# Fire and Gas Detection Systems







Product Catalogue

#### Introduction

Welcome to the new Morley-IAS by Honeywell Fire and Gas Detection Catalogue.

Morley-IAS is one of the world's leading designers and manufacturers of fire alarm control panels and associated equipment for professional fire alarm installers. Our vision is to deliver unsurpassed value through technical innovation and talented, professional people. We listen to our customers to ensure that we understand not only their product requirements, but also their expectations for customer and technical support.

Continuous investment in research and development drives the delivery of modern high technology products, which puts the Morley-IAS brand in a leading position in the fire industry. By choosing Morley-IAS, you are assured of working with a company that has a well established reputation for quality products with first-class support. The wide range of products from Morley-IAS allows you the freedom to design the system that best suits your needs with the option to create, add and enhance, whenever and however you wish.

The ethos of Morley-IAS is to supply products approved to meet local legislation. In the Benelux, all our fire detection and alarm control panels are designed to meet EN54 Part 2 and Part 4 standards and approved by BOSEC, LPCB or VDS to ensure compliance. The carefully planned evolution of our products over many years ensures that we can provide a panel to maintain or extend existing Morley-IAS fire systems and a system purchased today meets not only your existing needs but can easily grow to satisfy the requirements of tomorrow.

We supply our products to professional and qualified fire alarm installers who will design and install a complete system for a building as well as providing commissioning and maintenance. Our extensive network of trained installers and maintenance operatives gives end users the freedom to choose the service provider that best meets their requirements. We supply our products to professional and qualified fire alarm installers who will design and install a complete system for a building as well as providing commissioning and maintenance.

Our global parent is Honeywell International Inc., a diversified technology and manufacturing company. Honeywell is traded on the New York Stock Exchange as well as the Chicago, Pacific and London Stock Exchanges. It is one of the 30 stocks that make up the Dow Jones Industrial Average, and is listed on the Standard & Poors Index. We are looking forward to continued success in working together.

Your Morley-IAS team

Legend:



Special product information.



Information regarding the delivery (packing units, special charges, etc.).



Please complete the partnumber with the correct information.



Lead time information



Special information regarding trainings.



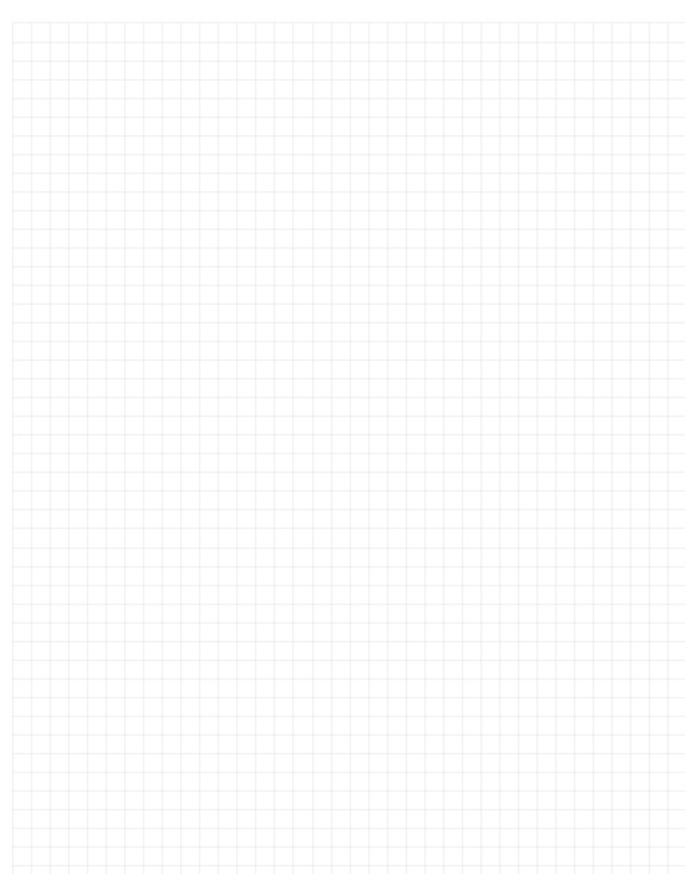
This document is not intended to be used for installation purposes. Every care has been taken in the preparation of this document but no liability can be accepted for the use of the information therein.

Design features may be changed or amended without prior notice.



# **Notes**



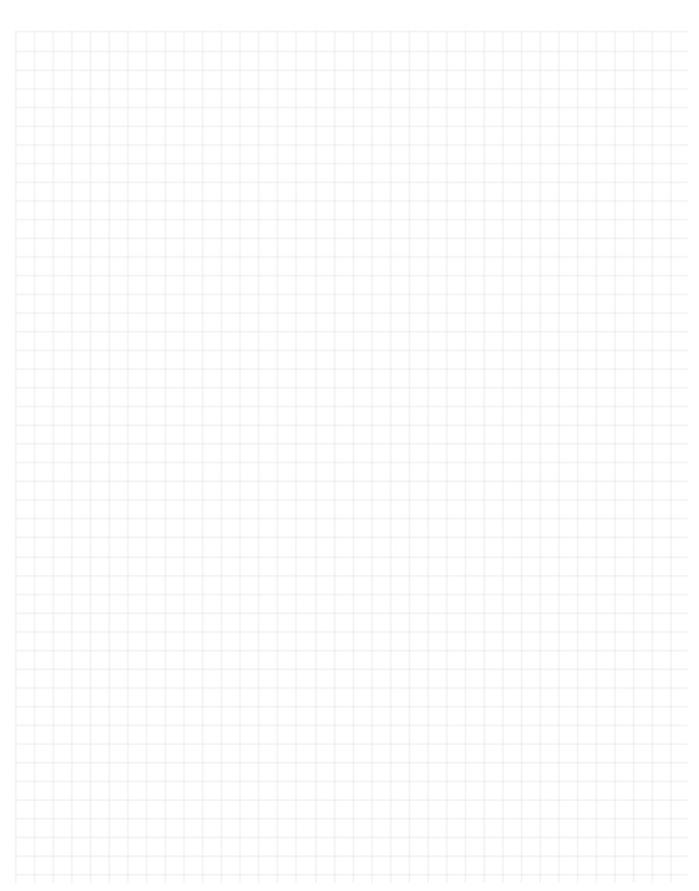


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# **Notes**

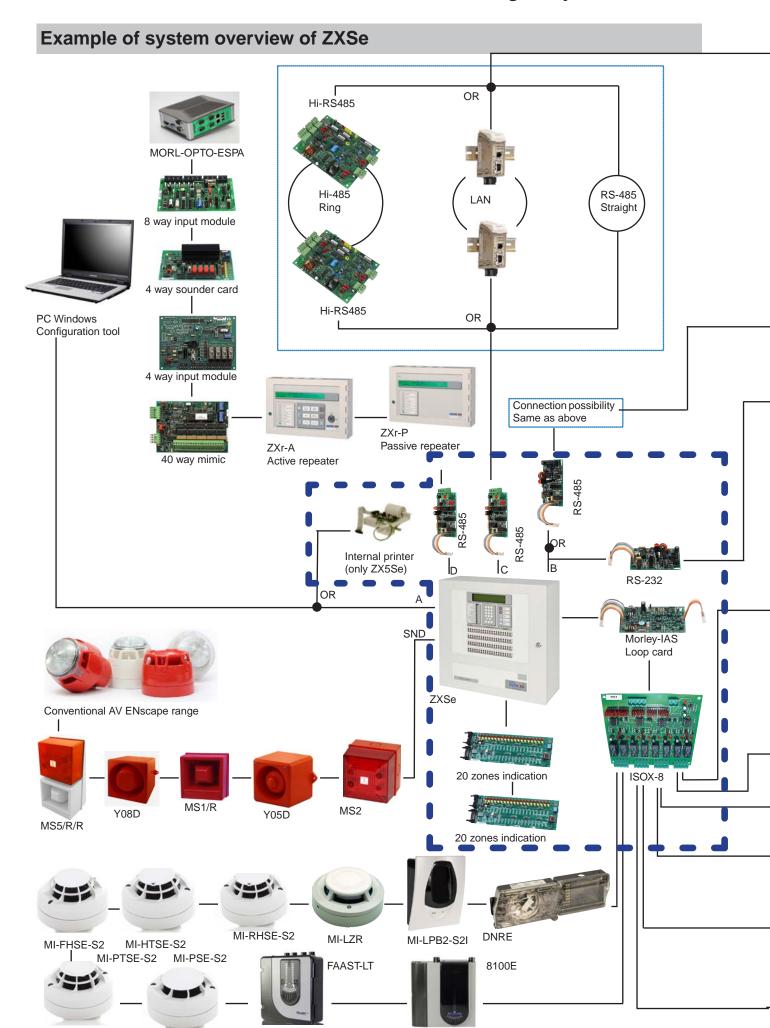






# Intelligent Systems





# **Intelligent Systems**

MI-BSO-PP-I

MI-WSO-PR-I

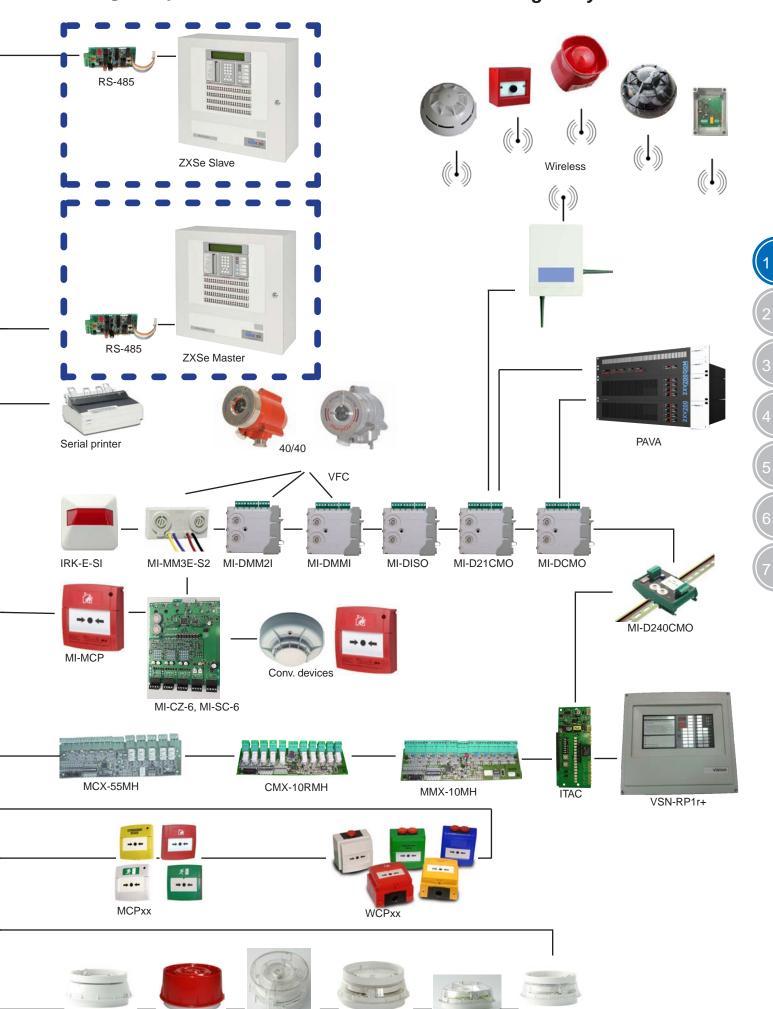
MI-WSS-PC-I

MI-BSS-PC-I

MI-WST-PC-I

MI-WSS-PC-I

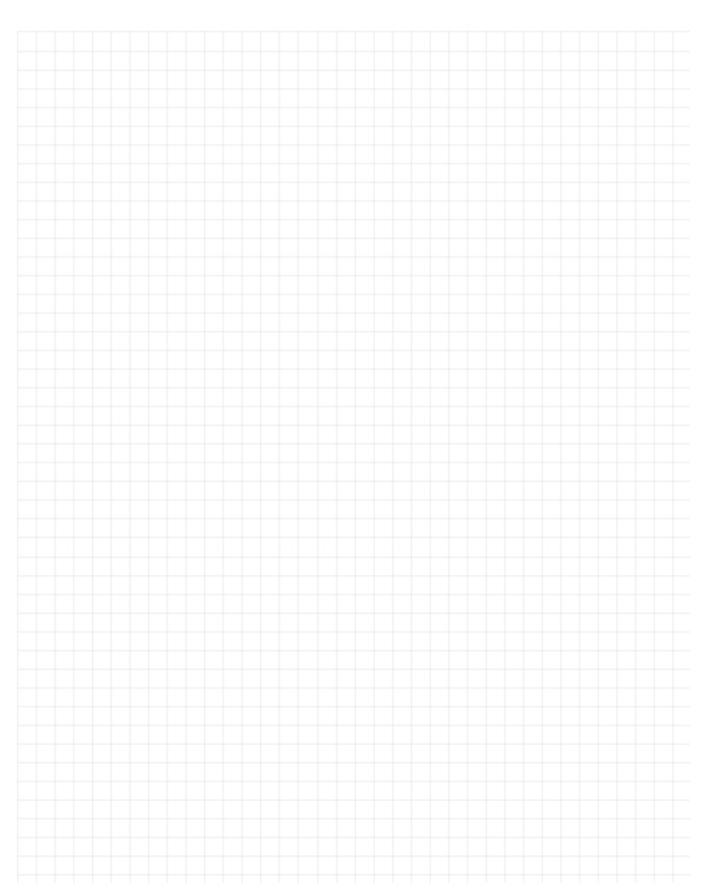
# Intelligent system overview



# **Intelligent Systems**

# Notes





#### **DXc Series**



- Optional 40 or 80 zone alarm LEDs
- Easy 4 key-press set-up
- Large blue LCD display
- Supports USB upload/download
- Mobile phone style keypad and navigation
- Option to upload a company logo

The Morley-IAS DX Connexion panel is ideally suited for use in the protection of small to medium sized buildings. All in all, a compact, high performance, feature rich, economical fire alarm control panel designed to help for both the installer and the end user

The DX Connexion is an enhancement of the Morley-IAS Dimension panel range, connecting the traditional Morley-IAS qualities of reliability, flexibility and value with advanced features and intuitive functionality.

The DX Connexion range of fire alarm control panels has been developed to be the most time efficient fire panel on the market to install. Simply fix the control panel to the wall, connect the field wiring, and in as few as four button presses later you can have a compliant, working fire alarm system.

The panel's large graphical display provides a clear menu structure making the whole initial set-up process quick, clear and intuitive.

Programming the control panel couldn't be easier. Text can be quickly inserted from the panel's mobile phone style keypad to identify the exact location of each field device. All panel features and system cause and effect can be programmed via either the panels large LCD display or by using the Windows configuration tool.

#### 714-001-113

#### DXc1 - One loop fire alarm control panel

#### **Specifications**

· Dimensions (HxWxD): 260 mm x 390 mm x 147 mm

Weight:

· Colour: RAL 9002 - Grey white

230V AC (+15%,-15%) 50-60 Hz · Operating voltage:

· Power supply: 24VDC/2A · Battery space: 2 x 7Ah/12V

CPD number: 0832-CPD-1511

#### 714-001-213

#### DXc1-M One loop fire alarm control panel, with space for 17Ah batteries (availability will be announced)

As 714-001-113, but with a housing allowing 2 x 17Ah stand-by batteries.

#### **Specifications**

391.5 mm x 390 mm x 147 mm · Dimensions (HxWxD):

· Weight: 4.5kg 24VDC/4A Power supply: 2 x 7Ah/12V · Battery space:

#### 714-001-223

#### DXc2 - Two loop fire alarm control panel

#### **Specifications**

• Dimensions (HxWxD): 391.5 mm x 390 mm x 147 mm

• Weight:

230 VAC (+15%,-15%) 50-60 Hz Operating voltage:

· Power supply: 24VDC/4A · Battery space: 2 x 17Ah/12V

CPD number: 0832-CPD-1512











714-001-243

#### DXc4 - Four loop fire alarm control panel

#### **Specifications**

• Dimensions (HxWxD):

• Weight:

• Colour:

Operating voltage:

Battery space:

Power supply:

4.5kg

391.5 mm x 390 mm x 147 mm RAL 9002 - Grey white

230 VAC (+15%,-15%) 50-60 Hz 24VDC/4A

2 x 17Ah/12V

CPD-number: 0832-CPD-1513

<b>DXc Series accessories</b>	
020-891	USB Interface lead cable for DX, DXc and ZXSe panels
795-099	DXc Network card
795-122	DXc RS232 card
795-102	DXc 40 Zone LED card
795-124	DXc 80 Zone LED card
795-111	DXc 2 Loop expansion card
795-101	DXc Cover blank
795-121	DXc Extension backbox
020-909	Kit Compact mimic 160 zone main PCB
020-910	Kit Compact mimic expansion PCB
	Please note that the below items are available on request only. Please check the last price list for lead time information.
795-116	DXc Cover custom keyplate
795-112	DXc Bezel 1 loop
795-113	DXc Bezel 2-4 loop
795-114	DXc Bezel 1 loop + ext.
795-115	DXc Bezel 2-4 loop + ext.
795-118	DXc Keyswitch
795-119	DXc Rack mount 1 loop
795-120	DXc Rack mount 2 loop
795-130	DXC Loop splitter enclosure (availability will be announced)

For spare parts, please refer to § Spare Parts at the end of this chapter (01. Intelligent Systems)

795-131	Loop splitter card (availability will be announced)
795-132	System I/O card (availability will be announced)
NEW	

DXc extension EN54-4 PSU backbox

Increases the enclosure size of a Dxc2, or Dxc4 control panel to accommodate an additional pair of 17Ah batteries to provide increased system battery standby of upto 34Ah at 24V(depending of the batteries fitted in the panel). This unit is supplied with the backbox, two cover blanks and an aditional power supply unit (PSU).

#### **Specifications**

• Dimensions (HxWxD): 263 mm x 390 mm x 147 mm

• Approved to: EN54-4

# **ZXSe Series**

#### 722-001-302

797-090



- Multi-protocol
- · Modular concept
- Simple, robust design to EN54
- · Intuitive to use
- Easy to maintain, to expand, to network, to install, to configure

## ZX1Se single loop intelligent panel (incl. UK, FR and NL language)

The ZX1Se is an intelligent intelligent fire alarm control panel. It has been designed and constructed around proven and reliable microprocessor technology. This simple approach has produced a modular, scalable fire alarm platform suitable for protecting all types of premises.

Includes English, Dutch and French languages.

#### **Specifications**

Dimensions (HxWxD): 400 mm x 400 mm x 135 mm
 Operating voltage: 230V 50Hz AC

Weight: 10 kg without batteries Construction: Sheet steel painted, se

Construction: Sheet steel painted, sealed to IP30 Loop Capacity: 1 loop max. 460mA

Max. PSU rating:
 2.5A total, comprising battery charger:
 0.5A

Standby batteries: max. 2 x 12Ah/12V
 Operating temperature: 0°C to +40°C

Relative humidity: max. 85% (non-condensing)

Bosec numbers: TCC2-909, TCC2-910, TCC2-911, TCC2-912, TCC2-913; CPD number: 0786-CPD-20917









#### 720-001-302

#### ZX2Se 1 or 2 loop intelligent panel (incl. UK, FR and NL language)



The ZX2Se is an intelligent fire alarm control panel. It has been designed and constructed around proven and reliable microprocessor technology. This simple approach has produced a modular, scalable fire alarm platform suitable for protecting all types of premises.

Includes English, Dutch and French languages.

#### **Specifications**

• Dimensions (HxWxD): 400 mm x 400 mm x 135 mm

Operating voltage: 230V 50Hz AC Weight: 10 kg without batteries

Sheet steel painted, sealed to IP30 • Construction: 1 or 2 loops max. 460mA · Loop capacity:

 Max. PSU rating: 2.5A total, comprising battery charger:

max. 2 x 12Ah/12V Standby batteries: Operating temperature: 0°C to +40°C

· Relative humidity: max. 85% (non-condensing)

Bosec numbers: TCC2-909, TCC2-910, TCC2-911, TCC2-912, TCC2-913; CPD number: 0786-CPD-20917

#### 721-001-302

#### ZX5Se 1 to 5 Loop intelligent panel (incl. UK, FR and NL language)



Includes English, Dutch and French languages.

#### **Specifications**

Dimensions (HxWxD): 500 mm x 500 mm x 195 mm 230V 50Hz AC Operating voltage:

20 kg without batteries Weight: • Construction: Sheet steel painted, sealed to IP32

· Loop capacity: 1 to 5 loops expandable, 460mA per loop maximum

• Max. PSU rating: see inst. manual for power distribution

Standby batteries: max. 2 x 22Ah/12V 0°C to +40°C Operating temperature: · Relative humidity: max. 85% (non-condensing)

Bosec numbers: TCC2-909, TCC2-910, TCC2-911, TCC2-912, TCC2-913; CPD number: 0786-CPD-20917

# **Modular & Peripheral Devices**

#### 795-072

#### Loop driver card Morley-IAS protocol - 250mA



Compatible with Zxe and ZXSe panels.

#### 795-072-100

#### Loop driver card Morley-IAS protocol 460mA



Only compatible with ZXSe panels.

# **Intelligent Systems**

# Modular & Peripheral Devices



Please note that the below devices are available on request only. Please check the last price list for lead time information.

#### 795-077-020

#### 20-zones indication expansion module; only for ZX5Se



Expansion zone 21 till 40 (zone 1 till 20 is included in panel).

#### 795-077-060

#### 60-zones indication expansion module; only for ZX5Se



Expansion zone 21 till 80 (zone 1 till 20 is included in panel).

#### 797-061

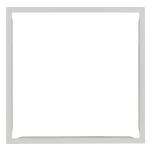
#### ZX1Se/ZX2Se Bezel kit.



Semi flush mounting kit for ZX1Se or ZX2Se control panel. Bezel size  $450 \times 450 \text{mm}$ .

#### 797-062

#### ZX5Se Bezel kit.



Semi flush mounting kit for ZX5Se control panel. Bezel size 550 x 550mm.

#### 797-063

#### ZX1Se/ZX2Se Glass door kit



# **Intelligent Systems**

# Modular & Peripheral Devices



Please note that the below devices are available on request only. Please check the last price list for lead time information.

#### 797-064

#### **ZX5Se Glass door kit**



#### 797-076

"L" shaped mounting bracket to fit peripheral pub's into ZXSe serie



#### 795-063

# PSU/Charger in box, 24VDC/5 Amp.



Space for 2x 12V/24 Ah batteries.

#### **Specifications**

• Dimensions (HxWxD):

500 mm x 500 mm x 180 mm

#### 795-064

#### PSU/Charger without enclosure, 24VDC/5 Amp.

#### 797-077

#### ZX1/2Se Battery box or mounting enclosure



#### **Specifications**

• Dimensions (HxWxD):

400 mm x 400 mm x 135 mm

#### 797-078

#### ZX5Se Battery box or mounting enclosure

#### **Specifications**

Dimensions (HxWxD):

500 mm x 500 mm x 185 mm

#### 020-891

#### USB interface lead cable for DX, DXc and ZXSe panels

#### 795-004-001

#### **RS-485 Communication module**



The module provides optical (galvanic) isolation for the serial input/output channel. It translates the signal levels of this channel to the RS485 Communications Interface Standard levels. Up to 31 peripheral units can be connected to the panel using this module.



The below modules are available on request only. Please check the last price list for lead time information.

#### 795-005

#### **RS-232 Communication module**



The RS232 Interface module provides a communication interface for BMS. The module is compatible with the ZX5Se Fire Alarm Control Panels.

#### 795-038-001

#### HI-485 communication module



The HI485 interface is typically used to form a closed loop. This ensures that data is communicated to every device connected to the loop, even if a fault exists, and each interface acts as a node access point onto the loop. Requires an RS485 card to be fitted in the control panel.

#### **Specifications**

· Supply voltage:

Supply current:

· Volt free contact rating:

Communications:

18-28VDC

40mA @ 24VDC (typical)

Max. 100mA in fault condition

1A @ 24VDC

3 RS485 balanced transmission ports

#### 709-601-001

#### Active repeater panel



Silence, Reset, Mute, Accept, Evacuate and Test Controls. Requires an RS485 card fitted in control panel.

#### **Specifications**

Dimensions (HxWxD):

165 mm x 254 mm x 50 mm Weight:

Operating temperature: +5°C to +45°C

10% to 93% (non-condensing)

Relative humidity: Supply voltage: 18-28VDC Current rate: 90 to 120mA

#### 709-701-001

#### Passive repeater panel



Requires an RS485 card fitted in control panel.

#### **Specifications**

Dimensions (HxWxD):

Weight:

Operating temperature:

Relative humidity range:

Supply voltage:

Current rate:

+5°C to +45°C max. 10-93% (non-condensing)

165 mm x 254 mm x 50 mm

18-28VDC

1.7kg

90 to 120mA



Item available on request only. Please check the last price list for lead time

#### 020-600-002

## Bezel kit for repeater panels



Semi flush mounting kit.

#### 795-014

## 4 way, programmable relay module, pcb



Requires an RS485 card fitted in the control panel.

#### **Specifications**

24-28VDC • Supply voltage: Current rate: 80 to 160mA · Relay contact rating: 5A, 240VAC

## 795-015

#### 4 way, programmable sounder module, pcb



Requires an RS485 card fitted in the control panel.

#### **Specifications**

· Supply voltage: 24 to 28VDC · Current rate: 120 to 220mA

Max. current output per sounder circuit:

· Max. total current: 3A (spread over all 4 outputs)

#### 795-029

#### 8 way, programmable input module, pcb



Requires an RS485 card fitted in the control panel.

#### **Specifications**

22 to 28VDC Supply voltage: Current rate: 65 to 97mA

For spare parts, please refer to § Spare Parts at the end of this chapter (01. Intelligent Systems)

#### 795-065

#### 40 way, programmable mimic interface, pcb



The card can be configured to display either zone or event information. Requires an RS485 card fitted in the control panel.

#### **Specifications**

- Supply voltage:
  Current rate:
- +/- 24VDC +/- 300mA

#### 795-060-002

#### **External printer for ZXSE panels**



#### 795-057

#### Modbus interface module



The modbus interface unit connects to the RS485 peripheral bus of a fire control panel and allows panel interrogation by a modbus (RTU) control system. Requires an RS485 card fitted in control panel.

#### **Specifications**

- Dimensions (enclosure):
- Supply voltage:
- Current rate:
- Modbus functions:

250 mm x 175 mm x 75 mm

18-28VDC

120mA @ 24VDC

01, 02, 04, 07

#### **ITS-BOX**

#### RS232 - TCP/IP device server

#### ISOX-8

#### 8-way loop splitter board



Transforms 1 intelligent loop into 4 closed and isolated sub-loops 3 types of configurations possible. Requires external 24VDC. Compatible with all intelligent Morley-IAS panels. Must be installed into the panel.

#### **Specifications**

• Dimensions (W x H x D):

155 mm x 115 mm x 70 mm

# **Espa Interfaces**

#### MORL-OPTO-ESPA



- Used to connect a DXc or ZXSe fire panel on a pager system using a serial communication
- Uses the standard ESPA 4.4.4 "Third Party Protocol"
- · Windows Configuration Tool
- Freely programming on site using the LAN ports or the serial port COM3
- Onboard Intel Atom E620 microprocessor
- Includes 3 serial RS232 communication ports
- Includes 3 2.0 USB ports for the backup and download of the configuration
- LAN ports with dynamic and static IP address
- · Allows the connection of a control display
- · Filtering per group of event
- · Event filtering per zone
- Tone and priority per event
- The message sent can include: panel number, loop number, device address, zone number

#### Mini PC fire panel - Espa converter

The MORL-OPTO-ESPA 4.4.4 is a universal interface which is connected on the DXc to the isolated RS232 port in a "stand alone" or network configuration. It uses the "Third Party Protocol" to send out informations coming from the fire detection panel to a pager or Dect system. The protocol used to communicate with the paging system is the standard Espa4.4.4.

This interface is also compatible with the ZXSe fire panel (requires an RS232/RS485 converter) and is connected to the RS485 bus (requires a 795-004-001 RS485 communication module).

The interface is delivered with an easy to use configuration tool, to set on site the configuration data and messages to display on the pagers.

The communication software allows to visualize in real time the communication which takes place on the incoming and outgoing serial ports and to send out a standard test message to the pager interface. The programming is done using a remote access with VNC Viewer.

The MORL-OPTO-ESPA includes: Mini PC Fire panel

HLS-OPTO-RS232 (RS232 Optical

Isolation Transceiver)

#### **Specifications**

Operating voltage range:
 12VDC to 24VDC

Power consumption: 420 mA

RS232 optical isolation transceiver

 RS232 serial ports:
 3 (COM 1 Analog fire detection panel, DXc & ZXSe range; COM 2 Pager system ESPA 4.4.4; COM 3 Activation

new configuration

Dimensions (H x W x L): 140 mm x 59 mm x 167 mm

Operating temperature: -5°C to +55°C

Relative humidity:
 10% to 93% (non-condensing)

#### **HLS-OPTO-RS232**



R RS232 == RS232 RS232 RS232 MODEL: 232 NO

Item available on request only. Please check the last price list for lead time

#### **HLS-OPTO-RS485**

#### RS232/485 converter



Required when connection the MORL-OPTO-ESPA to a ZXSe panel.



Item available on request only. Please check the last price list for lead time information.

# MI200-S2 Series Intelligent detectors with Advanced protocol



- · New mechanical platform with revolutionary chamber offering 3 doors:
  - improved false alarm immunity
  - improved detection across multiple fire types
  - improved resilience to false alarms
- Includes the Advanced protocol
- · Available with standard short circuit isolator with status control using the Advanced protocol
- Tri colour LED offering red, green and amber colour
- Rotary decade address switches 0 159
- Pure white colour to complement modern buildings
- 100% mechanical and electrical backwards compatibility
- New base design to complement the detector

The MI200-S2 detectors have two integral tri-colour LEDs that provide 360° local visual indication of the device status. The LEDs are programmable with static or blinking red, amber and green status indications available. All MI200-S2 detectors are environmentally friendly and meet the WEEE and RoHS legislative requirements, minimising end of life disposal costs, and are mechanically and electrically backwards compatible with existing devices.

The MI200-S2 detectors include the standard protocol as well as the new Advanced protocol for enhanced communication with future Morley-IAS panels, offering more features.

#### **Specifications**

- Max. wire gauge for terminals:
- Material:
- Operating voltage range:
- Isolation current:
- Maximum continuous current:
- Temperature range:
- Relative humidity:
- Approved to:

2.5mm<sup>2</sup> Pure white PC/ABS 15 to 28.5VDC 15mA at 24VDC 1A (Switch closed) -30°C to +70°C

10% to 93% (non-condensing)

EN54 (LPCB & CPD)

# **Pure white**

#### MI-PSE-S2

MI-PSE-S2I



#### Digital optical detector

The MI-PSE-S2 photoelectric smoke detector has a completely new detection chamber design, the result of many years of research and development. This delivers improved responsiveness, reduced sensitivity changes caused by settling dust and reduced false alarms resulting from insect ingress and other debris. The plug-in unit uses sophisticated processing circuitry that incorporates smoothing filters to help eliminate transient environmental noise conditions that can be the cause of unwanted alarms. The devices are managed by embedded software running complex algorithms that further improve resilience to false alarms and improve detection speed.

#### **Specifications**

Weight:

Dimensions (Ø x h):

· Approved to:

CPD number: 0786-CPD-20745

97g (base inc)

102 mm x 43 mm in base B501AP

FN54-7

CPD number: 0786-CPD-20739

Digital optical detector with isolator

# Intelligent Detectors

#### MI-FHSE-S2

#### Digital 58°C thermal detector



The MI-FHSE-S2 is fixed temperature intelligent sensors employing low mass thermistors and microprocessor technology for fast response and linear temperature sensing. Their linear response allows these sensors to be used to signal temperatures over the range of 58°C (Class A1S).

#### **Specifications**

• Weight:

• Dimensions (Ø x h):

· Approved to:

88g (without base)

102 mm x 61 mm in base B501AP

EN54-5. Class A1S

CPD number: 0786-CPD-20746

#### MI-FHSE-S2I

#### Digital 58°C thermal detector with isolator

CPD number: 0786-CPD-20740

#### MI-HTSE-S2

#### Digital 78°C thermal detector



The MI-HTSE-S2 is fixed temperature intelligent sensors employing low mass thermistors and microprocessor technology for fast response and linear temperature sensing. Their linear response allows these sensors to be used to signal temperatures over the range of 78°C (Class BS).

#### **Specifications**

• Weight:

• Dimensions (Ø x h):

Approved to:

88g (without base)

102 mm x 61 mm in base B501AP

EN54-5. Class BS

CPD number: 0786-CPD-20747

#### MI-HTSE-S2I

#### Digital 78°C thermal detector with isolator

CPD number: 0786-CPD-20741

#### MI-RHSE-S2

#### Digital R.O.R. thermal detector



The MI-RHSE-S2 uses the same thermistor and microprocessor technology to provide an alarm when the rate of rise in temperature exceeds 10°C/minute (typical) or if the temperature exceeds a threshold of 58°C (Response Class A1R).

#### **Specifications**

• Weight:

• Dimensions (Ø x h):

Approved to:

88g (without base)

102 mm x 61 mm in base B501AP

EN54-5. Class A1R

CPD number: 0786-CPD-20748

#### MI-RHSE-S2I

#### Digital R.O.R. thermal detector with isolator

CPD number: 0786-CPD-20742

#### MI-PTSE-S2

#### Digital multi (O/T) detector



The multi-criteria sensor MI-PTSE-S2 Photo Thermal detector uses thermal assistance to the core photoelectric smoke detector to give enhanced false alarm immunity and faster response to a wide range of incipient fires. The plugin unit combines two separate sensing elements that are managed by embedded software to act as a single unit. The detector conforms to EN54-5, a 58°C fixed temperature and rate of rise thermal assistance conforming to EN54-7. The thermal detection function combines thermistor technology with a software corrected linear temperature response.

#### **Specifications**

· Weight:

• Dimensions (Ø x h):

Approved to:

97g (base inc)

102 mm x 43 mm in base B501AP

EN54-7, EN54-5

CPD number: 0786-CPD-20744

#### MI-PTSE-S2I

#### Digital multi (O/T) detector with isolator

CPD number: 0786-CPD-20738

#### MI-PTIR-S2

#### Digital multi (O/T/IR) detector



The MI-PTIR-S2 multi-criteria, multi-sensor Photo Thermal Infra Red detector is the environmentally friendly alternative to the ionisation detector, a technology that is now over sixty years old. The MI-PTIR-S2 offers comparable speed of response to the ionisation technology for a fast flaming fire and is less susceptible to false alarms. It can be deployed with confidence in locations where the main risk is from fast-developing flaming fires. MI-PTIR-S2 moves the goalposts in the fight against false alarms in the core detector space by delivering enhanced false alarm immunity. In addition to being an effective alternative to ionisation units, MI-PTIR-S2 offers better performance over the alternative technologies of dual angle or dual wavelength optical detectors and photo-thermal detectors.

#### **Specifications**

• Weight:

102g (base inc)

• Dimensions (Ø x h):

102 mm x 63 mm in base B501AP

· Approved to: EN54-7, EN54-5

CPD number: 0786-CPD-20743

#### MI-PTIR-S2I

#### Digital multi (O/T/IR) detector with isolator

CPD number: 0786-CPD-20737

# **Detector Series for Retrofit & Black ceilings**

- · New mechanical platform with revolutionary chamber offering 3 doors:
  - improved false alarm immunity
  - improved detection across multiple fire types
  - improved resilience to false alarms
- Includes the Advanced Protocol
- · Available with standard short circuit isolator with status control using the Advanced Protocol
- Tri colour LED offering red, green and amber colour
- Rotary decade address switches 0 159
- Ivory colour to complement with retrofit installations using ivory bases and
- 100% mechanical and electrical backwards compatibility

The MI200-S2 detectors have two integral tri-colour LEDs that provide 360° local visual indication of the device status. The LEDs are programmable with static or blinking red, amber and green status indications available. All MI200-S2 detectors are environmentally friendly and meet the WEEE and RoHS legislative requirements, minimising end of life disposal costs, and are mechanically and electrically backwards compatible with existing devices.

#### **Specifications**

• Max Wire Gauge for Terminals:

Material:

Operating voltage range:

Isolation Current:

· Maximum continuous current:

· Temperature range:

Relative humidity:

Approved to:

15 to 28.5VDC 15mA at 24VDC 1A (Switch closed) -30°C to +70°C

2.5mm<sup>2</sup>

PC/ABS

10% to 93% (non-condensing)

EN54 (LPCB & CPD)

# **Ivory**



Please note that the ivory sensors are available on request only. Please check the last price list for lead time information.

MI-PSE-S2-IV	Digital optical detector, ivory
MI-PSE-S2I-IV	Digital optical detector with isolator, ivory
MI-FHSE-S2-IV	Digital 58°C thermal detector, ivory
MI-FHSE-S2I-IV	Digital 58°C thermal detector with isolator, ivory
MI-HTSE-S2-IV	Digital 78°C thermal detector, ivory
MI-HTSE-S2I-IV	Digital 78°C thermal detector with isolator, ivory
MI-RHSE-S2-IV	Digital R.O.R. thermal detector, ivory
MI-RHSE-S2I-IV	Digital R.O.R. thermal detector with isolator, ivory
MI-PTSE-S2-IV	Digital multi (O/T) detector, ivory
MI-PTSE-S2I-IV	Digital multi (O/T) detector with isolator, ivory
MI-PTIR-S2-IV	Digital multi (O/T/IR) detector, ivory
MI-PTIR-S2I-IV	Digital multi (O/T/IR) detector with isolator, ivory

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#### Black



In order to obtain a black detector, you have to order the standard detector and change the cover with the black cover indicated below. Attention: The covers are specific per type of detector.



Please note that the black covers for intelligent detectors are available on request only. Please check the last price list for lead time information.

BCK-200EAP	Black detector cover for Optical MI200-S2 detector
BCK-200TEAP	Black detector cover for Optical/Thermal MI200-S2 detector
BCK-200TEMAP	Black detector cover for PTIR MI200-S2 detector
BCK-200REAP	Black detector cover for Thermal MI200-S2 detector

# **Intelligent Laser Detector**

# MI-LZR



- · Extremely high sensitivity laser based smoke sensor
- Superior early warning performance
- Effective response to both fast flaming and slow smouldering fires
- Stable communication with high noise immunity
- 9 sensitivity levels (0.07 6.56%/m)
- Twin LEDs for 360° visibility
- Built-in test

#### Analogue high sensivity laser detector ivory

The MI-LZR high sensitivity laser based intelligent smoke sensor provides an extremely high sensitivity to fire conditions, by detecting the earliest particles of combustion. This is achieved by combining a patented optical chamber, the latest in laser diode and precision optical technology. This combination enhances the sensitivity of the device. Sophisticated processing circuitry and smoothing filters help eliminate the effects of transient environmental noise, which can be the cause

The result is a very sensitive and stable sensor able to achieve sensitivities of 0.07 % to 6.56% per metre obscuration - up to 100 times more sensitive than a standard photoelectric smoke sensor.

Historically, photoelectric smoke sensors have shown a quick response to slow smouldering fires, whilst ionisation smoke sensors have responded guicker to fast flaming fires. The MI-LZR provides a good response to both types of fire by improving the signal to noise ratio. The use of a laser enables detection of small particles (usually associated with fast flaming fires), that are not as easily detected by a standard photoelectric smoke sensor.

A quick response and pin point accuracy makes the MI-LZR especially suitable for environmental applications where there is substantial cost for down time or a significant investment in installed equipment has been made. Typical installations are electronics manufacturers clean rooms, telecommunication rooms and computer rooms.

#### **Specifications**

Dimensions (Ø x h):

Color:

Material:

Terminal wire guage: Operating temperature:

Relative humidity:

Voltage:

Standby current:

2.5mm<sup>2</sup> max. -10°C to +55°C

10% to 93%(non condensing)

+15 to +32 VDC

102 mm x 42 mm

Bayblend FR110

Ivorv

No comm.: 230µA @ 24VDC max. One comm. every 5 seconds, LED blink: 330µA @ 24VDC max. Alarm current: 6.5mA @ 24VDC max.

0.07 - 6.56%/m

· Sensitivity modes: · Approved to: EN54-7

CPD number: 0832-CPD-0195



Item available on request only. Please check the last price list for lead time information.



102 mm x 22.5 mm

# **Intelligent Detector Accessories**

#### **Pure white**

#### **B501AP**

#### Standard mounting base



Standard mounting base for intelligent MI200-S2 Series detectors. Contains adress tag.

#### **Specifications**

Dimensions (Ø x h):
 Operating temperature rand

Operating temperature range: -10°C to +60°C Relative humidity: 10% to 93% (non-condensing)

Operating voltage:
 15 to 32 VDC

- · Rugged industrial construction
- Electronic free base allowing cabling to be tested for continuity prior to the installation of the sensors
- Compact stylish design
- · Easy plug in the head of base
- Tamper proof feature
- SEMS screws for easy wiring

#### B524HTR-WH

#### **Heated base**



Standard base with heater, compatible with the MI200-S2 series. Rises the temperature of the detector to avoid condensation in the detection room.

#### **Specifications**

Dimensions (Ø x h): 102 mm x 26 mm
 Operating temperature range: -10°C to +60°C

Relative humidity:
Operating voltage:
10% to 93% (non-condensing)
15 to 28.5 VDC

Standby Current: Max 100µA
Maximum cable size: 2.5mm²



Requires 24VDC power supply.

#### B524IEFT-1W

#### Mounting base with FET isolator, pure white

CPD-number: 0832-CPD-0925

Ivory		
B501AP-IV	Standard mounting base, ivory	
B524IEFT-1	Mounting base with FET isolator, ivory	
B524HTR	Heated base, ivory	

#### **Black**



The black accessories for intelligent detectors are available on request only. Please check the last price list for lead time information.

B501AP-BK Standard mounting base

B524IEFT-1B Mounting base with FET isolator

# **Accessories**

#### RMK400AP

# Recess mounting kit



For suspended and drywall ceilings. For use with B501AP base.

#### **Specifications**

- Weight:
- Diameter:
- Material:
- internal 103 mm; ext. 143,5 mm PC/ABS Pure white

#### SMK400EAP

#### Surface mounting kit



Provides for entry of surface wiring conduit. For use with standard B501AP base.

#### **Specifications**

- Weight:
- Dimensions (Ø x h):
- Material:

- 55g
- 102 mm x 34 mm PC/ABS Pure white

#### WB-1AP

#### Wet base shroud



Adapter base enclosure for humid environments. For use with standard B501AP base. Three mounting options are possible: surface mounting, cable mounting and pendant mounting.

#### **Specifications**

- Weight:
- Dimensions (Ø x h):
- Material:

- 200g
- 110 mm x 69 mm
- PC/ABS Pure white

#### **IBS-LIDW**

#### Base cover for B501AP & ABS base sounders (pack of 10)



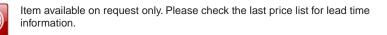


Pack of 10 pieces.

#### **BA1AP**

#### AP base conduit adapter, white





#### SFT2000

#### Installation adaptor for suspended ceiling (pack of 10)



The mounting adapter is used for the quick and secure attachment of bases of the MI200-S2 and ECO detector series to suspended ceiling systems. It saves the usage of special hollow cavity fasteners, since the mounting screws of the bases are screwed directly into the slots of the mounting adapter. The mounting adapter offers additional advantages in the fixing of the cables, rigid/flexible cable inlays and threaded cable connections.



Pack of 10 pieces.

#### **Specifications**

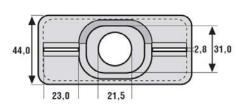
• Material:

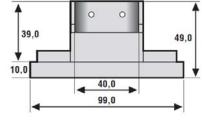
ABS

Application examples for the fixing of the cables:



#### Dimensions in mm:





Ivory	
RMK400AP-IV	Recess mounting kit
SMK400EAP-IV	Surface mounting kit
WB-1AP-IV	Wet base shroud
IBS-LIDDW	Base cover for B501AP-IV, B401 & ABS base sounders (pack of 10)
	Pack of 10 pieces.
BA1AP-IV	AP base conduit adapter, ivory
	Item available on request only. Please check the last price list for lead time information.

# **Remote indicators**

#### **IRK-2E**



Typical applications:

- All rooms permanently locked (boiler rooms, computer rooms, cupboards,...)
- · Health buildings
- Find faster alarm location.

# LED remote indicator, white

The remote indicator lamp has been designed for direct connection to all Morley-IAS fire detectors. It provides a visual alarm indication of the room in which the detector is installed.

#### **Specifications**

Dimensions (H x W x D ):

IP rating:Terminals:

Maximum wire section:Operating temperature:Voltage range:Maximum current:

Weight:Maximum cable size:

80 mm x 80 mm x 25 mm

IP40 Screw 1.5mm<sup>2</sup> -10°C to +70°C 2,5 to 30 VDC 15mA 40g 2.5mm<sup>2</sup>



Note: Supply voltage must not exceed 3,5 VDC without limiting resistor. Above this, a serial resistor must be provided with no less than 40 Ohm per Volt (usually inside the detector).

#### **IRK-E-SI**



#### LED remote indicator, ivory

Surface mounted on the supplied mounting plate. Led's will not blink in normal mode on intelligent systems.

#### **Specifications**

• Dimensions (H x W x D):

IP rating:

Operating temperature:
 Voltage range:
 Maximum current:
 Maximum cable size:

86 mm x 86 mm x 36 mm

IP40 -10°C to +70°C

2,5 to 30 VDC 25mA 1.5mm<sup>2</sup>

#### **IRK-W-1224**

#### Waterproof remote indicator



Led based technology. Surface mounted. LED will blink in normal mode on intelligent systems.

#### **Specifications**

IP rating: IP55 Voltage range: 12-24VDC

## InnovairFLEX™

#### **DNRE**



#### **Duct detector housing**

The DNRE Air Duct Smoke Detector uses photoelectric technology for the detection of smoke. This detection method, when combined with an efficient housing design, samples air passing through the duct and allows detection of a developing hazardous condition.

The DNRE provides a remote alarm output for use with auxiliary devices, such as the RA100Z remote LED annunciator, as well as remote test capability with the RTS151 or RTS151KEY Remote Test Stations.

Compatible with MI200-S2 Series detectors.



To be ordered separately: Detector & DST-xx Inlet Sampling Tube.

#### **Specifications**

- Voltage supply:
- Air velocity rating:
- Dimensions (W x H x D):
- Weight:
- Operating temperature:
- Relative humidity:
- IP rating:

24VDC

from 1.5m/s to 20.3m/s 370 mm x 127 mm x 63.5 mm

820g

-20°C to +70°C

0% to 95% (non-condensing)

IP40

# Air Inlet Tubes for InnovairFLEX™





DNRE requires an inlet sampling tube as listed below.

#### **Specifications**

Diameter:Length:

18 mm

DST-1: 30 cm DST-1.5: 45.7 cm DST-3: 91.6 cm

DST-5: 152 cm DST-10: 325.5 cm

DST-1 Inlet sampling tube (30 cm)

DST-1.5 Inlet sampling tube (45.7 cm)

DST-3 Inlet sampling tube (91.6 cm)

For spare parts, please refer to § Spare Parts at the end of this chapter (01. Intelligent Systems)

DST-5 Inlet sampling tube (152 cm)

DST-10 Inlet sampling tube (325.5 cm)

# Accessories for InnovairFLEX™

#### **RTS151**

#### Remote test station



Proof remote station for DNRE and D2E.



24VDC external power supply is required, according to EN54-4.

#### RTS151KEY

#### Remote test station with key



Proof remote station for DNRE and D2E with key.



24VDC external power supply is required, according to EN54-4.

#### **RA100Z**

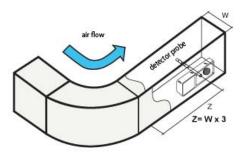
#### Remote annunciator

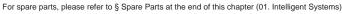


Remote indicator with LED for DNRE and D2E.



Item available on request only. Please check the last price list for lead time information.





# **Intelligent Beam Detectors**

#### MI-LPB2-S2I



- · Combined transmitter and receiver unit
- Connects directly to the intelligent loop
- Range 5-100 metres
- · 4 fixed sensitivity/threshold adjustment
- 2 automatic variable sensitivity modes
- Operates in the Infra-Red light spectrum
- · Numerical indicators to aid beam alignment
- Standby, fault and alarm LED indicators visible from the front and bottom
- ± 10° horizontal & vertical beam alignment
- · Automatic drift compensation
- Approved to EN54-12
- Uses the Advanced protocol
- Loop powered
- Contains a short-circuit isolator

#### Intelligent optical smoke beam detector

The MI-LPB2-S2I is an intelligent reflector type linear optical beam smoke detector designed to operate as a component of an intelligent fire alarm system. It operates primarily on the principle of light obscuration utilising infra-red beam. Optical beam smoke detectors are particularly appropriate for protecting buildings with large open spaces such as warehouses, atriums etc.

The MI-LPB2-S2I detector is a combined transmitter/receiver unit which can be directly connected to an intelligent loop. The Infra-Red transmitter generates a beam of light towards a high efficiency reflector. The reflector returns the beam to the receiver where an analysis of the received signal is made. The change in the strength of the received signal is used to determine the alarm condition.

#### **Specifications**

- Weight:
- Detector dimensions (W x H x D):
- Reflector dimensions (W x H):
- · Current consumption:
- · Operating voltage range:
- Operating Tempurature Range:
- IP Rating:
- Relative humidity:
- Approved to:

1.77kg

190 mm x 254 mm x 84 mm 200 mm x 230 mm

- Typical standby: 2mA @ 24 VDC (No communications, LED off)
- Max. Alarm current (LED on): 8.5mA 15 to 32 VDC (24VDC nominal) 15 to 29 VDC if using built-in isolators
- -30°C to +55°C

IP54

0% to 95% (non condensing)

EN54-12, EN54-17

CPD-number: 0832-CPD-0329



Includes: Beam detector and short range reflector (5-70m).

# **Intelligent Beam Detector Accessories**

#### **BEAM-LRK**



#### Long-range reflector (70m-100m)

The BEAM-LRK kit contains 3 reflectors (200mm x 230mm).

In combination with the short range reflector supplied with the beam, the 4 reflectors mounted in square form one big reflector surface which extends the beam range over 70m, up to a maximum distance of 100m.

# Intelligent Beam Detector Accessories

#### **BEAM-SMK**

#### Surface mounting box





Absolutely needed when using the mounting bracket kit.

## **BEAM-MMK**

#### Mounting bracket - swivel type



Used for wall mount and ceiling mount applications.



Must be used together with surface mounting box BEAM-SMK. (Beam not included.)

#### **BEAM-HK**

#### Heater kit for beam detector





Avoid condensation problems in non heated rooms.

#### **Specifications**

- Voltage:
- Current:
- Power consumption:

15 to 32V

- 92mA max at 32V
- nominal: 1.6W at 24Vmaximum: 3W at 32V

# BEAM-HKR

#### Heater kit for reflector





Avoid condensation problems in non heated rooms.

#### **Specifications**

- Voltage:
- Current:
- Power consumption:

15 to 32V

- 450mA max at 32V
- nominal: 7.7W at 24V
- maximum: 15W at 32V

# **Intelligent Manual Call Points**

# Indoor (IP24)



- · Unique 'Plug & Play' installation concept
- Resettable operating element option
- Intelligent communications
- · Semi-flush or surface mounting
- Fully compliant with EN54, Part 11
- Backward compatibility
- Enhanced aesthetics
- Integral LED
- Integral loop isolation option

MI-MCP is designed to provide a manual alarm interface to Morley-IAS fire alarm control panel. Installation efficiency, flexibility and compliance with the latest standards are at the heart of the call point range.

The unique 'plug and play' concept is designed specifically to reduce installation time by using a terminal block which can be wired during the initial installation cabling with a link (P102) to provide continuity for testing. During the commissioning phase, the links are removed and the terminal block is simply inserted into the connector at the back of the unit. No re-termination is required.

Both break glass, supplied, and resettable operating elements (PS230) can be used in the standard unit. Operation of the resettable element, as well as being indicated by the units LED, is also indicated by a yellow strip on the element which becomes visible when activated. With the addition of a hinged transparent cover (PS200) the element may be protected against accidental operation and may be further protected by using a cover seal (PS056) which requires breaking in order to operate the unit. The call point uses one of 99 possible addresses which is simply 'dialled in' using the two rotary decade switches on the rear of the unit. A specialist test key may be inserted into the bottom of the unit to lower the glass and release the micro-switch and thus a full functional test is achieved.

#### **Specifications**

Weight: Flush: 110g / Surface: 160g
 Dimensions (W x H x D): - Semi-flush mounting: 89 mm x

93 mm x 27.5 mm

- Surface mounting: 89 mm x 93 mm

x 59.5 mm

• Operating temperature: -10°C to +55°C

• Relative humidity: 0% to 95% (non-condensing)

• IP Rating: IP2

CPD number: 0832-CPD-0676 (version without isolator); 0832-CPD-0703 (version with isolator)

D	Ad	CO	IF

#### MI-MCP-GLASS Manual call point with break glass

Including EN54 break glass, without back box. Compatible with standard electric embedded box with screws.

#### MI-MCP-GLASS-I Manual call point with isolator & break glass

Including EN54 break glass & isolator, without back box. Compatible with standard electric embedded box with screws.

#### MI-MCP-FLEX Manual call point with flexible

Including EN54 flexible element, without back box. Compatible with standard electric embedded box with screws.

#### MI-MCP-FLEX-I Manual call point with isolator & flexible

Including EN54 flexible element & isolator, without back box. Compatible with standard electric embedded box with screws.

# Other colours





The MI-MCP call points in other colors contain:

- Operating Element label: EN54-11 'dot & arrows'
- Function label: Plain color

For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches)



Please replace "x" in the part  $n^{\circ}$  by the code for the needed color: Y = yellow; G = green; B = blue; W = white



Items available on request only. Please check the last price list for lead time information.

#### MI-MCP-GLASS-x

#### Manual call point with break glass

Including EN54 break glass, without back box. Compatible with standard electric embedded box with screws.

#### MI-MCP-GLASS-I-x

#### Manual call point with isolator & break glass

Including EN54 break glass, without back box. Compatible with standard electric embedded box with screws.

#### MI-MCP-FLEX-x

#### Manual call point with flexible

Including EN54 flexible element, without back box. Compatible with standard electric embedded box with screws.

#### MI-MCP-FLEX-I-x

#### Manual call point with isolator & flexible

Including EN54 flexible element & isolator, without back box. Compatible with standard electric embedded box with screws.



2

3

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5

6



# Water resistant (IP67)



#### **Specifications**

Weight:

• Dimensions (WxHxD): 97.5 mm x 93 mm x 65.5 mm

Operating temperature: -30°C to +70°C Color: RAL3001

CPD-number: 0832-CPD-0891 (version without isolator); 0832-CPD-0893 (version with isolator)

270g

# **Red colour**



The red call MI-WCP call points contain:

- Operating element label: EN54-11 "Dot & Arrows"
- Function label: Burning House

For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches)



Items available on request only. Please check the last price list for lead time information.

MI-WCP-R/SG	MCP surface with break glass element		
	Including back box and break glass.		
MI-WCP-R/SF	MCP surface with flexible element		
	Including back box and flexible operating element.		
MI-WCP-R/I/SG	MCP surface with break glass element & isolator		
	Including back box, break glass and short circuit isolator.		

Including back box, flexible operating element & short circuit isolator.

MCP surface with flexible element & isolator

MI-WCP-R/I/SF

## Other colours





The MI-WCP call points in other colors contain:

- Operating Element label: EN54-11 'dot & arrows'
- Function label: Plain color

For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches)



Please replace "x" in the part  $n^{\circ}$  by the code for the needed color: Y = yellow; G = green; B = blue; W = white



Items available on request only. Please check the last price list for lead time information.

MI-WCP-x/SG	MCP surface with break glass element	
	Including back box and break glass.	
MI-WCP-x/SF	MCP surface with flexible element	
	Including back box and flexible operating element.	
MI-WCP-x/I/SF	MCP surface with flexible element & isolator	
	Including back box, break glass and short circuit isolator.	
MI-WCP-x/I/SG	MCP surface with break glass element & isolator	

## **Intelligent Manual Call Point Accessories**

## **Surface mounting boxes**





Please replace "x" in the part  $n^{\circ}$  by the code for the needed color: Y = yellow; G = green; B = blue; W = white

Including back box, flexible operating element & short circuit isolator.

SR1T	Surface mounting box red	
Sx1T	Surface mounting box other color	

## **Accessories**

#### PS200 Transparent protective hinged cover



Please note that the below items are available on request only. Please check the last price list for lead time information.

SC071 Terminal blocks (pack of 20)



Pack of 20 pieces.

KL1 X 5 Earth continuity links (pack of 5)



Pack of 5 pieces.

BZR2 Red bezel for flush installation

## Foil with labels for Call Points & Switches



Please see the images of the labels on the next page.



Each foil contains 48 labels.



The below items are available on request only. Please check the last price list for lead time information.

MCP-LABEL F 028	Foil with 48 'ALARME INCENDIE' labels (black on red)
MCP-LABEL F 048	Foil with 48 'KOEPEL COUPOLE' labels (white on red)
MCP-LABEL F 056	Foil with 48 'BRAND FEU' labels (black on yellow)
MCP-LABEL F 071	Foil with 48 'EMERGENCY STOP' labels (black on yellow)
MCP-LABEL F 078	Foil with 48 'EVACUATION' labels (black on red)
MCP-LABEL F 081	Foil with 48 'FEU' labels (black on yellow)
MCP-LABEL F 082	Foil with 48 'BLUSKNOP' labels (black on yellow)
MCP-LABEL F 138	Foil with 48 'ALERTE INCENDIE' labels (black on red)
MCP-LABEL F 217	Foil with 48 'EXTINCTION' labels (black on yellow)
MCP-LABEL F 218	Foil with 48 'RUNNING MAN' labels (white on green)
MCP-LABEL F 220	Foil with 48 'BIJ NOOD DEUR OPEN' labels (white on blue)

For spare parts, please refer to § Spare Parts at the end of this chapter (01. Intelligent Systems)

## **Intelligent Systems**

# Intelligent Manual Call Points

MCP-LABEL F 222	Foil with 48 'EN54 BURNING HOUSE' labels (white on red)
MCP-LABEL F 228	Foil with 48 'DEUR ONGRENDELING' labels (white on blue)
MCP-LABEL F 235	Foil with 48 'ALERTE WAARSCHUWING' labels (black on red)
MCP-LABEL F 244	Foil with 48 'UITSTEL BLUSSING' labels (white on blue)

F 028	F 048
INCENDIE	COUPOLE
F 081	F 082
FEU	BLUSKNOP
F 220	F 222
DENU OBEN BA NOOD	











## **Intelligent Modules**



The new family of input/output modules are available in single and multi-way models within the same mechanical package, reducing both the cost of installation and the mounting space required.

Their unique mechanical design allows each module to be mounted in either a wall box, on a DIN rail or within any type of enclosure. Irrespective of the mounting method chosen, the address switch is both visible and accessible for selection.

Each module has built-in short circuit protection for the communications loop; however, to increase application flexibility, the isolators can be selected/deselected on an individual module basis.

To help engineers in the maintenance and fault-finding process, both the LEDs and the switches can be viewed without having to remove the cover of the surface mounting box. The LEDs, being multi-colour, provide diagnostic information regarding the status of each individual input/output.

For ease of installation, testing and maintenance, the field wiring terminals are of plug-in design.

#### MI-MM3E-S2

#### Intelligent mini monitor module



Intelligent mini monitor module with 1 monitored input circuit, to supervise alarm initiating devices or technical signals that have voltage free contact. It connects directly to the intelligent communication loop.

Compatible with CLIP (99 + 99) protocol.

#### **Specifications**

Weight: 57g

Dimensions (W x H x D): 71 mm x 33 mm x 15 mm

Approved to: EN54-18

CPD number: 0359-CPD-0176; VDS number: G214118

#### MI-MM3E/KAC

#### Intelligent remote indicator driver (LED output)



Intelligent LED output module to be used for driving a remote indicator. It connects directly to the intelligent communication loop.

#### **Specifications**

• Dimensions (W x H x D): 80 mm x 65 mm x 20mm

#### MI-DMMI

#### Single supervised input module



The MI-DMMI module monitors a single input device circuit of normally open dry contact alarm activation devices.

#### **Specifications**

Dimensions (W x H x D):

Weight:

Operating voltage: Operating temperature:

Relative humidity:

· Current consumption:

0% to 95% (non-condensing)

90g

- 310 μA @ 24 VDC (no comm.); - 510 µA @ 24 VDC (one comm.

94 mm x 93 mm x 23 mm

every 5 sec with LED blink enabled)

EN54-17 & EN54-18

15 to 30VDC peak

-20°C to +60°C

· Approved to:

CPD-number: 0786-CPD-20342; VdS number: G202145

94 mm x 93 mm x 23 mm

#### MI-DMM2I

#### Double supervised input module



The MI-DMM2I dual monitor module provides two supervised input device circuits of normally open dry contact alarm activation devices.

#### **Specifications**

Dimensions (W x H x D):

Weight:

90g Operating voltage:

15 to 30 VDC peak Operating temperature: -20°C to +60°C

· Relative humidity: 0% to 95% (non-condensing) Current consumption: - 340 μA @ 24 VDC (no comm.), - 600 µA @ 24 VDC (one comm.

every 5 sec with LED blink enabled)

· Approved to: EN54-17 & EN54-18

CPD-number: 0786-CPD-20342; VdS number: G202145

#### MI-DCMO

#### Single supervised output module



The MI-DCMO control module provides a monitored single output circuit for use with polarised loads (sounder circuit) which requires a suitable power source (7VDC -30VDC) for the connected load. Alternatively the same device may be placed in to an unsupervised mode which can then be used to control any switched load up to 2A @ 30VDC.

#### **Specifications**

Dimensions (W x H x D): 94 mm x 93 mm x 23 mm

Weight: 102g

· Operating voltage: 15 to 30 VDC peak Operating temperature: -20°C to +60°C

0% to 95% (non-condensing) · Relative humidity:

• Current consumption: - 310 µA @ 24 VDC (no comm.) - 510 µA @ 24 VDC (one comm.

every 5 sec with LED blink enabled)

· Approved to: EN54-17 & EN54-18

CPD-number: 0786-CPD-20341; VdS number: G202146

#### MI-D21CMO

#### Double supervised input + single relay output



In addition the MI-D21CMO dual input, single relay output module, as well as providing two supervised inputs also provides a single change over relay output rated at 2A @30VDC.

The MI-D21CMO uses three addresses of 99 available module addresses on a loop and responds to regular polls from the control panel reporting its type and the status (open/normal/ short) of their supervised device circuits.

#### **Specifications**

• Dimensions (W x H x D): 94 mm x 93 mm x 23 mm

Weight: 102g

Operating voltage: 5 to 30 VDC peak -20°C to +60°C Operating temperature:

· Relative humidity: 0% to 95% (non-condensing) Current consumption: - 340 µA @ 24 VDC (no comm.) - 660 µA @ 24 VDC (one comm. every 5 sec with LED blink enabled)

· Approved to: EN54-17 & EN54-18

CPD-number: 0786-CPD-20343; VdS number: G202144

#### MI-D240CMO

#### Single 240VAC/5A relay module



The MI-D240CMO provides two (1 x N.O. 1 x N.C.) 250Vac (nominal 230Vac), 5Amp contact outputs. It is provided complete with a surface mounting back box.

#### **Specifications**

Dimensions (W x H x D):
 94 mm x 93 mm x 23 mm

Weight: 200g

Operating voltage:
 Operating temperature:
 15 to 30VDC peak
 -20°C to +60°C

Relative humidity: 0% to 95% (non-condensing)
 Current consumption: - 275 μA @ 24 VDC (no comm.)
 - 445 μA @ 24 VDC (one comm.)

every 5 sec with LED blink enabled)

• Approved to: EN54-17 & EN54-18

CPD-number: 0786-CPD-20341; VdS number: G202146

#### MI-D240CMO-KO

#### Single 240VAC/5A relay module (knock outs)



Wall mount with knockouts and rubber grommets, direct decade address entry and tri-colour LED's complete with built-in isolator.

#### **Specifications**

• Dimensions (W x H x D): 94 mm x 93 mm x 23 mm

Weight: 200g

Operating voltage:
 Operating temperature:
 15 to 30VDC peak
 -20°C to +60°C

Relative humidity:
 Current consumption:
 275 µA @ 24 VDC (no comm.)
 445 µA @ 24 VDC (one comm.
 every 5 sec with LED blink enabled)

Approved to: EN54-17 & EN54-18

VdS number: G202146

MI-D240CMO-DIN

#### Single 240VAC/5A relay module (DIN rail mount)



The MI-D240CMO-DIN provides two (1 x N.O. 1 x N.C.) 250Vac (nominal 230Vac), 5Amp contact outputs. Complete with DIN mounting enclosure, direct decade address entry and tri-colour LED's complete with built-in isolator.

#### **Specifications**

• Dimensions (W x H x D): 94 mm x 93 mm x 23 mm

Weight: 195g

Operating voltage:
 Operating temperature:
 15 to 30VDC peak
 -20°C to +60°C

Relative humidity:
 Current consumption:
 275 µA @ 24 VDC (no comm.)
 445 µA @ 24 VDC (one comm.
 every 5 sec with LED blink enabled)

• Approved to: EN54-17 & EN54-18

CPD number: 0786-CPD-20341; VdS number: G202146

## Intelligent Modules

94 mm x 93 mm x 23 mm

94 mm x 93 mm x 23 mm

15 to 30 VDC peak

62g

#### MI-DISO

#### Single isolator module



Complete with plug-in screw connections and tri-colour LED.

#### **Specifications**

Dimensions (W x H x D):

Weight:

Operating voltage: Operating temperature:

-20°C to +60°C Relative humidity: 0% to 95% (non-condensing)

Current consumption: 200 μA @ 24 VDC EN54-17 & EN54-18 · Approved to:

CPD-number: 0786-CPD-20340; VdS number: G202142

#### **MI-DCZRM**

#### Conventional zone input module



Complete with end of line resistors, plug-in screw connections, direct decade address entry and tri-colour LED's complete with built-in isolator.

#### **Specifications**

• Dimensions (W x H x D):

Weight: 90g

15 to 30 VDC peak Operating voltage: Operating temperature: -20°C to +60°C

 Relative humidity: 0% to 95% (non-condensing) • Current consumption: - 310 μA @ 24 VDC (no comm.); - 510  $\mu A$  @ 24 VDC (one comm. every 5 sec. with LED blink enabled).

· Approved to: EN54-17 & EN54-18

CPD number: 0832-CPD-1392; VdS number: G213074

#### ISO524-1

#### Micro isolator module



To build inside SR3T back box of intelligent call point.

#### **Specifications**

· Approved to: EN54-17

CPD number: 0832-CPD-0926

#### M200-SMB

#### Surface mount box



To be used with MI series modules.

#### **Specifications**

Dimensions (W x H x D): 139 mm x 134 mm x 40 mm

• IP rating: IP50

#### M200-SMB KO

#### Surface mount box with knockouts



Complete with rubber grommets.

#### **M200-PMB**

#### Panel mounting bracket



With 2 holes for fixing.

To be used with MI series modules.

#### **M200-DIN**

#### **DIN-rail bracket**

To be used with MI series modules.

#### MMX-10MH

#### 10 way intelligent input monitor card



Complete with end of line resistors, individual input disable switches, plug in screw connections and on board LED's with the facility for external LED's (unboxed). Max. 4 connections on an intelligent loop.

#### **Specifications**

• Dimensions (W x H x D):

Approved to:

233 mm x 70 mm x 13 mm

EN54-18

CPD number: 0051-CPD-0283

#### CMX-10RMH

#### 10 way intelligent relay control card



Complete with individual output disable switches, plug in screw connections and on board LED's with the facility for external LED's (unboxed). Max. 4 connections on an intelligent loop.

#### **Specifications**

• Dimensions (W x H x D):

• Contact rating:

Approved to:

233 mm x 70 mm x 13 mm

30VDC - 1A

EN54-18

CPD number: 0051-CPD-0284

#### MCX-55MH

#### 5 way intelligent input monitor & 5 way intelligent relay



Complete with end of line resistors and relays (30VDC - 1A) on board LED's with the facility for external LED's (unboxed). Max. 4 connections on an intelligent loop.

#### **Specifications**

• Dimensions (W x H x D): 233 mm x 70 mm x 13 mm

Approved to: EN54-18

CPD number: 0051-CPD-0285

#### MI-CZ-6

#### 6 way zone interface multimodule



The MI-CZ-6 way zone interface module is intended for use in an intelligent alarm system. Each module provides an interface between the intelligent alarm system and a conventional alarm system loop. A common SLC input is used for all modules, and the initiating device loops share a common supervisory supply and ground. Otherwise, each monitor operates independently from the others. Requires a separate reset.

#### **Specifications**

• Weight: 360

• Dimensions (W x H x D): 147 mm x 185 mm x 25 mm

Normal operating voltage: 15-32 VDC
 Stand-By Current: 2 mA
 Temperature range: 0°C to 49°C

Relative humidity:
 10% to 85% (non-condensing)

Approved to: EN54-18

CPD number: 0832-CPD-0929

#### MI-SC-6

#### 6 way supervised sounders outputs



The MI-SC-6 six way supervised sounder output module is intended for use in an intelligent alarm system. Each module is intended for switching applications involving DC which require wiring supervision. A common SLC input is used for all modules. Each module has its own address. A pair of rotary code switches is used to set the address of the first module from 01 to 94. The remaining modules are automatically assigned to the next five higher addresses.

Provisions are included for disabling a maximum of three unused modules to release the addresses to be used elsewhere. Each module also has panel controlled green LED indicators. The panel can cause the LEDs to blink, latch on, or latch off.

#### **Specifications**

• Weight: 460g

• Dimensions (W x H x D): 147 mm x 185 mm x 25 mm

Normal operating voltage:
 Stand-By Current:
 Temperature range:
 Approved to:
 15-32 VDC
 2.25 mA
 -10°C to 55°C
 EN54-18

CPD number: 0832-CPD-0930

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#### SMB6-V0

#### Multi-mount ABS antistatic box



VO Flame retardant box in grey colour. Can hold up to 6 MI modules (DIN accessory is not required). Compatible with MMX-10MH, CMX-10RMH & MCX-55MH.

#### **Specifications**

Weight:

700a

• Dimensions (W x H x D): 245 mm x 180 mm x 50 mm

#### **SMBW-VO**

#### ABS antistatic box for MI-xx-6



VO Flame retardant box, color cream. Can hold 1 multimodule (CMX-10RMH, MMX-10MH, MCX-55MH, MI-CZ-6 and MI-

#### **Specifications**

• Weight:

720g

• Dimensions (W x H x D): 245 mm x 100 mm x 50 mm

#### **BB-2**

#### **Multi-mount steel cabinet**



Up to 2 modules (MI-xx-6 series). Red coated enclosure.

#### **Specifications**

• Dimensions (W x H x D):

227 mm x 305 mm x 93 mm

#### **BB-6**

#### **Multi-mount cabinet**



Up to 6 modules (MI-xx-6 series) can be mounted using the BB-6 mount chassis. Red coated enclosure.

#### **Specifications**

• Dimensions (W x H x D):

319 mm x 610 mm x 164 mm

#### CH-6

#### Mount chassis for BB-6



The CH-6 chassis is mounted in the BB-6 cabinet.

It is shipped with two self-threading screws, which are used to fasten the chassis to the back wall of the cabinet.

## Intelligent Audio Visual range (IAV)



B501AP base allows the Intelligent AV range and the MI200-S2 Advanced range to share a common installation base, giving reduced inventory costs.

- Greater flexibility of installation. Decisions regarding the positioning of AV and smoke detection can be delayed until the commissioning stage.
- · Maintain electrical and mechanical compatibility with the Morley-IAS detector range.
- The visual products meet the requirements of the latest EN54-23.
- The audible products meet the requirements of EN54-03.
- · Loop powered with low current draw.
- · Sounders and strobes will be fully controllable from the panel, enabling tone selection and output levels to be set from the panel according to the status of the alarm; all sounders and strobes on each loop will automatically be synchronised.
- · Flush, surface and waterproof mounting base options.
- · Loop address set using the familiar rotary switches.

The range consists of sounders, strobes and sounder-strobes in both wall-mounted and detector base configurations. A major feature of the new family is that both the wall-mounted and detector base devices will use the new Series 200 Advanced B501AP base, thereby reducing the number of separate parts that have to be stocked and managed. The new devices are not backwards compatible with the AVAX base.

#### **Specifications**

 Supply voltage: 15 to 28 VDC 225uA Standby current: Temperature range: -25°C to +70°C

· Relative humidity: Max. 95% (non-condensing) • IP rating: IP24 with low profile base (B501AP)IP44 with deep bases

(BRR, BPW, BDD)

IP65 for MI-BSO-PP-x with sealed

deep base (WRR) 1.5 - 2.5mm<sup>2</sup> max.

· Wire gauge for terminals: EN54-3, EN54-17 and EN54-23 Approved to:

#### **IAV Wall Mount Sounder**



#### **Specifications**

Dimensions (Ø x h):

Weight:

Body color:

Number of tones:

Volume settings:

Max. current consumption: · Max. sound output:

121 mm x 64 mm

168g

Red or Pure white

High, Medium & Low

11.4mA (High volume tone 21 @ 24V) 97dB(A) ±3dB @ 1m (High volume,

tone 8 @ 24V - tone dependent)

CPD number: 0832-CPD-1827 (version without isolator); 0832-CPD-1831 (version with isolator)

MI-WSO-PP-I	Wall mount sounder, with isolator, pure white	
MI-WSO-PR-I	Wall mount sounder, with isolator, red	
MI-WSO-PR-N	Wall mount sounder, no isolator, red	
MI-WSO-PP-N	Wall mount sounder, no isolator, pure white	

#### **IAV Wall Mount Sounder Strobe**



#### **Specifications**

• Dimensions (Ø x h): 121 mm x 64 mm

Weight: 238g
Lens color: Clear
Light color: Red
Number of tones: 32
Beacon flash rate: 1Hz

Volume settings: High, Medium & Low

Max. current consumption:
 Max. sound output:
 97dB(A) ±3dB @ 1m (High volume, tone 8 @ 24V - tone dependent)
 Approved to:
 EN54-3, EN54-17 and EN54-23

CPR number: 0832-CPR-F0274 (version without isolator); 0832-CPR-F0276 (version with isolator)

MI-WSS-PC-N Wall mount sounder strobe, no isolator, clear, clear lens

MI-WSS-PC-I Wall mount sounder strobe, with isolator, clear, clear lens

## **IAV Wall Mount Strobe**



#### **Specifications**

• Dimensions (Ø x h): 121 mm x 51 mm

Weight: 238g
Lens color: Transparant or Amber

Light color: Red or Amber
Beacon flash rate: 1Hz
Max. current consumption: 3.5mA

Approved to: EN54-17 and EN54-23

CPR number: 0832-CPR-F0272 (version without isolator); 0832-CPR-F0269 (version with isolator)

MI-WST-PC-N Wall mount strobe, no isolator, clear lens

MI-WST-PC-I Wall mount strobe, with isolator, clear lens

MI-WST-PA-I Wall mount strobe, with isolator, amber lens

## **IAV Integrated Detector Base Sounder**



#### **Specifications**

Dimensions (Ø x h): 121 mm x 64 mm

Weight: 200q

Body color: Pure white (P) or Ivory (D) 32

Number of tones:

· Volume settings: High, Medium & Low

• Max. current consumption: 11.4mA (High volume tone 21 @ 24V) Max. sound output: 97dB(A) ±3dB @ 1m (High volume, tone 8 @ 24V - tone dependent)

· Approved to: EN54-3, EN54-17

CPD number: 0832-CPD-1829 (version without isolator); 0832-CPD-1833

(version with isolator)

MI-BSO-PP-N Int. detector base sounder, no isolator, pure white Int. detector base sounder, no isolator, ivory MI-BSO-DD-N MI-BSO-PP-I Int. detector base sounder, with isolator, pure white MI-BSO-DD-I Int. detector base sounder, with isolator, ivory

## **IAV Integrated Detector Base Sounder Strobe**



#### **Specifications**

• Dimensions (Ø x h): 121 mm x 64 mm

Weight: 202g Lens color: Clear · Light color: Red • Number of tones: 32 · Beacon flash rate: 1Hz

 Volume settings: High, Medium & Low

 Max. current consumption: 14.7mA (High volume tone 21 @ 24V) · Max. sound output: 97dB(A) ±3dB @ 1m (High volume, tone 8 @ 24V - tone dependent)

EN54-3, EN54-17 · Approved to:

CPD number: 0832-CPD-1830 (version without isolator); 0832-CPD-1834

(version with isolator)

MI-BSS-PC-N Int. detector base sounder strobe, no isolator, clear, clear lens, pure white housing

MI-BSS-PC-I Int. detector base sounder strobe, with isolator, clear, clear lens, pure white housing

IAV Mounting Bases		
B501AP	Low profile base - pure white	
B501AP-IV	Low profile base - ivory	
BRR	Deep profile base - red (includes B501AP)	
BDD	Deep profile base - ivory (includes B501AP)	
BPW	Deep profile base - pure white (includes B501AP)	
WRR	Deep waterproof base - red (includes B501AP)	
WDD	Deep waterproof base - ivory (includes B501AP)	
WPW	Deep waterproof base - pure white (includes B501AP)	

# **Spare parts**

Part number	Description	Spare part for:
002-439	Multi mount enclosure	Intelligent modules
020-820	Replacement paper roll for printer	ZXSe
020-836	Spare key for DXc & ZXr	ZXSe & DXc
020-891	Interface lead(cable) for ZX & DX Morley panels to PC (RS232)	ZXSe & DXc
124-196	230VAC mains input filter for all ZX models	Zxe
795-045	RS485 to RS232 convertor	ZXSe
795-051-001	Internal Printer Module for ZX5Se	ZXSe
795-072	Loop driver card Morley protocol for Zxe series panels	ZXSe
795-083	Keyswitch kit. Keyswitch and 2 keys for DX control panels	DX
795-084	Spare Key for all DX control panels (PACK OF 5)	DX
795-085	Internal Printer Module for DX 40 zone Control panels	DX
795-104	DXc Spare door	DXc
795-106	Kit DXc Spare PSU 1 loop	DXc
795-107	DXc spare PSU 2-4 loop	DXc
795-108-003	DXc Spare language pack region 3	DXc
795-109-003	Kit DXc Spare base card 1 loop region 3	DXc
795-109-004	Kit DXc Spare base card 1 loop region 2 version 2	DXc
795-110-003	Kit DXc Spare base card 2 loop region 3	DXc
796-045	Microprocessor board for Zxe series panels Without software (pcb 124-206)	ZXSe
796-150	Single loop motherboard for DX1e (pcb 124-336)	DX
796-151	2 loop motherboard for DX2e/4e (pcb 124-344)	DX
796-152	2 loop PLUG IN card for DX4e (pcb 124-351)	DX
796-153	Display card for all DX panels (pcb 124-335)	DX
796-157	2-Loop Base Mainboard for ZX2e (pcb 124-209-002)	ZXe
796-158	Display 2x40 characters. LCD display (pcb 124-327)	ZXSE
796-161	Power supply for ZX5e 3-Amp.(pcb 124-205-002)	ZXe
796-162	5-Loop Base Mainboard for ZX5Se (pcb 124-354)	ZXSe
796-163	1-Loop Base Mainboard for ZX1e (pcb 124-209-003)	ZXe
796-164-000	Set of EPROMS for ZXe series panels. Eproms programmed with the latest software.	ZXe
796-170	Spare ZX2Se Baseboard	ZXSe
796-171	Spare ZX1Se Baseboard	ZXSe
796-175	Reprofit PSU kit; Panels manufactured before January 2010	ZXSe
796-176	Retrofit PSU Kit for ZX5Se, Panels manufactured before Jan. 2010	ZXSe
796-177	Power supply for ZX1e/ZX2e 2-Amp.(pcb 124-207-003); Panels manufactured since January 2010	ZXe
796-178	Power supply for ZX5e 2-Amp.; Panels manufactured since January 2010	ZXe
796-180	ZX5Se Retrofit PSU & PCB kit, Panels manufactured before Jan. 2010	ZXSe
796-181	Retrofit 4 lines display plate assembly complete with display and board; Panels manufactured before January 2010 (ZX5Se)	ZXe
796-182	ZX1Se Retrofit PSU&PCB kit; Panels manufactured before January 2010	ZXSe
796-183	Retrofit 4 lines display plate assembly complete with display and board; Panels manufactured before January 2010 (ZX1/2Se)	ZXe
796-184	ZX2Se Retrofit PSU&PCB kit; Panels manufactured before January 2010	ZXSe
796-855-M200	Set of Eproms with M200 850 software for Zxse	ZXSe
797-021	Spare Key for all ZX control panels (quantity 1)	ZXe
ESPA4.4.4-TEST_PROG	ZX-ESPA4.4.4 Test software	ZX-ESPA
KEYLCK-DRK220	Lock and Key for all ZX control panels	ZXe
MUS 156	EN54 break glass for MI call points (pack of 10; old code: KG1x10)	Call points
PS230	EN54 flexible op. elements for MI call points (pack of 10)	Call points

4

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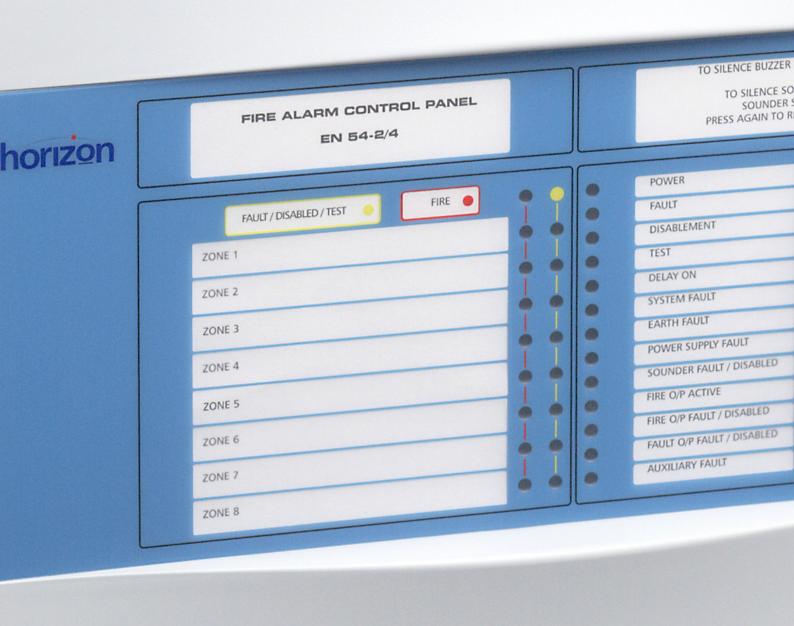
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# **Intelligent Systems**

# Spare parts

SC070	Spare test keys (pack of 10)	Call points
SC071	Pack of 20 terminal blocks for MCP	Call points

Benelux region





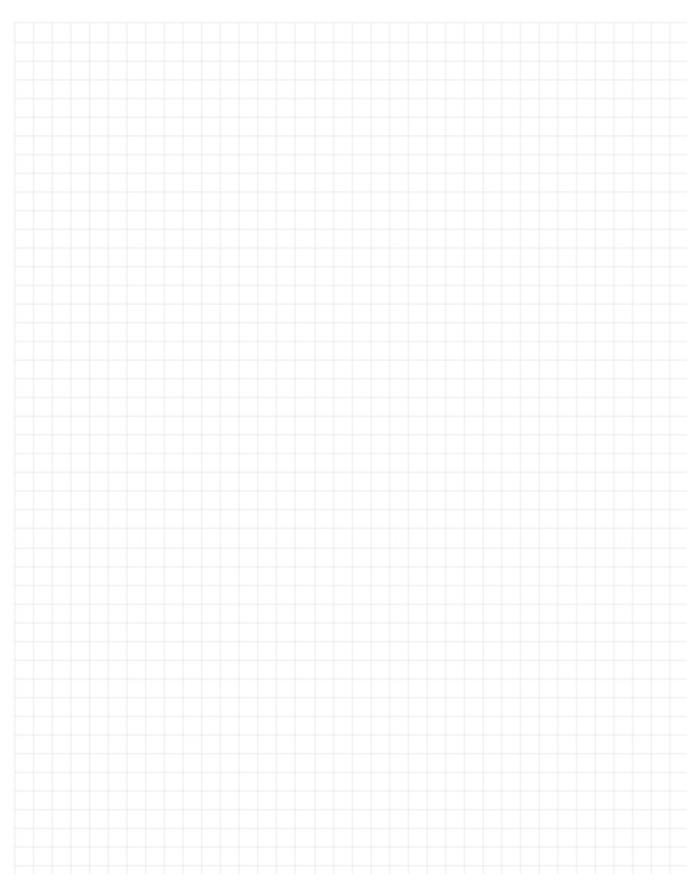
# Conventional Systems



# **Conventional Systems**

# Notes





#### **HRZ Series**



- Zones configurable for delay, coincidence, short-circuit alarm, capacitor or resistive end of line
- Fire and fault outputs volt-free relay or monitored (optional)
- Auxiliary power output for ancillary equipment
- 2 configurable inputs for ancillary equipment (e.g. class change, alert, etc.)
- Space for two option modules
- Optional 8-way relay module, common or zonal switching
- Optional 1.5A 4-way sounder module, common or zonal switching
- Simple to install

HRZ8

- · Robust fire resistant ABS moulded enclosure
- Battery space for up to 72 hours stand-by
- · 2, 4 or 8 zone versions available

Developed with efficiency in mind, HRZ2-8 zone non-intelligent fire alarm panels offer both installers and end users a technically advanced range of functions while remaining easy to install, program and operate. A full range of non-intelligent detectors, advanced non-intelligent detectors, beam detectors, manual call points, duct mounting applications, audible and visible alarm devices are available for use with the panels.

HRZ2-8 series fire alarm panels are ideally suited for facilities including offices, shop units, public houses, B & B, clubs, small industrial units, nursing homes and schools, offering a wide range of benefits to installers and end-users.

#### **Specifications**

Dimensions (W x H x D): 356 mm x 318 mm x 96 mm Weight: 2kg (without batteries) · Supply rating:  $230V\sim(AC) \pm 15\%$ , 50 / 60Hz, 1.6A Auxiliary output voltage: 18.0-28.5VDC Auxiliary output current: 0.5A maximum · Sounder circuit: 0.5A maximum per circuit

Sounder circuit total: 1.0A maximum • Operating temperature: -5°C to +45°C

• Relative humidity: 5% to 95% (non-condensing)

IP30 IP rating:

Optional sounder module may be used with an external power supply to give an additional 1.5A per module

EN54-2 & EN54-4 Approved to:

CPD number: 0786-CPD-20798; BOSEC number: B-9057-FD-892-b

#### The EN54-13 Bosec System certificate (B-9057-FD-892-b) contains the following items:

• Conventional fire panel HRZ2-8	• Beam detectors 6500R(S)
• ECO1000 Detectors & Bases:	Manual Call Points
ECO1002	MCP1A-xxxxxx-01
ECO1003	WCP1A-xxxxxx-01
ECO1005	MCP2A-xxxxxx-01
ECO1005T	MCP3A-xxxxxx-01
ECO1004T	WCP3A-xxxxxx-01
ECO1000B(R)	MCP4A-xxxxxx-01
ECO1000DB(R)	
	<ul><li>Sounders</li></ul>
	CWSO-RR-S1

CWSO-WW-S1

 Sounders with visual alarm CWSS-RR-S5 CWSS-WW-S5

Others IRK-2E **IRK-E-SI** 

#### HRZ2 Two zone conventional fire alarm panel

Four zone conventional fire alarm panel HRZ4

Eight zone conventional fire alarm panel

#### **HRZ Accessories**

#### 020-713

#### FS02 A/F Fire and fault relay expansion card



Fire and fault relay outputs for the HRZ series panels.

#### **Specifications**

• Weight:

Dimensions (L x W x H):

Connection:

Relay contacts:

65g

65 mm x 37 mm x 12 mm

connects directly to the panel using

the SK2

Rated 30VDC/1A

#### 020-747

### 8-Way relay board



8 relay outputs which are configurable as N/O or N/C by jumper links (1A @ 30VDC). Link setting allows 4 function presets to be configured for all 8 relays.

#### **Specifications**

· Weight:

• Max Current (per PCB):

Relay contacts:

210g

- Quiescent 0.1mA

- Alarm /all active 80.1mA

Rated at 30VDC, 1A.



Max 2 x 020-747 per panel.

#### 020-772

#### 4-Way sounder / monitored output board



Provides 4 monitored circuits with provision for external PSU and 2 digital inputs.

#### **Specifications**

• Sounder PCB outputs:

• Max Current (per PCB):

• If DIP switch 6 is set to >250mA:

• If DIP switch 6 is set to <250mA:

Digital Inputs:

Sounder PCB input:

Compliancy:

4 x 1A (maximum of 1.5A in total for 2

or more outputs)

4 x 250mA 2 x 5-32VDC

26 - 28.5VDC

20-30VDC, 5A

EN54 Part 4 with power status volt-

free contact (NC when there are no

faults present)

- Quiescent: 47mA

- Alarm/all active: 1547mA



This board is required to comply with EN54-13.

#### **ECO1000 Series**



- Low profile design
- Low current draw
- Remote alarm test feature
- Easy maintenance
- · Remote LED option
- Certified to EN54-5 and EN54-7
- Pan European approvals (CPD, MED and EN regions)
- White color

The ECO1000 series is the Morley-IAS range of conventional detectors. These detectors have been produced using the latest in manufacturing technology and supplied with an array of advanced features, making them "better by design".

A laser-based hand held Remote Test Unit can be used in conjunction with the range of ECO1000 detectors for alarm test purposes. The unit transmits a coded message, preventing spurious alarms being generated by other laser based devices. With a range of several meters, the hand held test unit provides an effortless way of remotely testing the ECO1000 range of detectors and removes the need for any direct physical access to the detector by the user.

The ECO1000 detectors also have an internal LED, which illuminate to provide a local alarm signal. This latches on, and remains illuminated until the detector is reset by a momentary power interruption. An optional remote LED annunciator may be used to repeat any alarm signal. The detector base is fitted with a shorting spring to permit circuit testing prior to fitting the detector and has a tamper resistant feature, which when activated prevents removal of the detector without the use of a tool.

#### **Specifications**

• Operating temperature range:

Operating voltage range:

Storage temperature range:

Relative humidity:

Material:

-30°C to +70°C

14-28VDC (Nominal 24VDC)

-40°C to +85°C

5% to 95% (non-condensing)

**ABS** 

#### ECO1003

#### Optical conventional detector



The ECO1003 photoelectric smoke detector uses a state of the art optical chamber combined with an application specific integrated circuit (ASIC) to provide quick and accurate detection of fires. A combination of the unique chamber design and other technically advanced features will significantly extend the service intervals before the cleaning of the detector becomes necessary.

#### **Specifications**

Dimensions (Ø x h):

102 mm x 32.5 mm (without base) 75g (+45g for standard base) Weight:

CPD number: 0832-CPD-0064; Vds number: G201060

#### **ECO1005**

#### Rate of rise thermal conventional detector



The ECO1005 class A1R thermal detector uses a state of the art thermal element combined with an application specific integrated circuit (ASIC) to provide quick and accurate detection of fires.

The detector incorporates a static element and is suitable where ambient conditions normally exhibit high temperatures.

#### **Specifications**

• Dimensions (Ø x h):

102 mm x 40.5 mm (without base)

· Weight:

70g (+45g for standard base)

CPD number: 0832-CPD-0066; Vds number: G201016

#### Conventional Detectors

#### **ECO1005T**

#### Fixed thermal conventional detector (58°C)



The ECO1005T class A2S thermal detector uses a state of the art thermal element combined with an application specific integrated circuit (ASIC) to provide quick and accurate detection of fires.

The detection incorporates a static element and is suitable where ambient conditions normally exhibit high temperatures.

#### **Specifications**

Dimensions (Ø x h):
 Weight:
 102 mm x 40.5 mm (without base)
 70g (+45g for standard base)

CPD number: 0832-CPD-0067; Vds number: G201073

#### ECO1004T

#### Fixed thermal conventional detector (78°C)



The ECO1004T detector uses a state of the art class BS and A1R thermal element combined with a microprocessor, running sophisticated algorithms to provide quick and accurate detection of fires. The detection incorporates a static element and is suitable where ambient conditions normally inhibit rapid changes in temperature, eg kitchens.

#### **Specifications**

Dimensions (Ø x h):
 Weight:
 102 mm x 40.5 mm (without base)
 70g (+45g for standard base)

CPD number: 0832-CPD-0068; VDS number: G204042

#### ECO1002

#### Optical/thermal detector



The ECO1002 multi-criteria detector uses a state of the art optical chamber and a class A1R thermal element combined with a microprocessor, running sophisticated algorithms to provide quick and accurate detection of fires.

The combination of photoelectric and thermal characteristics provides a faster response to 'real fire' situations, while at the same time reducing the risk of unwanted environmentally generated alarms.

#### **Specifications**

Dimensions (Ø x h): 102 mm x 40.5 mm (no base)
Weight: 78g (+45g for standard base)

CPD number: 0832-CPD-0065; Vds number: G201067

#### ECO1000B

#### Standard mounting base



#### **Specifications**

Dimensions (Ø x h):

102 mm x 21 mm

## **Conventional Systems**

#### Conventional Detectors

#### ECO1000BR Base with 470R resistor

#### **ECO1000DB**

#### Deep base

#### **Specifications**

• Dimensions (Ø x h):

102 mm x 33 mm

#### ECO1000DBR

#### Deep base with 470R resistor

#### ECO1000BREL12NL

#### 12V Relay base non latching



Interface for 12V systems that do not provide a reset facility. Resets automatically the ECO detector when the fire alarm condition no longer exists.

#### ECO1000BREL12L

## 12V Relay base latching



Interface for 12V systems that latches the detector into alarm. The detector can only be reset by removing its supply voltage. The base can be used with 4 wire security systems that have a reset facility.

#### ECO1000BREL24L

#### 24V Relay base latching



Interface for 24V system that requires an external contact. The detector stays in alarm until the removing of its supply voltage. A break-off tab allows the base to be connected to fire control panels. This tab should be broken when there is little current flow or no current limiting resistor such as when used as a 24V stand-alone system.

## **Conventional Detectors Accessories**

#### **IRK-2E**

#### LED remote indicator, white



Typical applications:

- All rooms permanently locked (boiler rooms, computer rooms, cupboards,...).
- · Health buildings.
- · Find fast the alarm location.

The LED remote indicator has been designed for direct connection to all Morley-IAS fire detectors. It provides a visual alarm indication of the room in which the detector is installed.

#### **Specifications**

• Dimensions (H x W x D): 80 mm x 80 mm x 25 mm

IP rating:

Terminals:

Maximum wire section:

Operating temperature:

Voltage range:

Maximum current:

IP40

1.5mm²

-10°C to +70°C

2,5 to 30 VDC

Weight: 40gMaximum cable size: 2.5mm²



Note: Supply voltage must not exceed 3,5 VDC without limiting resistor. Above this, a serial resistor must be provided with no less than 40 Ohm per Volt (usually inside the detector).

#### **IRK-2E-B**

#### LED remote indicator with booster



The IRK-2E-B includes an amplifier which allows the connexion of several LED remote indicators to a single detector.

Surface mounted on the supplied mounting plate.

#### **IRK-E-SI**

#### LED remote indicator, ivory



Surface mounted with the supplied mounting plate. Led's will not blink in normal mode on intelligent systems!

#### **Specifications**

Dimensions (H x W x D):
 86 mm x 86 mm x 36 mm

IP rating: IP40

Operating temperature: -10°C to +70°C
 Voltage range: 2,5 to 30 VDC
 Maximum current: 25mA
 Maximum cable size: 1.5mm²

### Conventional Detector accessories

#### **IRK-W-624**

#### LED technology remote indicator

Surface mounted. LED blinks in normal mode on intelligent systems.



#### **Specifications**

IP rating:Voltage range:

IP55 6-24 VDC

#### SFT2000

#### Installation adaptor for suspended ceiling (pack of 10)



The mounting adapter is used for the quick and secure attachment of bases of the MI-200-S2 and ECO detector series to suspended ceiling systems. It saves the usage of special hollow cavity fasteners, since the mounting screws of the bases are screwed directly into the slots of the mounting adapter. The mounting adapter offers additional advantages in the fixing of the cables, rigid/flexible cable inlays and threaded cable connections.



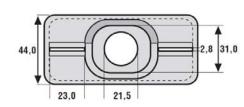
Pack of 10 pieces.

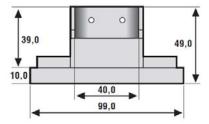
#### **Specifications**

• Material:

ABS

#### Dimensions in mm:





1

2

3

4

5

6

7

#### InnovairFLEX™

#### D<sub>2</sub>E

#### **Duct detector housing**







The duct detector samples air passing through a duct and gives dependable performance for shutdown of fans, blowers or airco systems, so preventing the spread of toxic smoke and fire gases through the protected area.

The D2E housing is modular and can be mounted in square or rectangular configuration. The D2E contains a LED remote indicator output and a B401 base to be used with the 2351E conventional detector. The conventional smoke detector and the air inlet sampling tube must be ordered separately. (No Relay output available.)

#### **Specifications**

Power supply: Operating range:

Dimensions (W x H x D):

Operating temperature:

Relative humidity:

IP rating:

12/24VDC 8.5 to 35VDC

370 mm x 127 mm x 63.5 mm

-20°C to +70°C

0% to 95% (non-condensing)

#### 2351E

#### **Conventional Smoke Detector for D2E**



#### **Specifications**

Dimensions (Ø x h):

Weight:

Operating temperature:

Relative humidity:

102 mm x 47 mm (in B401)

165g (in B401) -30°C to +70°C

0% to 95% (non-condensing)

## Air Inlet Tubes for InnovairFLEX™





D2E requires an inlet sampling tube as listed below.

#### **Specifications**

Diameter: Length:

DST-1: 30 cm DST-1.5: 45.7 cm DST-3: 91.6 cm

DST-5: 152 cm DST-10: 325.5 cm

DST-1

Inlet sampling tube (30 cm)

**DST-1.5** 

Inlet sampling tube (45.7 cm)

DST-3

Inlet sampling tube (91.6 cm)

DST-5

62

Inlet sampling tube (152 cm)

**DST-10** 

Inlet sampling tube (325.5 cm)

For spare parts, please refer to § Spare Parts at the end of this chapter (02. Conventional Systems)

## **Accessories for InnovairFLEX™**

#### **RTS151**

#### Remote test station



Proof remote station for DNRE and D2E.



24VDC external power supply is required, according to EN54-4.

#### RTS151KEY

#### Remote test station with key



Proof remote station for DNRE and D2E with key.



24VDC external power supply is required, according to EN54-4.

#### **RA100Z**

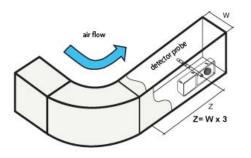
#### Remote annunciator



Remote indicator with LED for DNRE and D2E.



Item available on request only. Please check the last price list for lead time information.



## 6500R(S)



- · Combined transmitter and receiver unit
- Suitable for connection to a conventional zone
- Range 10-100 metres
- · 4 fixed sensitivity/threshold adjustment
- 2 automatic variable sensitivity modes
- Numerical indicators to aid beam alignment
- Fault and alarm LED indicators
- Integral horizontal and vertical beam alignment
- Drift compensation
- Approved to EN54-12
- Unique servo operated test filter (6500RS)

The 6500R and 6500RS are conventional reflector type linear optical beam smoke detectors designed to operate as a component of a conventional fire alarm system. It operates primarily on the principle of light obscuration utilising infra-red light. Optical beam smoke detectors are particularly appropriate for protecting buildings with large open spaces such as warehouses, atriums etc.

The 6500R and 6500RS detectors are combined transmitter/receiver units, which can be directly connected to a conventional zone and require a resetable 24VDC power supply. The Infra-Red transmitter generates a beam of light towards a high efficiency reflector. The reflector returns the beam to the receiver where an analysis of the received signal is made. The change in the strength of the received signal is used to determine the alarm condition.

#### **Specifications**

Detector dimensions (W x H x D): 254 mm x 84 mm x 90 mm
 Reflector dimensions (W x H): 200 mm x 230 mm
 Weight: 1.77kg

Operating temperature range: -30°C to +55°C IP rating: IP54

Relative humidity: 0% to 95% (non-condensing)

CPD number: 0832-CPD-0323; VDS number: G205034



For protective cages, see Protective Accessories, Part 6.

#### 6500R

#### 100M conv. reflective IR beam detector



Includes: Beam detector and short range reflector (5-70m).

#### **Specifications**

Operating voltage range:
 10.2 to 32VDC (24VDC Nominal)

Standby current: 17mAAlarm current: 38.5mA

#### 6500RS

#### 100M conv. reflective IR beam detector with self test tool

Same as 6500R with servo motor test tool. Requires 15V supply to operate Asuretest (remote test capability).

#### **Specifications**

Operating voltage range:
 Standby current:
 15 to 32VDC (24VDC Nominal)
 17mA (in Test Mode: 500mA peak)

Alarm current: 38.5mA

#### **Beam Detector Accessories**

#### **BEAM-LRK**

#### Long-range reflector kit (70m-100m)



The BEAM-LRK kit contains 3 reflectors (200mm x 230mm). In combination with the short range reflector supplied with the beam, the 4 reflectors mounted in square form one big reflector surface which extends the beam range over 70m, up to a maximum distance of 100m.

#### **BEAM-SMK**

## Surface mounting box





Absolutely needed when using the mounting bracket kit.

#### **BEAM-MMK**

#### Mounting bracket - swivel type



Used for wall mount and ceiling mount applications.



Must be used together with surface mounting box BEAM-SMK. (Beam not included.)

#### **BEAM-HK**

#### Heater kit for beam detector





Avoid condensation problems in non heated rooms.

#### **Specifications**

- Voltage:
- Current:
- Power consumption:

15 to 32V

92mA max at 32V

- nominal: 1.6W at 24V
- maximum: 3W at 32V

#### **BEAM-HKR**

#### Heater kit for reflector





Avoid condensation problems in non heated rooms.

#### **Specifications**

- Voltage:
- Current: Power consumption:

450mA max at 32V

15 to 32V

- nominal: 7.7W at 24V
- maximum: 15W at 32V

## FireRay ® 50/100R Beam detectors



- · Combined transmitter and receiver unit in one discrete unit
- Range 5-50 Metres (FIRERAY® 50R), 50-100 Metres (FIRERAY® 100R)
- Low current consumption
- Automatic self check drift compensation
- Selectable sensitivity/threshold levels
- Selectable latching / non latching fire
- LED indicators to aid the alignment process
- World-Wide approvals including EN54-12

The FIRERAY® 50/100R series conventional infrared optical beam smoke detectors provide economical and effective protection of large, open plan spaces with high ceilings, particularly if access to 'point type' smoke detectors presents practical difficulties.

Optical beam smoke detectors are ideally suited for protecting warehouses, factories, atria, shopping malls, leisure centres, churches, museums, power stations and industrial plants.

The FIRERAY® 50/100R optical beam smoke detectors can be connected to a zone of a conventional fire alarm control panel, or interfaced to an intelligent system via an intelligent input module or a zone monitored module.

#### **Specifications**

· Operating range F50R: 5 to 50 Metres Operating range F100R: 50 to 100 Metres Operating voltage range: 10.2VDC to 30VDC

Standby current: 17mA Weight: 0.67 kg IP rating: IP50

Relative humidity: 0% to 93% (non-condensing) Approvals / Certification: Designed, manufactured and certified to EN54-12: 2002

CPD number: 0786-CPD-20045; VDS number: G203070



For protective cages, see Protective Accessories, Part 6.

#### FR-0206.09

#### **FIRERAY 50R**



Reflective infrared beam smoke detector, comprising transmitter / receiver unit and reflective prism. 50m range. Including test filter and 1x reflective prism.

#### FR-0206.10

#### **FIRERAY 100R**



Reflective infrared beam smoke detector, comprising transmitter / receiver unit and reflective prism. 100m range. Including test filter and 4x reflective prisms.

For spare parts, please refer to § Spare Parts at the end of this chapter (02. Conventional Systems)

## FireRay ® 3000 End-to-End infrared optical beam smoke detector



- Separate transmitter and receiver heads
- Range 5 to 120 metres, configurable per set of detectors
- · Integral laser alignment in receiver
- 2-wire Interface between controller and receiver
- Single and twin detector options
- Separate fire and fault relays per detector
- · Low level controller with LCD display
- Programmable sensitivity and fire threshold
- Automatic gain control (AGC) for drift compensation
- First fix concept for transmitter, receiver and controller
- Multiple cable gland knockouts for ease of wiring
- Optional transmitter powering from controller
- · CPD approved

The FIRERAY 3000 End to End infrared optical beam smoke detector has been designed using the latest optical technology, incorporating modern industrial electronics and software technology. This detector offers cost effective protection for large, open area spaces with high ceilings. It is also very suited to applications where access to ceiling mounted smoke detectors presents practical difficulties.

The FIRERAY 3000 is ideal for applications where line of sight for the IR (infra-red) detection path is narrow and where the building structure uses reflective surfaces. It has also been designed to be aesthetically pleasing and thus can equally suit modern architectural buildings as well as heritage sites, particularly where ornate ceilings exist.

The system comprises a modern looking transmitter head, which emits a narrow beam of infra-red light to an associated Receiver head, with a compact low level controller. Once smoke crosses through and thus obscures the IR beam path, the signal strength at the receiver drops below a preset level which in turn results in an alarm condition.

Both the detector heads, transmitter and receiver, have integrated alignment thumbwheels for ease of alignment. Using these thumbwheels provides a smooth and repeatable alignment process. The detector heads have up to 10° of adjustment in both planes. For further adjustment, a bespoke adjustment bracket is available, which offers up to 180° movement in both planes, as well as a full 360° rotation.

The FIRERAY 3000 has been designed so that it can be installed by one operator, with its laser assisted alignment method combined with easy to use alignment LED's offering a visual feedback. Integrated laser alignment aid can be activated at the controller or at the receiver head.

An optional feature is to power the transmitter from the controller by wiring directly, thus reducing the number of power supplies required.

The low level controller incorporates a LCD display, which offers a full icon-based, easy-to-use interface unit. This controller enables ease of commissioning, testing and maintenance of the beam detection system. During commissioning the detector sensitivity and fire thresholds can be selected, along with the user variable time to fire and time to fault settings.

The system is fully compliant with the requirements of RoHS and WEEE.

#### **Specifications**

· Weight:

Operating voltage range:
 Operating temperature:
 Relative humidity:
 12 to 36 VDC
 -10°C to +55°C
 93% (non-condensing)

IP rating: IP54

Dimensions (W x H x D):
 Control unit: 203 mm x 124 mm x

71.5 mm

Transmitter & receiver: 78 mm x

77 mm x 161 mm Control unit: 606g

Transmitter & receiver: 207g

Operating controller current:
 14mA (constant) (with 1 or 2 receivers)

Operating Transmitter current: 8mA (per transmitter)

• Power down reset time: >10 seconds

Fire and Fault relay contacts:
 VFCO 2A @ 30VDC resistive

Optical wavelength: 850nm
 Housing material: UL94 V2 PC
 Approved to: EN54-12

CPD number: 078-CPD-21162; VDS number: G212034

#### FR-3000-101

#### Fireray 3000 System

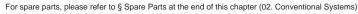




Kit containing: 1 transmitter (clear lens), 1 receiver (dark lens), 1 control unit, 1 test filter



Item available on request only. Please check the last price list for lead time information.



3

5



#### FR-3000-015

#### Fireray 3000 detector pack





Kit containing: 1 transmitter (clear lens), 1 receiver (dark lens)



Item available on request only. Please check the last price list for lead time information.

## FireRay ® 5000 Motorised infrared optical beam smoke detector



- Up to 2 detectors per system controller
- Each detector configurable from 8m to 100m
- Integral LASER
- Auto-align fast automatic beam alignment
- Auto-optimise building movement and contamination compensation
- · Low level system controller
- 20mm cable gland knockouts on system controller
- 2-wire interface from system controller to detector
- Worldwide approvals including EN54-12

The FIRERAY® 5000 motorised reflective, auto aligning infrared optical beam smoke detector can be installed with up to two detector heads per system, thus saving on installation time and costs. In addition, each system controller houses two pairs of fire and fault relays, one per detector. This innovative system has been designed from the ground up to include pioneering technology that fully addresses the needs of the installer and user, both now and in the future.

With its industry leading optics, the FIRERAY® 5000 is ideally suited for the protection of large areas where the use of traditional detection technologies would prove to be too difficult and/or costly to install. The FIRERAY® 5000 combines an infrared transmitter and receiver in the same discrete unit and operates by projecting a well-defined beam to a reflective prism, which returns the beam to the receiver for analysis. Smoke in the beam path causes a drop in power, which, if below a predetermined level, results in an alarm signal.

#### **Specifications**

Operating voltage range:
 Operating temperature:
 Storage temperature:
 Relative humidity:
 14 to 28 VDC
 -10°C to +55°C
 40°C to +85°C
 93% (non-condensing)

P rating: IP5

System controller dimensions (W x H x D):
 Operating current:
 202 mm x 230 mm x 81 mm
 37mA max (2 detectors)

Approved to:
 EN54-12

#### CPR number 0832-CPR-F0390; VDS number: G208017



For protective cages, see Protective Accessories, Part 6.

#### FR-5000-101

#### FIRERAY 5000 System (50m)





Kit containing: 1 x detector head, 1 x system controller and 1 x reflective prism.

Suitable for operation up to 50m.



Item available on request only. Please check the last price list for lead time information.

#### FR-5000-102

#### FIRERAY 5000 System (100m)





Kit containing: 1 x detector head, 1 x system controller and 4 x reflective prisms.

Suitable for operation up to 100m.



Item available on request only. Please check the last price list for lead time information.

#### FR-5000-002

#### FIRERAY 5000 single detector





FIRERAY 5000 detector plus 1 x prism for use with the FIRERAY 5000 50m system.



Item available on request only. Please check the last price list for lead time information.

#### FR-5000-039

#### FIRERAY 5000 single detector





FIRERAY 5000 detector plus 4 x reflective prisms for use with the FIRERAY 5000 100m system.



Item available on request only. Please check the last price list for lead time information.

#### FR-5000-004

#### FIRERAY 5000 long range kit





Long range kit, comprising 3 x reflective prisms, for use with FIRERAY 5000 system to give 100m capability. Can mount to either the 5000-006 or 5000-007 prism plate.

#### **Specifications**

Dimensions (W x D):

Weight:

205 mm x 205 mm

255g



Item available on request only. Please check the last price list for lead time information.

## FireRay accessories



Please note that the FireRay accessories are available on request only. Please check the last price list for lead time information.

#### FR-5000-005

# **Universal bracket**



Universal mounting bracket comes pre-drilled to mount the FIRERAY 5000 detector head as well as the 5000-007 four and 5000-008 single prism mounting plates.

283g

#### **Specifications**

• Dimensions (W x H x D):

134 mm x 71.5 mm x 134 mm

Weight:

#### FR-5000-007

#### Four prism plate



Prism plate for 4 prisms (not included) for use with 5000-005 universal bracket (not included). For beam range from 50m to 100m.

#### **Specifications**

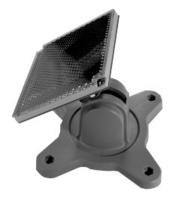
Dimensions (W x H x D):

205 mm x 205 mm x 105 mm

Weight: 255g

#### FR-5000-008

#### Single prism plate



Prism plate for 1 prism (not included) for use with 5000-005 universal bracket (not included). For beam range from 5 to 50m.

#### **Specifications**

Dimensions (W x H x D):

134 mm x 134 mm x 105 mm

Weight:

#### FR-5000-006

#### Prism mount plate



Surface mount plate for prisms. Hole pattern for 1 or 4 prisms.

#### **Specifications**

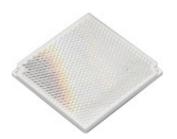
Dimensions (W x H x D):

284 mm x 211 mm x 12.7 mm

Weight:

#### FR-23901.01

#### Reflective prism



#### FR-5000-014

#### Universal ceiling mount



Ceiling pendant mount for use with F5000, F50/100, prism and 5000-005 universal bracket. Includes universal mounting plate. Does not include universal mounting brackets or 5000 detectors. Ceiling pendant mount comes with a 1" x 12" long threaded nipple. Contractor shall provide other nipple lengths as required.

#### **Specifications**

• Weight:

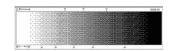
• Dimensions (W x D):

216 mm x 216 mm

3.4kg

#### FR-0209

#### Obscuration filter



Only compatible with F50/100

#### FR-0608

#### F50/100 Back box



Surface mount back box for use with FIRERAY 50/100 reflective beam detectors.

#### **Specifications**

• Dimensions (W x H x D):

190 mm x 248 mm x 49 mm

• Weight: 1.58kg

#### FR-0893

#### F50/100 Surface mount alignment bracket



Surface mount alignment bracket for use with FIRERAY 50/100 reflective beam detectors and prism.

45°

#### **Specifications**

Tilt angle:

• Dimensions (W x H x D): 190 mm x 130 mm x 30 mm

Weight: 1.02kg

#### FR-1000-007

#### Laser pointer



Pointer with red laser, output <5mW, for assisting beam alignment during installation.

#### FR-3000-201

#### Fireray 3000 adjustement bracket



The 3000-201 surface mount universal mounting bracket comes pre-drilled to mount the FIRERAY 3000 detector heads allowing 360° x 180° adjustment. Can also be used with 5000-007 four and 5000-008 single prism mounting plates.

#### **Specifications**

Weight:

• Dimensions (Ø x H):

85 mm x 99.5 mm

283g

#### FR-3000-202

#### Fireray 3000 flush mount plate



The 3000-202 flush mounting plate comes pre-drilled to mount the FIRERAY 3000 detector heads to any flat cable.

#### **Specifications**

• Dimensions (Ø x H):

99.5 mm x 13.6 mm

#### FR-5000-201

#### Fireray 5000 adjustement bracket



The 5000-201 surface mount universal mounting bracket comes pre-drilled to mount the FIRERAY 5000 detector heads allowing 360° x 140° adjustment.

#### **Specifications**

Weight:

• Dimensions (Ø x H):

99.5 mm x 98 mm

283g

### Conventional Beam Detectors

### FR-5100-204

### Anti-condensation heater for F50/100 beam detector



Heater to prevent condensation on lenses. Only compatible with F50 and F100, with or without alignment bracket.

The design of the FR-5100-204 utilises forced air, which results in a circulating current of warm air maintaining the detector lens at an incrementally higher temperature than the surrounding air. The heater will reduce the likelihood of condensation forming on the lens which, in turn, reduces the potential for false alarms.

### **Specifications**

Operating voltage: 24VAC/DC
 Power consumption at 24V: 20W
 Max. in-rush current: 3A
 Steady-state current at 24V: 0.8A (typical)

• Steady-state current at 24V. U.SA (typical)
• Operating temperature: -10°C to +45°C

Recommended fuse rating: T2A

• Connections: 4 leads (2 for heater & 2 for fan)

• Average temp. increase of lens above ambient: 10°C

• Dimensions (W x H x D): 126 mm x 210 mm x 181 mm

### FR-3000-204

### Anti-condensation heater for FR-3000 beam detector



Heater to prevent condensation on lenses. Only compatible with FR-3000 (transmitter, receiver, universal bracket).

The design of the FR-3000-204 utilises forced air, which results in a circulating current of warm air maintaining the detector lens at an incrementally higher temperature than the surrounding air. The heater will reduce the likelihood of condensation forming on the lens which, in turn, reduces the potential for false alarms.

### **Specifications**

Operating voltage: 24VAC/DC
Power consumption at 24V: 20W
Max. in-rush current: 3A
Steady-state current at 24V: 0.8A (typical)
Operating temperature: -10°C to +45°C

Recommended fuse rating:

T2A

Connections:
 4 leads (2 for heater & 2 for fan)

• Average temp. increase of lens above ambient: 10°C

Dimensions (W x H x D):
 86 mm x 126 mm x 198 mm

### FR-5000-204

### Anti-condensation heater for FR-5000 beam detector



Heater to prevent condensation on lenses. Only compatible with FR-5000 (receiver, universal bracket).

The design of the FR-5000-204 utilises forced air, which results in a circulating current of warm air maintaining the detector lens at an incrementally higher temperature than the surrounding air. The heater will reduce the likelihood of condensation forming on the lens which, in turn, reduces the potential for false alarms.

### **Specifications**

Operating voltage: 24VAC/DC
Power consumption at 24V: 20W
Max. in-rush current: 3A
Steady-state current at 24V: 0.8A (typical)
Operating temperature: -10°C to +45°C

• Recommended fuse rating: T2A

• Connections: 4 leads (2 for heater & 2 for fan)

• Average temp. increase of lens above ambient: 10°C

• Dimensions (W x H x D): 128 mm x 146 mm x 189 mm

### Conventional Beam Detectors

### FR-5000-205

### **Anti-condensation prism heater**



The heater pad is an efficient, ultra slim heating pad which is fixed behind the mounting plate.

The FR-5000-205 increases the temperature of the prism through the mounting plate thus maintaining the reflector at a higher temperature than the surrounding air. This reduces the likelihood of condensation forming on the lens which, in turn, reduces the potential for false alarms.



Does not include the prisms.

### **Specifications**

• Operating voltage: 24VAC/DC Power consumption at 24V: 20W Steady-state current at 24V: 0.8A (typical) Operating temperature: -10°C to +35°C

· Recommended fuse rating: 2A Connections:

2 x 500 mm PTFE flying leads Time taken to reach peak temperature: 30 min.

10°C Average temp. increase of lens above ambient:

Dimensions (W x H x D): 284 mm x 38 mm x 284 mm

### OSID beam smoke detector



Superior smoke detection and nuisance alarm rejection

- Simple and fast installation, easy to align
- High tolerance to vibration and structural movement
- High immunity to dust, steam, birds and
- High resistance to reflections and sunlight
- Minimal free spacing required (20 x 20 cm)

The OSID system measures the level of smoke entering beams of light projected over an area of protection. A single OSID imager can detect up to 7 emitters to provide a wide coverage area. Two innovations in smoke detection technology have been developped for the revolutionary OSID smoke detector. By using advanced dual wavelength projected beams and optical imaging technology for early warning smoke detection, OSID provides a low-cost, reliable and easy-to-install solution that overcomes typical beam detection issues such as false alarm incidents and alignment difficulties.



This range is available on request only. Please check the last price list for lead time information.

### **Specifications**

20 to 30VDC (24VDC nominal) Supply voltage: Nominal @ 24VDC: 8mA (1 emitter); · Imager current consumption:

10mA (7 emitters)

Peak @ 24VDC (during training

mode): 31mA

• Emitter current consumption: Wired version @ 24VDC: 350uA (Standard power); 800uA (High power)

• Dimensions (Emitter / Imager): 198 mm x 130 mm x 96 mm

CPD number: 0333-CPD-075387

OSI-10	OSID Imager, 7° coverage, 24VDC	
OSI-45	OSID Imager, 38° coverage, 24VDC	
OSI-90	OSID Imager, 80° coverage, 24VDC	
OSE-SP-01	OSID Emitter, Standard power, battery version	
OSE-SPW	OSID Emitter, Standard power, wired at 24VDC	

For spare parts, please refer to § Spare Parts at the end of this chapter (02. Conventional Systems)

**OSE-HPW** 

**OSI-EHE** 

OSID Emitter, High power, wired at 24VDC

### **OSID** beam detector accessories

OSID-INST	Installation kit for OSID beam detectors	
	Kit containing:  - Laser alignment tool (OSP-002)  - Test filter  - PC cable  - Cleaning cloth  - Manual	
OSP-001	FTDI cable 1.5m for OSID beam detectors	
OSP-002	Laser alignment tool for OSID beam detectors	
OSI-EHI	Environmental housing (IP66) for OSID Imager	

**Environmental housing (IP66) for OSID Emitter** 















## Conventional manual call points & switches

## Indoor (IP24) red colour MCP



The MCP1A range are Manual Call Points (MCP), both with a 470 Ohm resistor and normally open contact, complete with glass. The MCP1A-R470Fx-01 is designed for flush mounting. The call points are designed to provide a manual alarm interface to conventional fire alarm control panels. Both are supplied in the standard red colour.

i

The red conventional call points contain:

- Operating element label: EN54-11 "Dot & Arrows"
- Function label: Burning House

For other labels, please order the specific foil separately

(See §. Foil with labels for Call Points & Switches)

- Unique 'Plug & Play' installation concept
- Re-settable operating element option
- · Resistive and clean contact connections
- · Semi-flush or surface mounting
- · Approved to EN54-11
- · Backward compatibility
- Enhanced aesthetics

### **Specifications**

Weight:

• Dimensions (W x H x D):

Semi-flush mounting: 89 mmx 93 mm x 27.5 mmSurface mounting: 89 mm x

- 93 mm x 59.5 mm - Semi-flush: 110g
- Operating Temperature Range:
   Operating tension:
   Surface: 160g
   10°C to +55°C
   24VDC Nominal

The series red MCP is LPCB approved EN54-11

### MCP1A-R470FG-01

### MCP flush with break glass element

2 outputs: Normally open (max. 30VDC/2A) + monitoring resistor 470R.

CPD number: 0832-CPD-0642

### MCP1A-R470FF-01

### MCP flush with flexible element

As MCP1A-R470FG-01, but with flexible element.

### MCP2A-R470FG-01

### MCP flush with break glass element & LED



2 outputs: normally open (max. 30VDC/2A) + monitoring resistor 470R.

CPD number: 0832-CPD-0644

### MCP2A-R470FF-01

### MCP flush with flexible element & LED

As MCP2A-R470FG-01, but with flexible element.

For spare parts, please refer to § Spare Parts at the end of this chapter (02. Conventional Systems)

## **Conventional Systems**

### Manual Call Points & Switches

MCP3A-R000FG-01	MCP flush with break glass element with changeover contacts
	With changeover contacts (max. 30VDC/2A).
	CPD number: 0832-CPD-0648
MCP3A-R000FF-01	MCP flush with flexible element with changeover contacts
	As MCP3A-R000FG-01, but with flexible element.
MCP4A-R000FG-01	MCP flush with break glass element
	With double pole changeover contacts (max. 30VDC/2A).
	CPD number: 0832-CPD-0649
MCP4A-R000FF-01	MCP flush with flexible element
	As MCP4A-R000FG-01, but with flexible element.

## Indoor (IP24) MCP Other colours





The conventional call points in other colors contain:

- Operating element label: EN54-11 'dot & arrows'
- Function label: Plain color

For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches)



Please replace "x" in the part  $n^{\circ}$  by the code for the needed color: Y = yellow (RAL1006); G = green (RAL6016); B = blue (RAL5002); W = white (9010)



Items available on request only. Please check the last price list for lead time information.

MCP flush with break glass element
With changeover contacts (max. 30VDC).
MCP flush with flexible element
As MCP3A-x000FG-11 but with flexible element.
MCP flush with break glass element
With double pole changeover contacts (max. 30VDC).
MCP flush with flexible element

As MCP4A-x000FG-11 but with flexible element.

MCP surface, green, EDR marking, with break glass

## Security range, triple pole MCP

### M8A-G000SF

### M8 Triple pole call point, green, surface mount with plexi



Includes three change-over outputs to switch three separate circuits.

### **Specifications:**

Maximum operating voltage: 30VDC
Maximum current: 2A
IP rating: IP24D
Operating temperature: -30°C to +70°C
Weight: 180g

• Dimensions (W x H x D): 89 mm x 93 mm x 59.5 mm

• Colour: Green, RAL6016



Contains: - Triple pole call point, including back box

2 Function markings:Installation pack





Item available on request only. Please check the last price list for lead time information.

## Water resistant (IP67), red coloured MCP



### **Specifications:**

• Operating Temperature Range: -30°C to +70°C

Weight: 270g

• Dimensions (W x H x D): 97.5 mm x 93 mm x 65.5 mm



The red call M700WCP call points contain:

- Operating element label: EN54-11 "Dot & Arrows"

- Function label: Burning House

For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches)



### WCP3A-R000SG-01

### IP67 MCP surface with break glass element

With single pole changeover (max. 30VDC/2A). Includes surface mounting box.

CPD number: 0832-CPD-0659

### WCP3A-R000SF-01

### IP67 MCP surface with flexible element

As WCP3A-R000SG-11, but with flexible element.

Conventional Systems	S Manual Call Points & Switche		
WCP1A-R470SG-01	IP67 MCP surface with break glass element		
	2 outputs: normally open (max. 30VDC/2A) + monitoring resistor 470R. Includes surface mounting box.		
	CPD number: 0832-CPD-0654		
WCP1A-R470SF-01	IP67 MCP surface with flexible element		
	As WCP1A-R000SG-11, but with flexible element.		
Water resistant (IP67), N	ICP other colours		
	The conventional call points in other colors contain: - Operating element label: EN54-11 'dot & arrows' - Function label: Plain color For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches)  Please replace "x" in the part n° by the code for the needed color: Y = yellow (RAL1006); G = green (RAL6016); B = blue (RAL5002); W = white (9010)		

WCP3A-x000SG-11	IP67 MCP surface with break glass element
	With single pole changeover (max. 30VDC/2A). Includes surface mounting box.
WCP3A-x000SF-11	IP67 MCP surface with flexible element
	As WCP3A-x000SG-11 but with flexible element.
WCP1A-x470SG-11	MCP surface with break glass element
	2 outputs: normally open (max. 30VDC/2A) + monitoring resistor 470R. Includes surface mounting box.

list for lead time information.

Items available on request only. Please check the last price

As WCP1A-x470SG-11 but with flexible element.

MCP surface with flexible element

WCP1A-x470SF-11

### **MCP Accessories**

### **PS200**

### Transparent protective hinged cover



### **Specifications**

· Weight:

37g



Please note that the below items are available on request only. Please check the last price list for lead time information.

### SC071

### Terminal blocks (pack of 20)



Pack of 20 pieces.

### **KL1 X 5**

### Earth continuity links (pack of 5)



Pack of 5 pieces.

### BZR2

### Red bezel for flush installation

### **PTR**

### Semi flush tray for MCP

## Key switches single pole (K\*\*SxS range)





The keyswitches contain function label: Plain color For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches) All the keyswitches (K\*\*xS range) are surface mount. They replace the Wx9100 series.



Please replace "x" in the part n° by the code for the needed color: R = red; Y = yellow; G = green; B = blue; W = white

### **Specifications:**

Maximum voltage range:

Current rating:

Operating Temperature Range:

Dimensions (W x H x D):

• IP rating:

Colour: Material:

250VAC @ 50Hz 2A @ 250VAC -20°C to +55°C

87 mm x 87 mm x 52 mm

IP24

Red, Yellow, Green, Blue or White

**ABS** 



Items available on request only. Please check the last price list for lead time information.

For spare parts, please refer to § Spare Parts at the end of this chapter (02. Conventional Systems)

## **Conventional Systems**

### Manual Call Points & Switches

K20SxS-01	Key switch, single pole, 2 positions (key removable in both positions	
	Replacement for Wx9101 and Wx904.	
K21SxS-01	Key switch, single pole, 2 positions (key captive in one position)	
	Replacement for Wx9102.	
K30SxS-01	Key switch, single pole, 3 positions (key removable in all positions)	
	Replacement for Wx9103.	

## **Rocker switches**





The rocker switches contain:

- Function label: Plain color

For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches) All the rocker switches (Wx920x range) are flush mount.



Please replace "x" in the part n° by the code for the needed color: R = red; Y = yellow; G = green; B = blue; W = white

### **Specifications:**

• Maximum voltage range:

· Current rating: Operating Temperature Range:

Relative humidity:

• IP rating:

· Colour: Material: 240VAC or 24VDC 2A @ 240VAC; 6A @ 24VDC

-20°C to +70°C

0% to 95% (non-condensing)

IP24D

Red, Yellow, Green, Blue or White

**ABS** 



Items available on request only. Please check the last price list for lead time information.

### Wx9201 **Rocker switch 2 positions**

Double pole changeover contact.

### Rocker switch double pole ON/OFF Wx9202

With 220VAC red neon indicator.

### Wx9203 **Rocker switch 3 positions**

With two sets of three contacts.

## Miniature push switches





The miniature push switches contain:

- Function label: Plain color

For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches) All the miniature push switches (Wx930x range) are Flush mount.



Please replace "x" in the part n° by the code for the needed color: R = red; Y = yellow; G = green; B = blue; W = white

### **Specifications:**

• Maximum voltage range:

· Current rating:

• Operating Temperature Range:

Relative humidity:

· IP rating:

Colour:

Material:

240VAC or 24VDC

0.5A @ 240VAC; 1A @ 24VDC

-25°C to +55°C

0% to 95% (non-condensing)

IP24D

Red, Yellow, Green, Blue or White



Items available on request only. Please check the last price list for lead time information.

Wx9301	Miniature switch momentary action, non terminated
Wx9302	Miniature switch momentary action, terminated
Wx9303	Miniature switch latching, non terminated
Wx9304	Miniature switch latching, terminated

### **Push switches**





The push switches contain:

- Function label: Plain color

For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches) All the push switches (Wx940x range) are Flush mount.



Please replace "x" in the part n° by the code for the needed color: R = red; Y = yellow; G = green; B = blue; W = white

### **Specifications:**

• Maximum voltage range:

Current rating:

Operating Temperature Range:

 IP rating: Colour: · Material:

• Relative humidity:

IP24D

240VAC or 24VDC

-25°C to +55°C

0% to 95% (non-condensing)

6A @ 240VAC / 24VDC

Red, Yellow, Green, Blue or White

ABS



Items available on request only. Please check the last price list for lead time information.

Wx9403-11 Switch single pole, momentary action

Wx9402 **Switch 2 positions** 

For spare parts, please refer to § Spare Parts at the end of this chapter (02. Conventional Systems)

### **Conventional Manual Call Point & Switches Accessories**

## **Surface Mounting boxes**





Please replace "x" in the part  $n^{\circ}$  by the code for the needed colour: Y = yellow; G = green; B = blue; W = white

### **Specifications:**

• Dimensions (W x H x D):

87 mm x 87 mm x 32 mm

SR0T	Surface mounting box red
Sx0T	Curfoce mounting her other color
SXUI	Surface mounting box other color

## Foil with labels for Call Points & Switches



Please see the images of the labels on the next page.



Each foil contains 48 labels.



The below items are available on request only. Please check the last price list for lead time information.

MCP-LABEL F 028	Foil with 48 'ALARME INCENDIE' labels (black on red)
MCP-LABEL F 048	Foil with 48 'KOEPEL COUPOLE' labels (white on red)
MCP-LABEL F 056	Foil with 48 'BRAND FEU' labels (black on yellow)
MCP-LABEL F 071	Foil with 48 'EMERGENCY STOP' labels (black on yellow)
MCP-LABEL F 078	Foil with 48 'EVACUATION' labels (black on red)
MCP-LABEL F 081	Foil with 48 'FEU' labels (black on yellow)
MCP-LABEL F 082	Foil with 48 'BLUSKNOP' labels (black on yellow)
MCP-LABEL F 138	Foil with 48 'ALERTE INCENDIE' labels (black on red)
MCP-LABEL F 217	Foil with 48 'EXTINCTION' labels (black on yellow)
MCP-LABEL F 218	Foil with 48 'RUNNING MAN' labels (white on green)
MCP-LABEL F 220	Foil with 48 'BIJ NOOD DEUR OPEN' labels (white on blue)
MCP-LABEL F 222	Foil with 48 'EN54 BURNING HOUSE' labels (white on red)

## **Conventional Systems**

## Manual Call Points & Switches

MCP-LABEL F 228	Foil with 48 'DEUR ONGRENDELING' labels (white on blue)
MCP-LABEL F 235	Foil with 48 'ALERTE WAARSCHUWING' labels (black on red)
MCP-LABEL F 244	Foil with 48 'UITSTEL BLUSSING' labels (white on blue)

A		4. F	HM.	E
10	100	-		_









F 081

FEU









F 220 BU NOOD DEUR OPEN







## **Conventional Audio & Visual Devices - ENscape series**

### **Sounders**



- · Simple, fast & flexible installation
- · Suitable for wall and ceiling mount
- 32 tones, including a bell tone
- Two stage sounders enable alert and alarm sequences to be set for phased evacuation
- · Synchronised sounder output
- Approved to EN54-3

The conventional ENscape sounder is a high quality device designed to alert building occupants of an emergency. The product features a new folded horn design which provides outstanding sound output at low current draw. With its modern design, global tone set and extensive installer-friendly features, the ENscape sounder is the logical choice for specifiers, installers and distributors.



Includes (low profile or deep) base, see product description.

### **Specifications**

Dimensions (Ø x H):
 100 mm x 77 mm (low profile base)
 100 mm x 102 mm (deep base)
 Weight:
 190g (low profile base); 197g (deep base)

Operating Voltage Range:
 9-29VDC

Current: 31mA at 29 VDC (Tone 8)
Max. sound output: 107dB (A) @ 1m (Tone 23)
Number of tones: 32, including a bell tone

• Approved to: EN54-3

CPR number: 0832-CPR-F0254; VDS number: G215015

CWSO-RR-S1	EN Sounder, red, 32 tones, max. 107dB, incl. low profile base  EN Sounder, white, 32 tones, max. 107dB, incl. low profile base		
CWSO-WW-S1			
CWSO-RR-W1	EN Sounder, red, 32 tones, max. 107dB, incl. deep base (IP65)		
CWSO-WW-W1	EN Sounder, white, 32 tones, max. 107dB, incl. deep base (IP65)		

### **Strobes**



The conventional beacons feature high output LEDs, advanced optics and an innovative lens design, providing outstanding Omni-directional light coverage at low current draw. Specifically designed for, and approved to meet EN54-23, the ENscape beacon delivers outstanding quality, reliability and long operational life.



Includes (low profile or deep) base, see product description.

### **Specifications**

Dimensions (Ø x H):
 100 mm x 72 mm (low profile base)
 100 mm x 97 mm (deep base)
 Weight:
 164g (low profile base); 171g (deep

Operating Voltage Range:
Ourrent:
Dase)
9-29VDC
26mA at 29 VDC

• Flashing frequency: 0.5Hz

Approved to:
 EN54-23 C & W categories

CPR number: 0832-CPR-F0257; VDS number: G215016

## **Conventional Systems**

### Audio & Visible Devices

CWST-RW-S5	EN Strobe with red low profile base & white LED, EN54-23 C, W class	
CWST-WW-S5	EN Strobe with white low profile base & white LED, EN54-23 C, W class	
CWST-RR-S5	EN Strobe with red low profile base & red LED, EN54-23 C, W class	
CWST-WR-S5	EN Strobe with white low profile base & red LED, EN54-23 C, W class	
CWST-RW-W5	EN Strobe with red deep base & white LED, EN54-23 C, W class (IP65)	
CWST-WW-W5	EN Strobe with white deep base & white LED, EN54-23 C, W class (IP65)	
CWST-RR-W5	EN Strobe with red deep base & red LED, EN54-23 C, W class (IP65)	
CWST-WR-W5	EN Strobe with white deep base & red LED, EN54-23 C, W class (IP65)	

## Sounder-strobes



- · Simple, fast & flexible installation
- Suitable for wall and ceiling mount
- 32 tones, including a bell tone
- Advanced optics ensure superior light coverage
- Synchronised flash exceeds EN54-23 standard
- Approved to EN54-3 (sounder) and EN54-23, C & W categories (strobe)

The conventional sounder beacon is ideal for applications where a dual purpose audible and visual alarm device is required. The product features a new folded horn design, high output LEDs, advanced optics and an innovative lens design, providing outstanding sound output and omnidirectional light coverage at low current draw. Specifically designed and approved to meet both EN54-3 and EN54-23, the ENscape sounder beacon delivers outstanding quality, reliability and extended operational life.



Includes (low profile or deep) base, see product description.

### **Specifications**

• Dimensions (Ø x H):

• Weight:

• Operating Voltage Range:

• Current:

Max. sound output:

Number of tones:Flashing frequency:

Approved to:

100 mm x 98 mm (low profile base) 100 mm x 122 mm (deep base) low profile base: 248g (W class) or 236g (O class); deep base: 255g (W class) or 242g (O class) 12-29VDC 49mA at 29 VDC (class W) tone 7 22mA at 29VDC (class O) tone 7 107dB (A) @ 1m (Tone 23) 32, including a bell tone

0.5Hz

EN54-23 C, W & O categories

EN54-3

## EN54-23 C, W Class

	CPR number: 0832-CPR-F0262; VDS number: G215013
CWSS-RW-S5	EN Sounder/Strobe with red low profile base & white LED
CWSS-WW-S5	EN Sounder/Strobe with white low profile base & white LED
CWSS-RR-S5	EN Sounder/Strobe with red low profile base & red LED
CWSS-WR-S5	EN Sounder/Strobe with white low profile base & red LED

For spare parts, please refer to § Spare Parts at the end of this chapter (02. Conventional Systems)

## **Conventional Systems**

## Audio & Visual Devices

CWSS-RW-W5	EN Sounder/Strobe with red deep base & white LED (IP65)		
CWSS-WW-W5	EN Sounder/Strobe with white deep base & white LED (IP65)		
CWSS-RR-W5	EN Sounder/Strobe with red deep base & red LED (IP65)		
CWSS-WR-W5	EN Sounder/Strobe with white deep base & red LED (IP65)		

## **EN54-23 Open Class**

	CPR number: 0832-CPR-F0259; VDS number: G215014
CWSS-RR-S3	EN Sounder/Strobe with red low profile base & red LED
CWSS-WR-S3	EN Sounder/Strobe with white low profile base & red LED
CWSS-RR-W3	EN Sounder/Strobe with red deep base & red LED (IP65)
CWSS-WR-W3	EN Sounder/Strobe with white deep base & red LED (IP65)

## **ENscape accessories**



The below items are shipped per 5 pieces

CSR	Low profile base, red, pack of 5	
CSW	Low profile base, white, pack of 5	
CWR	Deep IP65 base, red, pack of 5	
cww	Deep IP65 base, white, pack of 5	
PS188	Deep base O-ring, pack of 5	
PS189	Deep base gasket, pack of 5	
SC076	Earther strap, pack of 5	













### **Base Sounder**



Item available on request only. Please check the last price list for Lead time information.

### NBS4

### Standard base sounder (4 TONES)



### **Specifications**

Dimensions (Ø x h): 117 mm x 30 mm
 Weight: 180g
 Operating temperature range: -30°C to +70°C
 Operating voltage: 9-33VDC

Operating voltage: 9-33VDC
 Current: 12mA at 24VDC (800Hz continuous,

Cable section:
 Compatible with:
 high volume)
 2.5mm²
 ECO series

VdS number: G211048; CPD number: 0832-CPD-0393

### **NBSLID/W**

### DBS white front LID-Pack of 10





Pack of 10 pieces.

### **NBSLID/R**

### DBS white front LID-Pack of 10





Pack of 10 pieces.

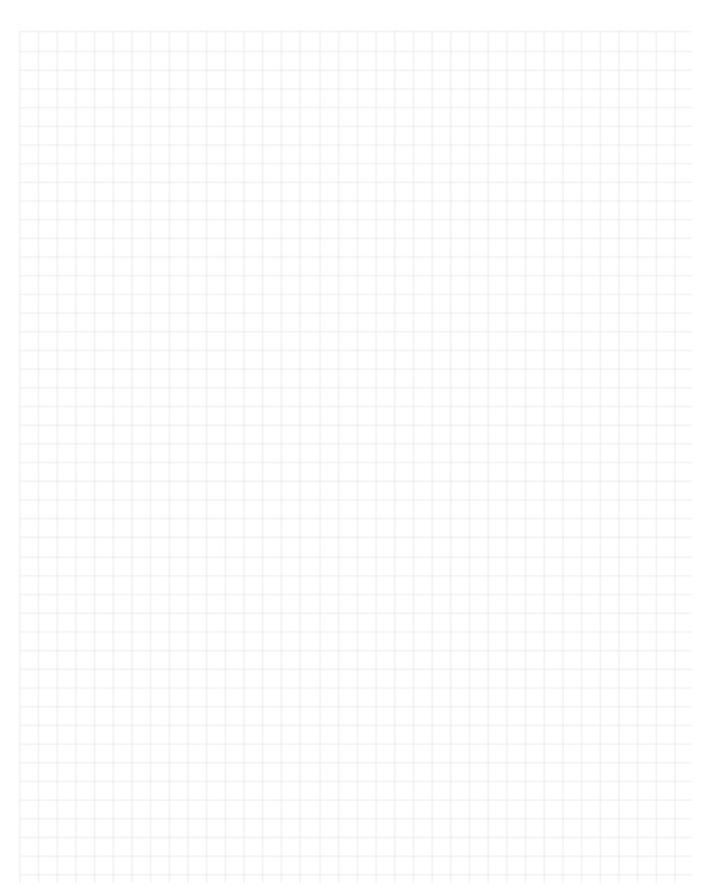
# **Spare parts**

Part number	Description	Spare part for:
020-745-008	Spare installation kit, includes 8 capacitive end of lines, battery leads, allen key, panel controls key and sounder end of line resistors	HRZ2-8
020-817	Spare text insert labels R1, Dutch, French, English, German, Swedish and Danish slide in labels	HRZ2-8
020-823	Spare allen key 4 mm right angle	HRZ2-8
020-849	Two zone replacement PCB	HRZ2-8
020-850	Four zone replacement PCB	HRZ2-8
020-851	Eight zone replacement PCB	HRZ2-8
020-852	Replacement power supply baseboard for HRZ panel range	HRZ2-8
020-865	Pack of 10 spare red keys	HRZ2-8
C 690	Spare key for key switches 2 positions rainproof unit	Switches
MUS 156	Spare EN54 breakglass for all KAC call points (pack of 10)	Conventional call points
OSE-RBA	Spare alkanine battery for emitter OSE-SP-01	OSID
PS230	Spare EN54 flexible operating elements for MCP call points (pack of 10)	Conventional call points
SC011	Screws for MCP call points (pack of 100)	Conventional call points
SC070	Pack of 10 spare test keys	Conventional call points
SC071	Pack of 20 terminal blocks	Conventional call points
SC080	Spare key for key switches 3 positions (pack of 6, replacement for C 273)	Switches
SC086	Spare key for keyswitch 2 positions, K2xD range (pack of 6; replacement for C 787)	Switches
SC087	Spare key for keyswitch 3 positions, K2xD range (pack of 6; replacement for C 788)	Switches

# **Conventional Systems**

## Notes









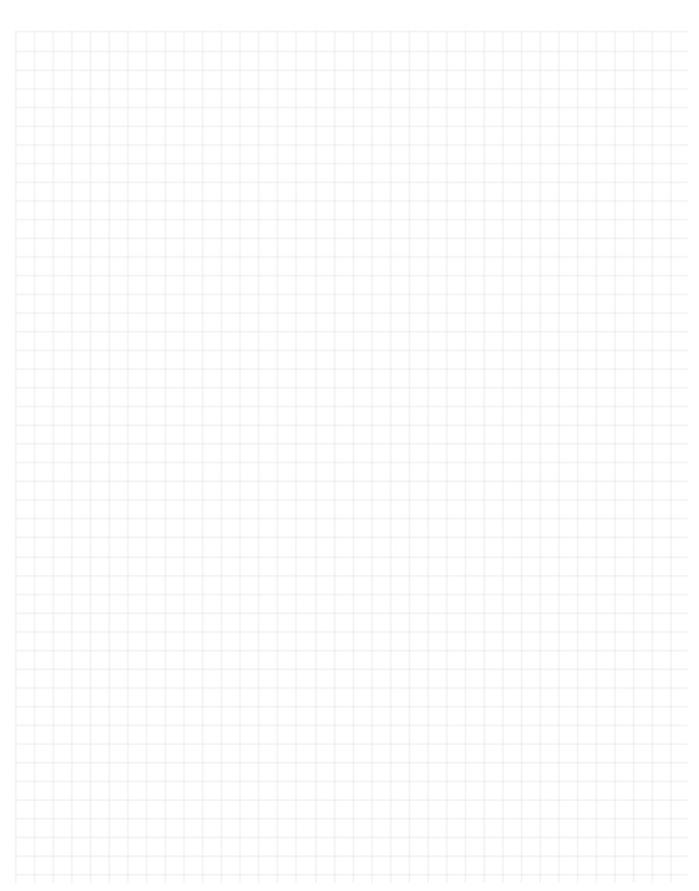
# Extinguishing Systems



# **Extinguishing Systems**

## Notes





### VSN-RP1R+



- Compact extinguishing panel controlled by 32 bits microprocessor from the last generation.
- · Easy configuration by means of keyboard.
- 2 conventional zones for detectors and a third one configurable for detectors or call points.
- Manual abort switch and hold manual call point.
- Sounder delay configurable from 30 to 300 sec. and verification time from 1 to 10 min
- Delays disabled from keyboard (optional).
- Input circuit for flow and low pressure and open door monitoring.
- Two release circuits. The second one can be used independently for preactivation.
- Countdown timer display which indicates the seconds left for release.
- 40 leds to quickly identify events.
- Relays for General fault, Extinguishing release activated, Preactivation, Extinguishing release in progress, Extinguishing release cancelled, Manual mode, Automatic mode
- Operating mode: Automatic, Manual and Disabled.
- Digital input for remote actions configurable as: system reset, evacuation, silence or delay on/off.
- · Plug-in terminals for all connections.
- Designed to comply with EN54-2/4 and EN12094/1:2003.
- CE marking.

### **Extinguishing control panel**

The VSN-RP1r+ control panel has been designed to efficiently manage the automatic release sequence of any extinguishing system of gas, CO2 (according EN12094:1/2003 requirements), foam, dust, aerosol or sprinklers.

The VSN-RP1r+ compact control panel includes: a switched 65W power supply with battery charger; three input zones to connect directly to two-wire conventional detectors and external release call point; two release monitored and electronically protected output circuits and two sounder outputs with different frequencies to identify each of the extinguishing stages (preactivated mode, activated mode, hold/abort and release). The front panel includes system status leds, a 2-digit countdown timer, a GAS sign and a keyswitch for access level 2.

There are inputs circuits for low and flow pressure monitoring, open door control; hold and release abort call points and status relays (general fault, extinguishing release activated, preactivation, extinguishing release in progress, extinguishing release cancelled, manual mode, automatic mode).

VSN-RP1r+ also includes two RS232 interfaces, an USB interface and an I2C which allows a visualization of the history log using one of the optional communication interfaces.

### **Specifications**

• Power supply:

· Quiescent current:

Total max. current:

· Batteries:

· Load max. current:

• Battery fuse:

Outputs:

• 2 monitored sounder outputs:

• 2 aux. power supply outputs:

· 2 release circuits:

• Operating temperature:

Relative humidity:

• IP rating:

• Dimensions (W x H x D):

• Weight:

110 - 230VAC; 50/60Hz.

125mA max. 2.4A 2 x 7Ah 300mA

F4L 250V (4A)

2 x 250mA

2 x 250mA (resettable and non-

resettable)

1A max. each circuit from -5°C to +40°C

Max. 95% (non-condensing)

IP30

381 mm x 353 mm x 123 mm

4 kg (without batteries)

CPR certification: 1134-CPR-045



### **VSN-232**

### RS 232 serial interface



## **Specifications**

Weight: 113g

### **ITAC**

### Interface module VSN-RP1r+



Communication card to transmit the information of the extinguishing control panel to the intelligent DXc or ZXSe.

- ITAC should be installed inside VSN D
- RP1r+ box from which it is powered by means of the 4 supplied cables.
- Relay included, 1A. NO/NC/C general fault.
  16 leds to inform about 16 events max.
- · Shortcircuit isolator option.
- 2 rotary switches provided to select the start module addresses (01-99) in the loop.
- 2 plug-in connectors with 3 terminals each one (+,- and shield).

### **Specifications**

• Dimensions (H x Wx D): 50 mm x 125 mm x 40 mm

### **VSN-4REL**

### 4 Relay board



Required to comply with EN12094:1/2003 (Option 4.26).

### **Specifications**

• Weight:

• Dimensions (H x Wx D):

Operating temperature:
 Polative humidity:

Relative humidity:

• Contact:

200g

357 mm x 382 mm x 94 mm

-5°C to +45°C

5% to 95% (non-condensing)

2A/30VDC

### **RACK-SUPRA**

### 19" Rack mounting kit for VSN-RP1r+

For rack mounting of VSN-RP1r+. Made in black lake iron of 8U height.

### **Specifications**

• Dimensions (H x Wx D): 355 mm x 480 mm x 125 mm

### **TFT-SUPRA**

### Spare TFT 4.3" Touchscreen display for VSN-RP1r+

Optional 4.3" TFT touchscreen for VSN-RP1r+

## **Manual Control Units**

### ECP-804900

### Manual release call point - class B



Includes: yellow housing, key for reset and enclosure opening. EN12094-3 compliant.

Labels in Dutch, French, English and German.

### **Specifications**

Operating voltage: 8-30VDC
 Connection terminal: max. 2.5mm²
 Operating temperature: -10°C to 50°C
 IP rating: IP44
 Housing: PC ASA plastic

Weight: approx. 236g (with housing)
 Dimensions (H x W x D): 133 mm x 133 mm x 36 mm

CPD number: 0786-CPD-20194

### ECP-804902

### Electric stop push button - class B



Includes: blue housing, key for reset and enclosure opening. EN12094-3 compliant.

Labels in Dutch, French, English and German.

### **Specifications**

Operating voltage:
 Connection terminal:
 Operating temperature:
 IP rating:
 Housing:
 8-30VDC
 max. 2.5mm²
 -10°C to 50°C
 IP44
 PC ASA plastic

Weight: approx. 236g (with housing)
 Dimensions: 133 mm x 133 mm x 36 mm

CPD number: 0786-CPD-20195

### ESS-704917

### IP55 kit for ECP call points



Pack of 10 pieces

1

4

5

6



### **PUL-D/EXT**



### Manual release call point

Yellow, resettable, manual release call point with included protective cover. For surface mount. For indoor use only. Includes surface mounting box, protective cover and key for reset. Labels included in Dutch, French, English and Spanish.



Item available on request only. Please check the last price list for lead time information.

### **Specifications**

Supply voltage: 24VDC
 Operating temperature: -10°C to 50°C
 Storage temperature: -10°C to 50°C

Relative humidity: max. 95% (non-condensing)
 Dimensions: 89 x 89 x 52 mm

Difficiliation.

CPD number: 1035-CPD-ES044861-2

### **PUL-P/EXT**



### Manual stop push button

Blue, resettable, manual stop push button with included protective cover. For surface mount. For indoor use only. Includes surface mounting box, protective cover and key for reset. Labels included in Dutch, French, English and Spanish.



Item available on request only. Please check the last price list for lead time information.

### **Specifications**

Supply voltage: 24VDC
 Operating temperature: -10°C to 50°C
 Storage temperature: -10°C to 50°C

Relative humidity: max. 95% (non-condensing)
 Dimensions: 89 x 89 x 52 mm

CPD number: 1035-CPD-ES044861-2

## **Emergency Fire Signalling Panels**



Optical and acoustic signalling panels suitable for any risk situation such as fire, flooding, gas extinguishing, etc.

Panels are delivered without labels that have to be ordered separately.

The housing material is a self-extinguishing thermoplastic, white color and the diffuser is a clear self-extinguishing polycarbonate.



Order labels separately.

### A5055 SS LED's light signalling panel

### **Specifications**

• Weight:

• Dimensions (W x H x D):

365 mm x 180 mm x 50 mm 66 mA @ 12VDC; 58 mA @ 24VDC Rated current:

· IP rating: IP40

### A5555 SS LED's light signalling panel IP65

### **Specifications**

Weight:

900g 325 mm x 130 mm x 80 mm • Dimensions (W x H x D): Operating temperature: from -10°C to +50°C

· Rated current:

• IP rating:

66 mA @ 12VDC; 58 mA @ 24VDC

IP65

### Text labels

## Text labels for A5055 SS Signalling Panels



The below items are available on request only. Please check the last price list for lead time information.

"BRANDALARM" A08670N

A08671N "ONTRUIMINGSALARM"

A08672N "VERBODEN TOEGANG - GASALARM"

A08666	"EXTINGUISHING IN PROGRESS"
A08667	"ALARM"
A08668	"FIRE ALARM"
A08669	"DO NOT ENTER"
A08670	"ALARME INCENDIE"
A08671	"EVACUATION IMMEDIATE"
A08672	"ENTREE INTERDITE"
A08673	"EINTRITT VERBOTEN"
A08674	"FEUERALARM"
A08675	"TIEFGARAGE SOFORT VERLASSEN"
A08676	"BETRETEN VERBOTEN - GASALARM"
A08660	"ALLARME INCENDIO"
A08664	"ABBANDONARE IL LOCALE"
A08658	"VIETATO ENTRARE SPEGNIMENTO AUTOMATICO IMMINENTE"



Other labels can be custom made (min. 100 pcs)

Text labels for A5555 SS	IP65 Signalling Panels
A08670N-W	"BRANDALARM" IP65
A08671N-W	"ONTRUIMINGSALARM" IP65
A08672N-W	"VERBODEN TOEGANG - GASALARM" IP65
A08666-W	"EXTINGUISHING IN PROGRESS" IP65
A08667-W	"ALARM" IP65
A08668-W	"FIRE ALARM" IP65
A08671-W	"EVACUATION IMMEDIATE" IP65
A08672-W	"ENTREE INTERDITE" IP65
A08660-W	"ALLARME INCENDIO" IP65
A08664-W	"ABBANDONARE IL LOCALE" IP65



Other labels can be custom made (min. 100 pcs)

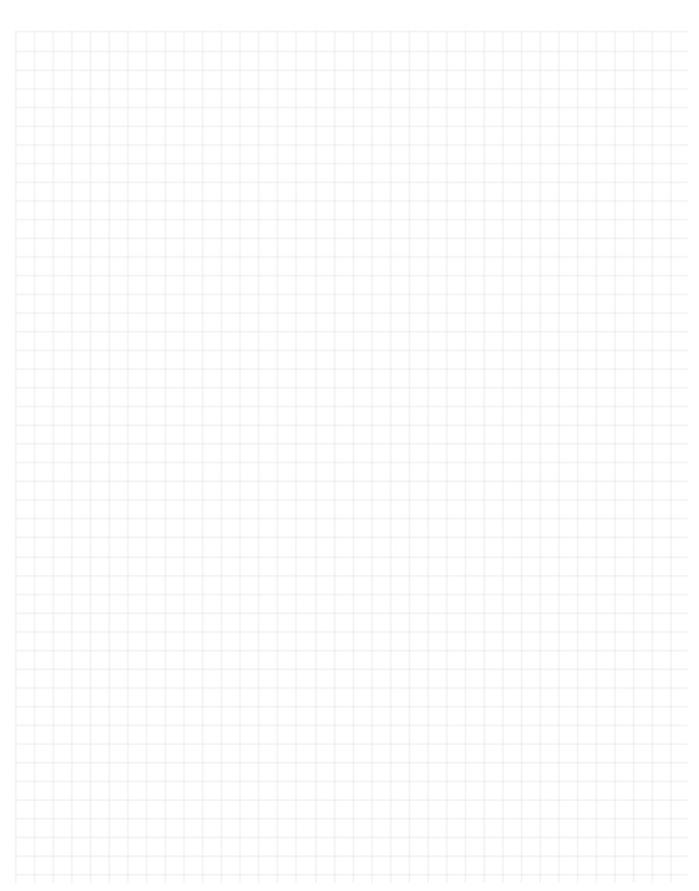
# **Spare parts**

Part number	Description	Spare part for:
ECP-25566A	Foil of 24 Dutch labels for ECP-804900	ECP-804900
ECP-25566A-W	Foil of 12 Dutch and 12 French labels for ECP-804902	ECP-804902
ESS-704901	Blue housing for electric stop push button, includes plastic key	ECP-804902
ESS-704902	Yellow housing for electronic control unit, includes plastic key	ECP-804900
ESS-704910	Break glass for ECP-804900 and ECP-84902	ECP call points
ESS-704911	Front label foil for electronic stop push button, includes Dutch, French, English, German & Italian labels (Pack of 10; Replacement for ECP-LABELS B)	ECP-804902
ESS-704912	Front label foil for manual control unit, includes Dutch, French, English, German & Italian labels (Pack of 10; Replacement for ECP-LABELS Y)	ECP-804900
ESS-769910	Plastic key for Class B MCP	ECP call points
PUL-TAP	Spare cover for PUL-VSN/EXT (Pack of 5)	PUL-VSN/EXT
RP1r-CLL	Spare lock & key (1 key only)	VSN-RP1R
RP1r-FA	VSN-RP1R+ spare power supply unit	VSN-RP1R
RP1r-PCB	VSN-RP1R+ base PCA assembly kit	VSN-RP1R
RP1R-SUPRA-KEY	Spare keylock & key for VSN-RP1R+	VSN-RP1R+
RP1R-SUPRA-PCB	VSN-RP1r+ PCB panel	VSN-RP1R+
TFT-SUPRA	Spare TFT 4,3" Touchscreen display for VSN-RP1r+	VSN-RP1R+
VSN-LL	Key switch for level 2 access (only for VSN-RP1r)	VSN-RP1R

# **Extinguishing Systems**

## **Notes**







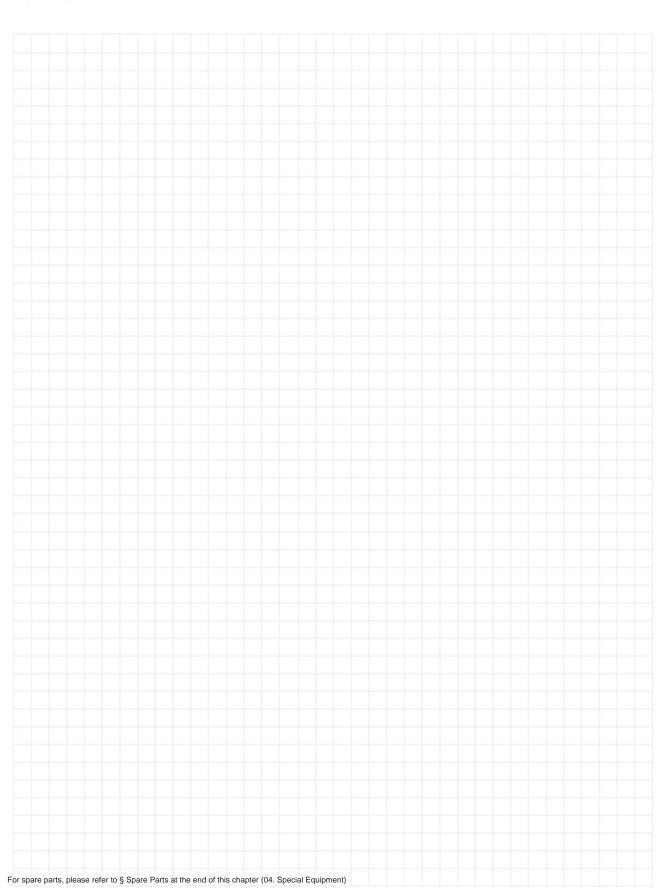


# Special Equipment



# **Special Equipment**

## **Notes**



## **Aspirating Systems**

### NEW

## FAAST XT (Availability will be announced)



- · Provides Very Early Warning Fire Detection, as precise as 0.0015%/m obscuration
- Five alarm levels and three sensitivity modes provide application flexibility
- User configurable 3-speed fan, allowing for maximum coverage area or minimizing on current consumption
- · Ultrasonic flow sensing for each pipe inlet and chamber airflow monitoring for precise system health information
- A single device covers up to 2.676 m<sup>2</sup>
- Dual source optical detection chamber with enhanced algorithms provide high sensitivity with greater immunity to nuisance conditions
- Patented particle separator removes large, non-fire particulate, ensuring chamber health and extending the life of the field-replacable filter
- TCP and Serial modbus for easy integration with building management systems
- Easy configuration via USB interface, no external power needed
- Onboard Ethernet interface enables remote monitoring, configuration, web server and e-mail notifications
- Multilingual LCD user interface
- Configurable air flow fault thresholds and verification period

The FAAST XT aspirating smoke detector combines advanced particle separation with unique dual source optical smoke detection technology to provide highly sensitive Very Early Warning Fire Detection while providing enhanced immunity to false alarms. This technology enables FAAST XT to accurately detect incipient fire conditions as early as 60 minutes before a fire actually starts when set for Early Warning and Very Early Warning Fire Detection in applications ranging from mission critical to harsh and extreme environments.

An installed FAAST XT device can protect up to 2.676 m<sup>2</sup> in standard coverage type applications and can be monitored in several different ways, including: Serial or TCP Modbus, Ethernet over a LAN or a direct connection, or via FAAST XT's onboard USB. When connected to a LAN, FAAST XT's email server can provide email event notification to appropriate personnel. FAAST XT also communicates alarm and notifications via form C relays.

### **Specifications**

- Dimensions (H x W x D):
- External supply voltage:
- Operating current:
- · Operating current:
- · Relay contact rating:
- Operating temperature:
- Sampling air temperature:
- Relative humidity: Sensitivity range:
- IP rating:
- Coverage area:
- Maximum single pipe length:
- Total pipe length:
- Event log:
- Communication network:
- · Webserver:

338 mm x 333 mm x 191 mm 18-30 VDC

Fan high: 465mA, 11.2W; Fan med.: 340mA, 8.2W; Fan low: 220mA,5.3W Fan high: 493mA, 11.85W; Fan med.: 368mA, 8.85W; Fan Iow: 248mA, 6W 3A @ 30VD; 0.5A @ 125VAC

8 form C; 3A, programmable latching or non-latching

0°C to 38°C -20°C to +60°C

10% to 95% (non-condensing) 0.0015% Obs/m to 20.5% Obs/m IP30

up to 2676 m<sup>2</sup>

123m (other three pipes disabled) 320m (all designs must be verified within PipeIQ software)

18.000 events stored

Ethernet monitoring, 6 email address alerts, TCP and serial modbus Read configuration, live view, logs

### CPD number: pending

9400X

### FAAST high sensitive aspiration system







### **FAAST XM**



- Detection as precise as 0.0015 %/m obscuration
- Five alarm levels and two sensitivity modes provide application flexibility
- Dual flow detection including both ultrasonic and electronic sensing for pipe and chamber air flow measurement
- A single device protects up to 2000 m<sup>2</sup>
- Advanced detection algorithms reject common nuisance conditions
- Patented particle separator and fieldreplaceable filter remove contaminants from the system
- PipelQ™ software provides intuitive system layout, configuration, and monitoring all in one package
- Integral Ethernet interface enables remote monitoring and e-mail status updates
- Fault indicators provide a broad spectrum of events
- Unique air flow pendulum graph verifies pipe network functionality
- Particulate graph displays subtle environmental changes for early problem indications
- 5 programmable alarm levels for latching or non-latching as well as a 0 to 60 second delay to best accommodate local codes or environments
- At startup FAAST XM self-adapts to its environment in just 24 hours, not weeks. The exclusive Acclimate mode automatically adjusts within your specified parameters to reduce nuisance alarms and adjust to current conditions.

The FAAST XM aspirating smoke detector combines dual source (blue LED and infra-red laser) optical smoke detection with advanced algorithms to detect a wide range of fires while maintaining enhanced immunity to nuisance particulates. This enables FAAST XM to accurately detect incipient fire conditions as early as 30 to 60 minutes before a fire actually starts for Early Warning Fire Detection and Very Early Warning Fire Detection.

For initial system creation, the PipelQ software guides users through pipe layout. The software also provides intuitive control over system configuration and ongoing system monitoring.

An installed device can be monitored through its integral display, from a computer connected to the device, or remotely through a computer browser or mobile device when the detector is connected to the Internet via its Ethernet port.

When Internet-connected, FAAST XM can also e-mail status updates to appropriate personnel. The detector can communicate alarm levels, urgent and minor faults, and isolate inputs via eight form C relays.

To enable a full detection strategy, FAAST XM combines its advanced communications capabilities with an extensive range of customizable settings. The detector provides five alarm levels that can be programmed for latching or non-latching relays.

To accommodate specific codes or environments, alarm delays can be set anywhere between 0 to 60 seconds. FAAST XM also supports two sensitivity modes: In Acclimate™ mode, the detector automatically adjusts itself to current environmental conditions to reduce nuisance alarms.

Day/Night/Weekend mode enables technicians to preset alarm thresholds based on routine changes in the environment.

### **Specifications**

• Dimensions (H x W x D): 337 mm x 330 mm x 127 mm

18-30 VDC External supply voltage:

Remote reset time: external monitor must be pulled low for

1 sec

a minimum of 100 ms

Power reset: Avg. operating current: 500mA @ 24VDC

Operating temperature: 0°C to 38°C

Relative humidity: 10% to 95% (non-condensing) IP rating: **IP30** 

Coverage area: up to 2000 m<sup>2</sup>

CPD number: 0786-CPD-21130; VDS number: G212002

### 8100E-BNL

### FAAST XM high sensitive aspiration system, stand alone version



Including English language and a multi language pack (ref. F-A-LC-A) with Dutch, French, German and Italian.

## FAAST LT Loop version



- · Multiple event logging up to 2240 events
- Ultrasonic airflow sensing
- PipelQ™LT software provides intuitive system layout and configuration all in one package
- User friendly air flow pendulum graph for verification of pipe network functionality
- Protected electronics from air flow and accidental damage during installation or maintenance
- Easily replaceable and reusable filter without affecting the rest of the device
- Designed for efficient wiring and installation: cable gland holes, easy access to the wiring area and no special tools required.
- · Easy access to parts requiring routine maintenance: filter(s) or sensors(s).
- Single & Dual channel versions with independent channels including fan, sensor and flow monitoring
- IP65 enclosure

The FAAST LT Aspirating Smoke Detector is designed with the installer and end user in mind. It serves the wide variety of Class C applications where maintenance is difficult, other smoke detection methods are inappropriate or prone to fail due to harsh environments or areas where aesthetics matters. It is also suitable for smaller mission critical applications where very early warning - Class A or B detection is required.

FAAST LT combines proven aspiration detection technologies to deliver reliable smoke detection and efficient installation and maintenance. The device includes high sensitivity laser fire detection, ultrasonic flow sensors, and internal design features to protect vulnerable components from environmental and human threats. The device is fast to install and easy to commission thanks to PIPE IQ LT pipe design and configuration software which is included as standard.

FAAST LT loop based devices are available as single channel and dual channel devices, offering flexibility for different detection strategies. A range of customisable settings are geared towards maximizing device performance and meeting different application needs.

Loop capability allows standard device integration, maintenance and support consistent with other 200 series devices.

The detector provides alarm and fault relays with auxiliary events relay as an option. These can be set as latched or non-latched. To accommodate local installation standards or environments, flow and general fault delays can also be set.

### **Specifications**

- Dimensions (H x W x D):
- Weight:
- External supply voltage:
- Remote reset time:
- · Power reset:
- Avg. operating current:
- Max. avg. operating current:
- Operating remperature:
- Relative humidity:
- IP rating:
- · Sensitivity range:

403 mm x 356 mm x 135 mm

6.5kg 18.5-31.5VDC

1 sec. 0.5 sec.

200mA @ 24VDC (excl. sounders) 500mA @ 24VDC (excl. sounders)

-10°C to 55°C

10% to 93% (non-condensing)

**IP65** 

0.06% - 6% obs/m

FAAST-LT Loop based - 1 channel with 1 laser detector

CPD number: 0832-CPD-2169

MI-FL2012EI

FAAST-LT Loop based - 1 channel with 2 laser detectors (common chamber) for double knock functionality

CPD number: 0832-CPD-2170

MI-FL2022EI

FAAST-LT Loop based - 2 channels with 2 laser detectors (separated chambers)

CPD number: 0832-CPD-2171

### FAAST LT Stand alone version



- Configurable sensitivity 9 levels from 0.06% to 6% obs/m
- Multiple event logging up to 2240 events
- Programmable alarm thresholds
- Ultrasonic airflow sensing
- A single device covers up to 2000m<sup>2</sup> (2 channel detector with 2x80m pipes with 9 holes per pipe per channel in Class C)
- · Particulate graph displays subtle environmental changes for early problem indication
- PipeIQ™LT software provides intuitive system layout and configuration all in one
- User friendly air flow pendulum graph for verification of pipe network functionality
- Protected electronics from air flow and accidental damage during installation or maintenance
- · Easily replaceable and reusable filter without affecting the rest of the device
- Designed for efficient wiring and installation: cable gland holes, easy access to the wiring area and no special tools required.
- · Easy access to parts requiring routine maintenance: filter(s) or sensor(s).
- Single & Dual channel versions with independent channels including fan, sensor and flow monitoring
- IP65 enclosure

The FAAST LT Aspirating Smoke Detector is designed with the installer and end user in mind. It serves the wide variety of Class C applications where maintenance is difficult, other smoke detection methods are inappropriate or prone to fail due to harsh environments or areas where aesthetics matters. It is also suitable for smaller mission critical applications where very early warning - Class A or B detection is

FAAST LT combines proven aspiration detection technologies to deliver reliable smoke detection and efficient installation and maintenance. The device includes high sensitivity laser fire detection, ultrasonic flow sensors, and internal design features to protect vulnerable components from environmental and human threats. The device is fast to install and easy to commission thanks to PIPE IQ LT pipe design and configuration software which is included as standard.

FAAST LT stand alone devices are available as single channel and dual channel devices, offering flexibility for different detection strategies. A range of customisable settings are geared towards maximizing device performance and meeting different application needs.

The detector provides alarm, pre-alarm and fault relays with auxiliary events relay as an option. These can be set as latched or non-latched. To accommodate local installation standards or environments, flow and general fault delays can also be set. Day/Night/Weekend mode enables technicians to pre-set alarm thresholds based on routine changes in the environment's usage.

### **Specifications**

Dimensions (H x W x D):

· Weight:

· External supply voltage:

· Remote reset time:

Power reset:

Avg. operating current: Max. avg. operating current:

Operating temperature:

Relative humidity:

IP rating:

Sensitivity range: Coverage area:

403 mm x 356 mm x 135 mm

6.5kg 18.5-31.5VDC 1 sec.

0.5 sec. 200mA @ 24VDC (excl. sounders) 500mA @ 24VDC (excl. sounders)

-10°C to 55°C

10% to 93% (non-condensing)

IP65 0.06% - 6% obs/m up to 2000m<sup>2</sup>

### FL0111E

### FAAST-LT Stand Alone - 1 channel with 1 laser detector

CPD number: 0832-CPD-1990

### FL0112E

FAAST-LT Stand Alone - 1 channel with 2 laser detectors (common chamber)

CPD number: 0832-CPD-1991

### FL0122E

FAAST-LT Stand Alone - 2 channels with 2 laser detectors (separated chambers)

CPD number: 0832-CPD-1992

For spare parts, please refer to § Spare Parts at the end of this chapter (04. Special Equipment)

## FAAST XS (Availability will be announced)



- Provides Very Early Warning Fire Detection, as precise as 0.00095%/m obscuration
- Three alarm levels and three sensitivity modes provide application flexibility
- User configurable 3-speed fan, allowing for maximum coverage area or minimizing on current consumption
- Ultrasonic flow sensing and chamber airflow monitoring for precise system health information
- A single device covers up to 464 m²
- Dual source optical detection chamber with enhanced algorithms provide high sensitivity with greater immunity to nuisance conditions
- Patented particle separator removes large, non-fire particulate, ensuring chamber health and extending the life of the field-replacable filter
- TCP and Serial modbus for easy integration with building management systems
- Easy configuration via USB interface, no external power needed
- Onboard Ethernet interface enables remote monitoring, configuration, web server and e-mail notifications
- · Multilingual LCD user interface

7100X

 Configurable air flow fault thresholds and verification period The FAAST XS aspirating smoke detector combines advanced particle separation with unique dual source optical smoke detection technology to provide highly sensitive Very Early Warning Fire Detection while providing enhanced immunity to false alarms.

This technology enables FAAST XS to accurately detect incipient fire conditions as early as 60 minutes before a fire actually starts when set for Early Warning and Very Early Warning Fire Detection in applications ranging from mission critical to harsh and extreme environments.

An installed FAAST XS device can protect up to 464 m² in standard coverage type applications and can be monitored in several different ways, including: Serial or TCP Modbus, Ethernet over a LAN or a direct connection, or via FAAST XS's onboard USB. When connected to a LAN, FAAST XS's email server can provide email event notification to appropriate personnel. FAAST XS also communicates alarm and notifications via form C relays.

### **Specifications**

- Dimensions (H x W x D):
- · External supply voltage:
- Operating current:
- · Operating current:
- · Relay contact rating:
- Operating temperature:
- · Sampling air temperature:
- Relative humidity:
- Sensitivity range:
- IP rating:
- Coverage area:
- Maximum single pipe length:
- Total pipe length:
- Event log:
- Communication network:
- Webserver:

CPD number: pending

279 mm x 229 mm x 159 mm 18-30 VDC

Fan high: 200mA, 4.8W; Fan med.: 151mA, 3.7W; Fan low: 120mA, 2.1W Fan high: 230mA, 5.6W; Fan med.: 172mA, 4.2W; Fan low: 142mA, 3.5W

3A @ 30VD; 0.5A @ 125VAC 5 form C; 3A, programmable latching

or non-latching 0°C to 38°C -20°C to +60°C

10% to 95% (non-condensing) 0.00095% Obs/m to 20.5% Obs/m

IP30 up to 464 m<sup>2</sup>

54.9m (all designs must be verified within PipeIQ software)

91.5m (all designs must be verified within PipeIQ software)

18.000 events stored

Ethernet monitoring, 6 email address alerts, TCP and serial modbus Read configuration, live view, logs

verification period

FAAST high sensitive aspiration system

### FAAST™ and FAAST LT accessories

### F-LT-EB

### Earth bar for FAAST LT





Item available on request only. Please check the last price list for lead time information.

### LaserFocus



LaserFocus is available on request only. Please check the last price list for lead time information.

### **VLF-250**

- Swift-Start<sup>™</sup> Operation
- SonicFlow™ (Ultrasonic Airflow Sensing)
- · Laser-based absolute smoke detection
- Pre-engineered pipe network designs
- Programmable alarm thresholds
- Clean air barrier optics protection
- Instant recognition display Instant fault finder™
- AutoLearn™ smoke
- AutoLearn™ flow
- Field service access door
- Multiple event logging in separate logs
- Event log up to 18,000 events
- Offline/online configuration capability
- Up to 250 m² coverage

### Air sampling smoke detector

The VLF-250 Air Sampling Smoke Detector provides very early warning smoke detection performance for the protection of small, business critical environments of 250m2 or less.

The air sampling detection concept works by continually drawing ambient air through sampling holes in a pipe network. Upon entering the unit the sampled air is filtered and passed into the detection chamber where light scattering technology detects the presence of very small amounts of smoke.

As the amount of detected smoke increases the revolutionary circular Smoke Dial™ provides the user with an instant understanding of a smoke event, even from a significant distance. Detector status information is communicated externally via relays or optional interface cards.

### **Specifications**

- Voltage:
- Current @ 24 VDC:
- Dimensions (W x H x D):
- Weight:
- IP rating:
- Detector ambient:
- Sampled air:
- Relative humidity:
- Maximum pipe lengths:

24VDC Nominal (18-30VDC) 220mA nominal, 295mA in alarm 245 mm x 175 mm x 90 mm

Approx. 2 kg IP30 0 °C to 40 °C

0 °C to 40 °C 5% to 95% (non-condensing)

1 x 25m (3-6 sampling holes preengineered) / 2 x 15 m per branch (2-4 sampling holes per branch pre-

engineered)

CPD number: 0832-CPD-0771

### **VLF-500**



### Early warning smoke detector

As VLF-250, but up to 500m<sup>2</sup> coverage.

### **Specifications**

Current @ 24 VDC:

Maximum pipe lengths:

410mA nominal, 490mA in alarm 1 x 50m (5-8 sampling holes preengineered) / 2 x 30 m per branch (3-6 sampling holes per branch pre-engineered)

CPD number: 0832-CPD-0771

For spare parts, please refer to § Spare Parts at the end of this chapter (04. Special Equipment)

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# LaserCompact (VLC)



LaserCompact is available on request only. Please check the last price list for lead time information.

#### VLC-500RO



- · Absolute smoke detection
- Wide sensitivity range
- Single pipe inlet
- Five (5) status LEDs
- Referencing
- VESDAnet communication (VN)
- Clean air barrier optics protection
- Three (3) Alarm Levels
- Three (3) Programmable Relays
- Air flow monitoring
- Optional remote display and relay capability
- Simple mounting design
- AutoLearn™

#### VLC detector - relays only

The VLC detector has been specifically designed to provide all the benefits of aspirating smoke detection, including very early warning, in single environment small areas and where space is a premium. The VLC combines the well-proven VLP detection technology with a modified aspirator design, and incorporates them into a compact enclosure with a simplified display.

The VLC-500RO is capable of monitoring up to 800m<sup>2</sup>. Alarm and pre alarm is adjustable from 0,005% to 20% obs./m. The LaserCompact detector is fitted with 3 relays (Fire, Pre-alarm and Fault) and a RS232 connection. The RS232 connection makes commissioning of the unit simple especially with the VSC software.

#### **Specifications**

Supply voltage:

· Power consumption:

Current consumption:

Fuse rating:

Dimensions (W x H x D):

Weight:

Operating conditions:

Recommended detector ambient:

Sampled air:

Relative humidity:

Sampling network:

• Maximum pipe lengths:

Computer design tool:

Pipe diameter:

Relays:

• IP rating:

Cable access:

Cable termination:

Alarm sensitivity range:

18 to 30VDC

5.4 W quiescent, 5.9 W in alarm 225mA quiescent, 245mA in alarm

225 mm x 225 mm x 85 mm

1.9 kg

Tested to -10°C to 55°C

-10°C to 39°C

-20°C to 60°C

10% to 95% (non-condensing)

Maximum area of coverage 800m<sup>2</sup>

1 x 80 m, 2 x 50 m ASPIRE2™

internal: 15 - 21 mm; external: 25 mm 3 Relays rated 2A @ 30VDC / Fire

(NO) / Pre-Alarm (NO) / Alert/ Fault (Maintenance & Isolate) (NC/NO) /

Configurable as latching & non latching IP30

4 x 25mm cable entries

Screw terminal blocks 0.2-2.5 mm<sup>2</sup>

0.005% to 20% obs/m



#### LaserPlus detector



LaserPlus is available on request only. Please check the last price list for lead time information.

#### **VLP-400**

#### LaserPlus detector



LaserPlus is capable of monitoring up to 2000m². Alarm and pre alarm adjustable from 0,005% to 20% obs./m. The detector is particularly well suited for controlling various fire extinguishing systems e.g. sprinklers and gasextinguishing installations. The detector standard comes with 7 software programmable relays. The DualStage filter ensures that the laserchamber is provided with clean air, to prevent that the optical parts being polluted by dust. Comes with 3 blank plates, one with two signalling LED's (Fire 1, Alarm and OK), enclosure IP30.

#### **Specifications**

Maximum total pipe length: 200mMaximum individual pipe length: 100m

• Power consumption (no programmer or display): 460mA @ 4200rpm

Voltage: 24VDC

CPD number: 0832-CPD-0768

#### **VLP-002**

#### LaserPlus with display



As VLP-400, but with a standard display module for reading the actual status of the detector including alarm levels and system faults. The display is equipped with 4 push buttons for Mode, Mute, Reset and Isolate.

#### **Specifications**

Power consumption (detector and display):
 520mA @ 4200rpm

CPD number: 0832-CPD-0768

#### **VLP-012**

#### LaserPlus display programmer



As VLP-002, but with a standard programmer module for configuring and servicing the detector. With the push buttons and integrated display all values can be entered and read.

#### **Specifications**

 Power consumption (detector with display and programmer):

580mA

#### **Laser Scanner**

- Individual pipe identification
- · Adaptive scan threshold
- · Wide sensitivity range
- · Laser based smoke detection
- VESDAnet<sup>™</sup> communication
- · 4 alarm levels per sector
- · High efficiency aspirator
- · Clean air barrier optics protection
- Easy to replace air filter
- 7 or 12 programmable relays option
- AutoLearn™
- Referencing
- Event log
- Recessed mounting



LaserScanner is available on request only. Please check the last price list for lead time information.

LaserScanner is similar to the LaserPlus, but includes a valve mechanism in the inlet manifold and software to control the airflow from the four sectors (pipes). This configuration enables a single VESDA zone to be divided into 4 separate sectors, for example, distinguishing between separate voids within a room.

#### **Specifications**

Dimensions (W x H x D): 350 mm x 225 mm x125 mm
 Weight: 4kg (incl. Display & Programmer modules)

Supply voltage: 18–30VDC
IP rating: IP30
Maximum total pipe length: 200m
Maximum individual pipe length: 100m

#### **VLS-600**

#### LaserScanner detector



LaserScanner detector is capable of monitoring up to 2000m². Alarm and pre-alarm adjustable from 0,005% to 20% obs./m.

The LaserScanner detector is able to secure and monitor up to four different zones. In normal operation the detector draws air from all zones.

When the smokelevel reaches the Adaptive Scan Threshold, the Scanner will retrace the source of the smoke and scan each pipe individually. Comes with three blank plates, one with signalling LED's.

#### **Specifications**

Power consumption (without programmer or display):

400mA @ 4200rpm

CPD number: 0832-CPD-0769

#### **VLS-700**

#### LaserScanner three blank plates/leds 12 relays

As VLS-600 but with 12 software programmable relays.

CPD number: 0832-CPD-0769

#### **VLS-204**

#### LaserScanner detector standard display



As VLS-600, but with a standard display module for reading the actual status of the detector including alarm levels and system faults. The display is equipped with 4 push buttons for Mode, Mute, Reset and Isolate.

#### **Specifications**

Power consumption (detector with display):
 460mA @ 4200rpm

Voltage: 24VDC

 Power consumption (without programmer or display):

400mA @ 4200rpm

#### **VLS-304**

#### LaserScanner with display 12 relays

As VLS-204 but with 12 software programmable relays.

CPD number: 0832-CPD-0769

#### **VLS-214**

# LaserScanner with display and programmer 7 relays



As VLS-204, but with a standard programmer module for configuring and servicing the detector. With the push buttons and integrated display all values can be entered and read.

#### **Specifications**

 Power consumption (detector with display and programmer):

580mA

CPD number: 0832-CPD-0769

#### **VLS-314**

#### LaserScanner with display and programmer 12 relays

As VLS-214 but with 12 software programmable relays.

# Sampling pipes & fittings

# Red



The red sampling pipes & fittings are packed per 10 units.

#### ABS 008/25

# Pipe (ABS), red, diameter 25 mm - 3 metres long, pack of 10



3 metres long pipe with external diameter of 25mm and interior diameter of 21mm with ABS material. Red color.

#### **Specifications**

Weight:

5kg (30 meters)

#### ABS 001/25

#### 90° (ABS) bend for 25mm pipe, red, pack of 10



#### **Specifications**

Weight:

146g (for 10 units)

#### ABS 002/25

#### 45° (ABS) elbow for 25mm pipe, red, pack of 10



#### Specifications

• Weight:

260g (for 10 units)

#### ABS 030/25

#### Flexible pipe, diameter 25mm, transparent



#### **Specifications**

• Pipe length:

30 cm

#### ABS 003/25

#### Socket union (ABS) for 25mm pipe, red, pack of 10



# **ABS 004**

#### Mounting clips for 25mm pipe, red, pack of 10



# **Specifications**

· Weight:

76g (for 10 units)

# **Special Equipment**

# Sampling Pipes & Fittings

#### ABS 005/25

#### Socket to socket sleeve (ABS) for 25mm pipe, red, pack of 10



Jointing socket between two externals 25mm diameters pipes.

#### **Specifications**

• Weight: 120g (10 units)

#### **ABS 005-1**

#### Socket to socket sleeve (ABS) for 27 to 25mm pipe, red, pack of 10



#### ABS 006/25

#### T-piece (ABS) for 25mm pipe, red, pack of 10



#### **Specifications**

• Weight: 266g (10 units)

#### ABS 007/25

#### End cap (ABS) for 25mm pipe, red, pack of 10



#### **Specifications**

• Weight: 66g (10 units)

#### White



The white sampling pipes & fittings are packed per 10 units.



The white sampling pipes & fittings are available on request only. Please check the last price list for lead time information.

#### ABS 008/25-WH

#### Pipe (ABS), white, diameter 25 mm - 3 metres long, pack of 10



# **Special Equipment**

# Sampling Pipes & Fittings

ABS 001/25-WH

90° (ABS) bend for 25mm pipe, white, pack of 10



ABS 002/25-WH

45° (ABS) elbow for 25mm pipe, white, pack of 10



ABS 003/25-WH

Socket union (ABS) for 25mm pipe, white, pack of 10



**ABS 004-WH** 

Mounting clips for 25mm pipe, white, pack of 10



ABS 005/25-WH

Socket to socket sleeve (ABS) for 25mm pipe, white, pack of 10



**ABS 005-1-WH** 

Socket to socket sleeve (ABS) for 27 to 25mm pipe, white, pack of 10

ABS 006/25-WH

T-piece (ABS) for 25mm pipe, white, pack of 10



#### ABS 007/25-WH

End cap (ABS) for 25mm pipe, white, pack of 10



# Remote sampling point assemblies

#### **ABS 010**

#### Warning labels for capillary sampling point, roll of 100 pieces

50g



For the marking of the intake points of the PVC/ABS pipe(s).



Roll of 100 labels.

#### **Specifications**

Weight:

#### **ABS 011**

#### Cement 250ml



# Remote sampling point assemblies

#### Red

#### ABS 019C/25

#### Capillary conical sample point kit for 25mm pipes, red



To connect on an ABS 008/25 pipe. For flexible installation or suspended ceilings.



Kit containing: - T-piece

- 2 meter capilary tube
- Sampling point (conical head)

#### ABS 019F/25

#### Capillary flush sample point kit for 25mm pipes, red



To connect on an ABS 008/25 pipe. For flexible installation or suspended ceilings.



Kit containing: - T-piece

- 2 meter capilary tube
- Sampling point (flush disc head)

For spare parts, please refer to § Spare Parts at the end of this chapter (04. Special Equipment)

# **Special Equipment**

# Sampling Pipes & Fittings



The below items are available on request only. Please check the last price list for lead time information.

#### ABS 020/25

#### Capillary discrete sample point kit for 25mm pipes, red



To connect on an ABS 008/25 pipe. For flexible installation or suspended ceilings.



Kit containing: - T-piece

- 2 meter capilary tube
- Sampling point (discrete head)

#### ABS 019C/25EC

#### Capillary conical sample point kit for 25mm pipes (end cap), red



To connect on an ABS 008/25 pipe. For flexible installation or suspended ceilings.



Kit containing: - End cap

- 2 meter capilary tube
- Sampling point (conical head)

#### ABS 019F/25EC

#### Capillary flush sample point kit for 25mm pipes (end cap), red



To connect on an ABS 008/25 pipe. For flexible installation or suspended ceilings.



Kit containing: - End cap

- 2 meter capilary tube
- Sampling point (flush disc head)

#### ABS 020/25EC

# Capillary discrete sample point kit for 25mm pipes (end cap), red



Point 8mm to connect on an ABS 008/25 pipe. For flexible installation or suspended ceilings.



Kit containing: - End cap

- 2 meter capilary tube
- Sampling point (discrete head)

#### 510-KIT

#### Capillary flush sample point kit for 25mm pipes (T-piece), red



Ideal for mounting in false ceilings.



Kit containing capillary sampling point, a 1 meter tube made of flexible nylon (10mm outer diameter and 8mm inner diameter), ceiling mount and T-piece for connection to the aspiration pipe network and a kit of 8 white sampling points, with diameters of 2, 2.5, 3, 3.5, 4, 4.5, 5 and 6 mm.

# Sampling Pipes & Fittings



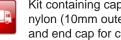
The below items are available on request only. Please check the last price list for lead time information.

#### 510-FIN

# Capillary flush sample point kit for 25mm pipes (end cap), red

Ideal for mounting in false ceilings.





Kit containing capillary sampling point, a 1 meter tube made of flexible nylon (10mm outer diameter and 8mm inner diameter), ceiling mount and end cap for connection to the aspiration pipe network and a kit of 8 white sampling points, with diameters of 2, 2.5, 3, 3.5, 4, 4.5, 5 and 6 mm.

#### 520-MTS-80R

#### Pack of 5 sampling point kits, red (for 510-KIT only)



Kit of 8 sampling points, with diameters of 2, 2.5, 3, 3.5, 4, 4.5, 5 and 6 mm. In red ABS material. Only for use with 510-KIT and 510-FIN.

# **White**



The below items are available on request only. Please check the last price list for lead time information.

ABS 019C/25-WH	Capillary conical sample point kit for 25mm pipes, white
ABS 019F/25-WH	Capillary flush sample point kit for 25mm pipes, white
ABS 020/25-WH	Capillary discrete sample point kit for 25mm pipes, white
ABS 019C/25EC-WH	Capillary conical sample point kit for 25mm pipes (end cap), white
ABS 019F/25EC-WH	Capillary flush sample point kit for 25mm pipes (end cap), white
ABS 020/25EC-WH	Capillary discrete sample point kit for 25mm pipes (end cap), white

# Components

# Red



The below items are available on request only. Please check the last price list for lead time information.

#### **ABS CAP-RED**





ABS 021/25

#### Capillary end cap for ABS 008/25 pipe



Reduces 25 m pipe to 10mm pipe.

#### ABS 022/25

#### Capillary T piece for ABS 008/25 pipe



Reduces 25 mm pipe to 10mm pipe.

# **White**



The below items are available on request only. Please check the last price list for lead time information.

#### **ABS CAP-WHITE**

#### 10mm Nylon tube - opaque (per metre)



ABS 021/25-WH

Capillary end cap for ABS 008/25-WH pipe

ABS 022/25-WH

Capillary T piece for ABS 008/25-WH pipe

# **Accessories**



The below items are available on request only. Please check the last price list for lead time information.

#### 02-WT-01

#### External water trap kit



Traps the water condensation.

PIP-025	25mm x 12" Condensation valve trap with ball valve
PIP-033	25mm Sight glass with condensation drain
F-PC	Pipe cutter, for pipes up to 27mm



# **Aspiration reducing films**



The Aspiration reducing films & banderole are packed per 10 units.



The below items are available on request only. Please check the last price list for lead time information.

# F-BS

#### Banderole, pack of 10



For securing the aspiration reducing film sheet on the PVC/ABS pipe(s).

F-AF-2.0	Aspiration reducing film sheet 2.0mm, pack of 10	
F-AF-2.5	Aspiration reducing film sheet 2.5mm, pack of 10	
F-AF-3.0	Aspiration reducing film sheet 3.0mm, pack of 10	
F-AF-3.6	Aspiration reducing film sheet 3.6mm, pack of 10	
F-AF-4.0	Aspiration reducing film sheet 4.0mm, pack of 10	
F-AF-4.6	Aspiration reducing film sheet 4.6mm, pack of 10	
F-AF-5.0	Aspiration reducing film sheet 5.0mm, pack of 10	

#### F-AF-5.6

Aspiration reducing film sheet 5.6mm, pack of 10

#### F-AF-6.0

Aspiration reducing film sheet 6.0mm, pack of 10



# **Smoke & heat evacuation systems**

#### **SAHEP** series



- 8A motor output, 24V
- EN12101-10 approval pending
- Two batteries of 2.1Ah included
- 6 led indications on front of panel
- Integrated priority control for fire brigade
- Possibility to connect MI-SAHEP-4-EFS slave panels
- Possibility to connect standard 470 ohms call points
- Easy installation: two wire polarity independent

The multilingual MI-SAHEP-4 panel is a smoke and heat evacuation panel built in a compact and curved attractive housing.

The MI-SAHEP-4 is the smallest panel on the market delivering 8A and with full built in control. Because of their size these panels are commonly installed directly in the entrance halls of apartments without the need of installing extra priority controls, call points, ventilation buttons.

The following functions are available on the control panel without the need of any addition: call point function, ventilation opening and priority control for the fire brigade.

The NBN S 21-208 demands a priority control for the fire brigade. The opening of a smoke vent can be done automatically by a smoke detector but it is up to the fire brigade to decide if the smoke vent must be closed when it brings to much oxygen in the building. This open and close control must have a higher priority than fire detectors or comfort controls. This priority control must be on a second access level and it must be possible to put the smoke vent in the 'close' position even before a Fire Switch is activated! The Sahep panels are a Belgian product and are manufactured specially to fulfil this Belgian requirement. On the Sahep panels these buttons are hidden behind a break out Plexiglas. There is also the possibility to add a second external priority control on the Sahep panel: SAHEP-PRIOR.

The Sahep panels are specially designed for easy installation.

The standard conventional call points with 470 ohms resistor can be used as Fire Switch on the Sahep panel.

#### **Specifications**

Dimensions (W x H x D):
 Operation temperature:
 20 cm x 20 cm x 7 cm
 -5°C to +60°C

• Colour:

Battery backup: Batteries included
 Autonomy: 72 h with 2.1 Ah batteries

Max. total load, motor output:
 24V, 8A

Fire brigade priority control:
 NBN S 21-208, Can be put in 'close' position before activation of a Fire

Switch and is on a second access level behind a break out Plexiglas.
 Fire brigade priority control input: Two wire, polarity independent input, supervised by end of line open and

close
 Fire group:
 Comfort group:
 Unlimited number of call points
 Unlimited number of switches
 Smoke-/heat detectors:
 1 line with line monitoring – max 30

• Wind-and rain sensor: detectors Input for closing

 Master Slave connection:
 Up to 20 slave control panels of each 8A can be connected to the master

panel LFD

White

Visual indicators:
 Designed to meet:
 Approval:
 LED
 PR EN12101-9
 EN12101-10 (pending)

MORLEY & IA

# Smoke & Heat Evacuation Systems

#### SAHEP-MI-SAHEP-4

#### Smoke and heat evacuation panel for 4 motors, 8A

The functions Fire switch, Comfort switch and priority control for the fire brigade are available on this panel.

Standard conventional call points with 470 ohms resistor are used as additional Fire Switches.

If needed any type and an unlimited quantity of external comfort switches can be added.



2 X 2,1Ah-12V batteries included.

#### SAHEP-MI-SAHEP-4-EFS

#### Smoke and heat evacuation panel 8A, slave version



This slave panel can be connected to the MI-SAHEP-4 and provides 8A with battery backup. This slave panel can be installed close to the smoke vent which leads to short high current wiring for the motors. On this slave panel a 70°C temperature sensor can be added providing a failsafe opening system. Even when the connection with the master panel fails, the slave panel will open the smoke vent at 70°C.

#### SAHEP-EFS-SENSOR

#### Temperature sensor 70°C for MI-SAHEP-4-EFS

This sensor can be connected to the MI-SAHEP-4-EFS to make a failsafe opening system.

#### SAHEP-PRIOR

#### Additional external fire brigade priority control



Key switch as external priority control with open, close and neutral position. The key switch contains electronics to connect this three position switch with only two, polarity independent wires, to the Sahep panel. The connection is supervised with a built in end of line resistor. Maximum one SAHEP-PRIOR can be added on a Sahep panel.

#### **Specifications**

Dimensions (W x H x D):

87 mm x 87 mm x 52 mm

#### SAHEP-WRD1

#### Wind & rain detector control unit



On this control unit a RD rain detector or WD wind detector can be added. The control unit can be connected to the Sahep control panel to provide automated closing of the vent in case of wind or rain. This automated closing will be overruled by a fire detection or an activation of the fire brigade priority control. Includes surface mounting box.

#### **Specifications**

Power supply:

Load contact:

Setting of the wind speed:

• Delay to avoid unwanted opening - closing:

• Dimensions (W x H x D):

230VAC 2.5A, 24V 5km/h to 35km/h

2 min

120 mm x 110 mm x 145 mm

For spare parts, please refer to § Spare Parts at the end of this chapter (04. Special Equipment)

# **Special Equipment**

# Smoke & Heat Evacuation Systems

#### SAHEP-RD

#### Rain detector



The SAHEP-RD rain detector functions with a capacitive sensor. So rain is detected in a capacitive way. In a capacitive rain sensor no external PCB traces are visible. These traces are sensitive for oxidation. This rain detector is compatible with the WRD1. A mounting bracket in included.

#### **Specifications**

• Dimensions (W x H x D):

120 mm x 110 mm x 145 mm

#### **SAHEP-WD**

#### Wind detector



This wind detector is compatible with the WRD1. A mounting bracket is included.

# **Spindle motors**

# **Specifications**



 Weight of smoke evacuation window that the motor can lift:

DS24VDC350/550/750: 65kg DS24VDC950: 20kg

#### SAHEP-DS24VDC350

#### Motor 24VDC 650N 35 cm IP65



Item available on request only. Please check the last price list for lead time information.

#### SAHEP-DS24VDC550

#### Motor 24VDC 650N 55 cm IP65

#### SAHEP-DS24VDC750

#### Motor 24VDC 650N 75 cm IP65

#### SAHEP-DS24VDC950

#### Motor 24VDC 200N 95 cm IP65



Item available on request only. Please check the last price list for lead time information.

#### SAHEP-PROFIL U

#### 'U' profile for DS24VDCxxx



Item available on request only. Please check the last price list for lead time information.

2







# Spindle motors for dual arms





The below items are available on request only. Please check the last price list for lead time information.

SAHEP-DUO24VDC550	Motor 24VDC 600N 55 cm IP65 for dual arms
SAHEP-DUO24VDC750	Motor 24VDC 600N 75 cm IP65 for dual arms
SAHEP-DUODR550	Slave arm for DUO 55cm
	Requires assembling kit SAHEP-TT130
SAHEP-DUODR750	Slave arm for DUO 75cm
	Requires assembling kit SAHEP-TT160
SAHEP-TT130	Assembling kit for DUO 55cm
SAHEP-TT160	Assembling kit for DUO 75cm

#### NEW

# **Apricolor chain motor**

#### **SAHEP-APRICOLOR**





The Apricolor motor is a chain motor. The chain is rolled up in the motor inside a nylon case. The chain is protected by a Dacromet coating.

Chain actuator for opening and closing gable windows and roof windows.

#### **Actulux series**

# **SVM** series control panels



- · Compact and elegant design
- 24V 5A or 8A
- LED indication in front panel for "OK", "AC", Fault", "Cable error", "Low battery", "Comfort open"
- Meet the demands according to EU Standard EN12101-9 and EN12101-10 (double supply)
- Possibility for integrated fire switch, comfort switch and special "fire close" function
- Possibility for external connection of fire switch, smoke- and heat detectors, comfort switch and weather sensor
- Potential free relay output for "alarm", "fault" and "comfort open"
- Possibility to connect more controls via bus communication
- Easy to install and set-up

ACT-SVM24V-5A-BASIC

ACT-SVM24V-8A-F-CS

Service indication

SVM "Mini" control panels are constructed to provide and control the operation of the opening systems for comfort and fire ventilation with 24VDC electrical opening units.

The SVM control panel has a compact and elegant design and is equipped with 100% double supply as standard according to EN12101-10 (motor output from internal supply or battery). 72 hours battery back-up is included.

The SVM control panel is equipped with connection terminals for external signals, detectors and contacts. Possibility for built-in fire and comfort switches in the front.



The below items are available on request only. Please check the last price list for lead time information.

#### **Specifications**

· Power supply:

• Operating temperature:

IP rating:

• Dimensions (H x W x D):

Colour:

• Battery back-up:

· Max. total load, motor output:

Motor output:

• Fire group:

• Comfort group:

Smoke-/heat detectors:

Wind- and rain sensor:

Serial connection of controls:

• Visual indication (LED) in front panel:

Control panel SVM 24V-5A Basic

230VAC - max. 250VA

-5°C - +60°C

IP50

286 mm x 238 mm x 113 mm

White RAL 9003 Incl. (72h)

24V - 5A / 8A

1 pc. (terminals 6mm²) - 1, 2, 3 or 4

lines with line monitoring

1 pc. with line monitoring - max. 20

pcs. external fire switches

1 pc. - unlimited no. of switches

1 line with line monitoring - max. 20 pcs. detectors

Input for close all

Bus connection integrates most

functions - from 2-10 controls in same

bus connection

OK, AC fault, DC fault, Line fault, Alarm

# ACT-SVM24V-5A-CS Control panel SVM 24V-5A incl. Comfort switch ACT-SVM24V-5A-FS Control panel SVM 24V-5A incl. Fire switch ACT-SVM24V-5A-F-CS Control panel SVM 24V-5A incl. Fire and comfort switch ACT-SVM24V-8A-BASIC Control panel SVM 24V-8A Basic ACT-SVM24V-8A-CS Control panel SVM 24V-8A incl. Comfort switch ACT-SVM24V-8A-FS Control panel SVM 24V-8A incl. Fire switch

Control panel SVM 24V-8A incl. Fire and comfort switch

# **Accessories for SVM Series control panels**

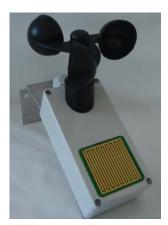


The below items are available on request only. Please check the last price list for lead time information.

#### ACT-VR-1



#### Wind and rain detector for SVM panel



The wind/rain sensor consists of a wind wheel and a rain sensor surface. It is developed for an automatic control of the smoke and comfort ventilation system. The wind/rain sensor is protected with a potential free SPDT switch with a contact rating of max. 60V/2A.

In case of wind and/or rain the SPDT switch is activated. The settings for the wind trigger threshold (the wind force makes the sensor report a too high wind force), the actuation delay, the drop out delay and the release in case of main power failure are made by a 6 pole DIP switch in the sensor.

#### **Specifications**

Power supply: Output contact:

Load contact:

Dimensions (WxHxD):

· Weight:

· IP rating:

• Setting of the wind mode:

Setting of the wind-/rain drop out delay:

Setting of the wind actuation delay:

Setting of the monitoring:

CE-marking:

18 to 26VAC or 20 to 32VDC

1 x potential free SPDT switch

60V / 2A

80 mm x 160 mm x 55 mm (without

wind wheel) Approx. 0,7 kgs

IP65

Approx. 3 to 14 m/s (+ / -20%)

10 min. / 20 min. 2 sec. / 5 sec. Off / On

in accordance with the EMC-directive and low voltage directive.

#### **ACT-WSK**





#### **Specifications**

Function:

Alarm (open), reset and off sound

indicator

LED indication:

"ok"; "fault""(yellow); "alarm activated"

(red)

Grey

Dimensions (W x H x D): 125 mm x 125 mm x 36 mm

Colour: IP rating:

#### **ACT-OPUS**

#### **Comfort switch for SVM Panel**



Up/down switch for manual control of comfort ventilation, e.g. in connection with 24V fire and smoke ventilation systems.

The up/down switch is delivered with housing for wall mounting.

#### **Specifications**

• Dimensions (W x H x D):

65 mm x 65 mm x 45 mm

# **Sagittarius Series**



SAGITTARIUS is a highly advanced wire to wireless system providing a solution for fire detection applications where traditional installations may be unacceptable or uneconomic.

The system is based on a proven protocol and wireless technology derived from the European security industry.

The translator provides for full sensor intelligent values on the European Frequency of 868 Mhz, fire and fault information and type ID's to be transmitted to the fire control panel.

All devices are delivered with batteries.

LPCB approved to EN54-25.

#### SG-PU



#### Display module with keypad

Wireless communication with receiver.



Only for conventional application.

#### SGCWE100



- · Bi-directional communication.
- 868.15 MHz—869.85MHz.
- Multi-channel (up to 7 channels).
- Automatic management of power transmission.
- Double orthogonal antenna provides reliable and secure communication.
- Immediate transmission of alarm, fault and tamper signals from field devices.
- Flexible on site device adjustment.

#### Sagittarius conventional system - expander module

The Sagittarius conventional system expander is a module device permitting to add a wireless sub-system to a conventional fire security installation.

This device is connected directly to the conventional control panel's zone line and is actually part of it. This device allows wireless sounders silencing by being controlled by the control panel's sounder output line.



Item available on request only. Please check the last price list for lead time information.

#### **Specifications**

- Communication range between expander and wireless devices:
- · Operating frequency channels:
- · Radiated power:
- Power supply voltage range:
- Power supply lower fault threshold:
- Conventional zone line applied voltage:
- Sounder's line maximum voltage:
- Expander maximum current consumption:
- Operating temperature range:
- Dimensions (without antennas):
- Weight:
- IP rating:

CPD number: 0832-CPD-1689

200m (in open space)

5 dBm (3 mW)

- 9-27VDC

- 12VDC typical

9VDC

Same as device's power supply

applied voltage 27VDC

60mA at 12VDC (alarm)

-30 °C to +50 °C

120 mm x 160 mm x 51 mm

330 g

IP 51C



#### **SGWE**



#### Wireless expander

Provides an extended signal coverage area up to 6 boosters per interface locally powered (12-24 Vdc) up to 32 wireless devices. Bi-directional dialogue protocol.

#### **Specifications**

Voltage range:
 Expander current consumption:
 Operating temperature range:
 9-27VDC
 15mA @ 24VDC
 -30°C to +50°C

• Dimensions (with antennas): 190 mm x 230 mm x 50 mm

IP rating: IP51C

CPD number: 0832-CPD-1690

#### SG100



#### Wireless optical smoke detector

Includes 360° bicolor LED & base.

#### **Specifications**

• Radiated power: 5dBm (3mW)

• Communication range with the receiver module: max. 200m (in open space)

Main battery: CR-123 A (approx. life time 5 years)
 Secondary battery: CR-2032 A (approx. life time 2 months)

Weight: 150g

Dimensions: 110 mm x 54 mm
 Approved to: EN54-7 & EN54-25

CPD number: 0832-CPD-1069

#### **SG200**



#### Wireless multi-tech optic / heat detector

Includes 360° bicolor LED & base.

#### **Specifications**

• Radiated power: 5dBm (3mW)

• Communication range with the receiver module: max. 200m (in open space)

Main battery: CR-123 A (approx. life time 5 years)
 Secondary battery: CR-2032 A (approx. life time 2 months)

Weight: 150g

• Dimensions: 110 mm x 54 mm

Approved to: EN54-5 & EN54-7 & EN54-25

#### SG350

#### Wireless heat detector



Includes 360° bicolor LED & base.

#### **Specifications**

Operating frequency chanels:

Radiated power: 5dBm (3mW)

Communication range with the receiver module: max. 200m (in open space)

Main battery: CR-123 A (approx. life time 5 years) Secondary battery: CR-2032 A (approx. life time 2 months) Alarm treshold: Programmable from 58°C to 78°C

with translator

• Approved to: EN54-5 & EN54-25

CPD number: 0832-CPD-1068

#### SG/SC

#### Decorline supplement for special coated detector



Available colors on request.



Minimum order quantity of 50 pcs.



Item available on request only. Please check the last price list for lead time information.

#### SGCP100

#### Wireless manual call point



Complies EN54-11.

Includes surface mounting box & break glass.

#### **Specifications**

• Dimensions (H x W x D): 86 mm x 86 mm x 59 mm

Weight: 186g Radiated power: 5dBm (3mW)

Communication range with the receiver module: max. 200m (in open space)

· Approved to: EN54-11 & EN54-25

CPD number: 0832-CPD-1683

#### SGWCP100

#### Wireless manual call point, weatherproof



#### **Specifications**

• Dimensions (H x W x D): 120 mm x 130 mm x 55 mm

-30°C to +55°C Operating temperature: IP rating: IP67

Radiated power: 5dBm (3mW)

• Communication range with the receiver module: max. 200m (in open space)





#### **SGMI200**

#### Wireless monitored input module



The wireless monitored input module allows the switched on/off status of an external device to be transmitted to the control panel through translator / expander devices.

#### **Specifications**

Main battery type: CR123 A · Backup battery type: CR2032 A IP rating: IP65 · Radiated power: 5dBm (3mW)

Communication range with the receiver module: max. 200m (in open space)

 Approved to: EN54-18 & EN54-25

CPD number: 0832-CPR-F0691

#### **SGMC200**

#### Wireless control module



With relay (requires external power supply).

#### **Specifications**

• Operating Voltage: 12-27VDC Current consumption: 50mA 109 mm x 37 mm Dimensions:

Weight: 52g IP65 • IP rating:

Relay: Max. switched voltage: 30VDC Max. switched current: 2A · Radiated power: 5dBm (3mW)

• Communication range with the receiver module: max. 200m (in open space) EN54-18 & EN54-25 · Approved to:

CPD number: 0832-CPR-F0691

#### SGMCB200

#### Wireless control module



With relay output (works on batteries).

#### **Specifications**

Dimensions: 87 mm x 87 mm x 40 mm

Weight: 150g Main battery type: CR123 A Backup battery type: CR123 A IP rating: **IP65** 

Relay: Max. switched voltage: 30VDC Max. switched current: 2A

 Radiated power: 5dBm (3mW)

Communication range with the receiver module: max. 200m (in open space)

EN54-18 & EN54-25 · Approved to:

#### SG-CWS100-KIT

#### Wireless wall mounted sounder, red





Replacement for SGRS100-H.

The CWS100 conventional red wall sounder with 32 tones (incl.Slow whoop tone) and volume settings is weatherproof at standard.

When the SGWS-MOD is fitted into the CWS100 it becomes fully compatible with the wireless translator and expander modules.



When ordering the SG-CWS100-KIT, you'll receive:

1 x CWS100 conventional red sounder

1 x SGWS-MOD wireless module for CWS100(-AV)



#### **Specifications**

Max. acoustic output: 100dB(A) @ 1m
 IP rating: IP65
 Operating temperature: -25°C to +70°C
 Max. relative humidity: 95% (non-condensing)

• Radiated power: 5dBm (3mW)

Communication range with the receiver module: max. 150m (in open space)

Approved to: EN54-3 (CWS100)

EN54-18 & EN54-25 (SGWS-MOD)

#### **CPD** number: pending

#### SGRBS100

#### Wireless sounder base



The SGRBS100 wireless sounder base is an acoustic output device that is activated in case of fire or emergency situations. Meets EN54 part 3.



Item available on request only. Please check the last price list for lead time information.

#### **Specifications**

Usable operating frequency channels:

Main battery type: CR123A (3 V & 1.2 Ah)
 Operating temperature range: From -10 °C to +55 °C

IP rating: IP 21C

Maximum volume range @ 1m : From 89 dBa to 91 dBa
 Tones: 32, incl. Slow Whoop tone (NL)







#### SG-CWS100-AV-KIT



#### Wireless wall mounted sounder/beacon, red

The CWS100-AV conventional red wall sounder beacon with 32 tones (incl.Slow Whoop tone) and volume settings is weatherproof as standard.

When the SGWS-MOD is fitted into the CWS100-AV it becomes fully compatible with the wireless translator and expander modules.



When ordering the SG-CWS100-AV-KIT, you'll receive: 1 x CWS100-AV conventional red sounder/beacon

1 x SGWS-MOD wireless module for CWS100(-AV)

#### **Specifications**

Max. acoustic output: 100dB(A) @ 1m
Visual alarm device frequency: 0.5Hz or 1Hz
EN54-23 Classification: W-2.4-9.5
IP rating: IP65
Operating temperature: -25°C to +70°C

Operating temperature: -25°C to +70°C
 Max. relative humidity: 95% (non-condensing)
 Radiated power: 5dBm (3mW)

Communication range with the receiver module: max. 150m (in open space)
 Approved to: EN54-3 & EN54-23 (CWS100-AV)
 EN54-18 & EN54-25 (SGWS-MOD)

**CPD** number: pending

#### SGRBS100-AV



#### Wireless audiovisual sounder base

The SGRBS100-AV wireless audiovisual sounder base is an output device that combines together acoustic and visual signaling features performed in case of fire or emergency situations. SGRBS100-AV's incorporated beacon's flash rate and light intensity are fixed. Meet EN 54 part 25.



Item available on request only. Please check the last price list for lead time information.

#### **Specifications**

• Operating temperature range: From -10 °C to +55 °C

Maximum volume range @ 1m : From 70 dBa to 95 dBa (selectable)

• Tones: 32

Radiated power: 5dBm (3mW)

Communication range with the receiver module: max. 200m (in open space)
 Max. relative humidity: 95% (non-condensing)

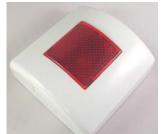
IP rating:

IP21C (type A for indoor using only)

Dimensions: 145 mm x 66 mm
 Approved to: EN54-3 & EN54-25

CPD number: 0832-CPD-1685

#### **SGFI200-S**



#### Remote led indicator

The SGFI200-S wireless remote indicator lamp is an output device which, activated by the control panel, switches on in the event of alarms, faults or emergency conditions.

#### **Specifications**

Operating temperature range:
 From -10 °C to +55 °C
 Dimensions:
 87 mm x 87 mm x 68 mm

• Weight: 180g

• Communication range with the receiver module: max. 200m (in open space)

For spare parts, please refer to § Spare Parts at the end of this chapter (04. Special Equipment)

# **Accessories for Sagittarius series**



The below items are available on request only. Please check the last price list for lead time information.

SG/CI

Plexi protection cap for SGCP100

**SG-LBS100** 

Lid for SGRBS100

# **Linear Heat Detection**

Linear Heat Detection (LHD) cable-based systems provide economical temperature monitoring at the precise point of risk. The system is reliable, flexible and has the ability to detect abnormal temperature variance before fire breaks out. The LHD product allows a vast range of commercial and industrial fire and overheat risks to be protected, in ambient temperature of -65 to +238°C.

Classic applications: cable tunnels, floating roof tanks, conveyors bulk storage, rail locomatives, rolling stock, vehicle engine bays, etc..



The below items are available on request only. Please check the last price list for lead time information.

#### LHD-LWM1



- Sensor length up to 300m
- Resistant to mechanical and chemical influences, corrosion, humidity and dust
- Easy to install, economic, low maintenance, simple commissioning
- Suitable for use in EX classified areas

#### Electronic interface module

The LWM-1 linear heat detection system allows early detection of fire or overheating. It is especially suited for confined areas or harsh environments where adverse ambient conditions cause other detection devices to be unreliable or difficult to use. The system consists of two components: the sensor cable and the Alarmline control unit LWM-1.

#### **Specifications**

- Housing material
- Dimensions (WxHxD):
- Weight approx.:
- IP rating:
- · Color:
- · Temperature range:
- · Length of sensor per control unit:
- Voltage:
- Quiescent current consumption:
- Current consumption on:
- Current consumption on fault max.:
- In-rush current (on power up):

ABS

200 mm x 120 mm x 80 mm

550 g IP65

Grey similar to RAL 7035

-20 °C to 50 °C

Max. 300 m, min. 10 m

10-30VDC

Max. 25 mA / 24VDC Max. 25 mA / 24VDC 15 mA / 24VDC < 100 mA / 24VDC

Approved to EN54 Part 5; VdS number: G205066

#### LHD-BLUE



#### Standard high resistance intelligent cable

For environments ranging from clean and dry to moderate dust and moisture.



Available reel lengths are: 100m; 200m; 500m; 1000m.

#### LHD-BLACK

#### Nylon coated high resistance int. cable



For use in wet, oily or corrosive environments or outdoors. Use in freezer warehouse.



Available reel lengths are: 100m; 200m; 500m; 1000m.

#### LHD-BRONZE

#### Bronze braided high resistance int. cable



For applications requiring superior abrasion protection or increased tensile strength.



Available reel lengths are: 100m; 200m; 500m; 1000m.

#### **LHD-STAINLESS**

#### Nylon stainless steel braided high resistance intelligent cable



Recommended for extreme environments.



Available reel lengths are: 100m; 200m; 500m; 1000m.

#### LHD-EC2.3

#### Edge clip, 2-3mm WEB





Requires neoprene sleeves & ties.

#### LHD-EC3.8

#### Edge clip, 3-8mm WEB



Requires neoprene sleeves & ties.

#### **LHD-EC8.18**

#### Edge clip, 8-14mm WEB



Requires neoprene sleeves & ties.

#### **LHD-EC14.2**

#### Edge clip, 14-20mm WEB



Requires neoprene sleeves & ties.

#### LHD-DP

#### 200mm distance piece for edge clip





Requires neoprene sleeves & ties.

Order edge clips & neoprobene sleeving separately.

#### **LHD-TC**

#### T clip





Requires neoprene sleeves & ties.

Order edge clips & neoprobene sleeving separately.

#### LHD-PC

#### Pipe clip





Requires neoprene sleeves & ties.

Order edge clips & neoprobene sleeving separately.

#### LHD-VC

#### V clip (incl. rubber)





Requires neoprene sleeves & ties.
Order edge clips & neoprobene sleeving separately.

#### LHD-CT

#### Cable ties (100/set)



#### LHD-NS

#### **Neoprene sleeving**



#### LHD-ELTK

# End line termination kit



Pack of 10.

#### LHD-ILJK

#### In line jointing kit



Pack of 10.

#### MTL7761AC

#### Intrinsically safe zener barrière



#### **Industrial Heat Detectors**



Thermal rate of rise detectors of the TMP2 series detectors guarantee high measure precision for long periods and high immunity from EMI interference. TMP2 detectors have an integrated alarm LED for alarm indication. Both peculiarities confer to TMP2 high performance, reducing probability of false alarms.

Sensors are compatible with all Morley-IAS control panels using them like normal smoke detectors. Direct wiring for conventional panels and connection through MI-DCZRM module, for intelligent panels.

The TMP2 series includes an electronic circuit for signal conditioning generated by the transducer. The electronic card is reduced to the minimum size using SMC technology and placed directly into the unit probe.



The industrial heat detectors & accessories are available on request only. Please check the last price list for lead time information.

#### **Specifications**

Supply voltage:

Supply current:

• Temperature range:

• Code of Protection:

• IP rating:

Approved to:

10-30VDC

approx. 20/30uA in normal conditions

>20mA in alarm condition

-20°C to +110°C

ATEX II 2G Ex d IIC T6 IP66 (Probe IP67)

EN54 Part 5

CPR number: 0068-CPR-009/2014

# **Dust type**



- Introduced double cable holder
- New auto-locking terminal block for quicker and easier installation
- Diagnostic LED showing connections errors as loop inversions

#### **Specifications**

- Overal dimensions (h x l x d):
- Weight:
- IP rating:
- Cable holder:

203 mm x 95 mm x 60 mm

400 g IP66

M20

TMP2-D-A257R1A	Rate of Rise dust thermal detector - 57°C	
TMP2-D-C90R1A	Rate of Rise dust thermal detector - 90°C	
TMP2-D-D110R1A	Rate of Rise dust thermal detector - 110°C	
TMP2-D-A257S1A	Fixed temp. dust thermal detector - 57°C	
TMP2-D-C90S1A	Fixed temp. dust thermal detector - 90°C	
TMP2-D-D110S1A	Fixed temp. dust thermal detector - 110°C	

# **Dust type Probes only**



Housing not included.

TMP2-P-A257R1A	Rate of Rise dust thermal detector probe - 57°C	
TMP2-P-C90R1A	Rate of Rise dust thermal detector probe - 90°C	
TMP2-P-D110R1A	Rate of Rise dust thermal detector probe - 110°C	
TMP2-P-A257S1A	Fixed temp. dust thermal detector probe - 57°C	
TMP2-P-C90S1A	Fixed temp. dust thermal detector probe - 90°C	
TMP2-P-D110S1A	Fixed temp. dust thermal detector probe - 110°C	

# **ATEX Type**

TMP2-TO-A257R1A



#### **Specifications**

• Overal dimensions (h x l x d):

160 mm x 85 mm x 75 mm 410 g

Weight:

Rate of Rise Eexd thermal detector - 57°C

TMP2-TO-C90R1A Rate of Rise Eexd thermal detector - 90°C

1

2

4

6

# **Special Equipment**

# Industrial Heat Detectors

TMP2-TO-D110R1A	Rate of Rise Eexd thermal detector - 110°C
TMD0 T0 4057044	F: 14 F 14 114 4 FF00
TMP2-TO-A257\$1A	Fixed temp. Eexd thermal detector - 57°C
TMP2-TO-C90S1A	Fixed temp. Eexd thermal detector - 90°C
TMP2-TO-D110S1A	Fixed temp.Eexd thermal detector - 110°C

# **Accessories**

#### TMP2-ST14

#### EEx-d junction box for end-of-line resistor



#### GDA-M/B-KF4A

#### **Mounting brackets**



Mounting Brackets for heat detectors ATEX type TMP2.

#### **GDA-CH12-NA**

#### ATEX cable gland





Size 1/2" for ATEX type TMP2, for non armoured cables.

#### GDA-CH12

#### ATEX cable gland



Size 1/2" for ATEX type TMP2, complete of rubber parts, for armoured cables.

#### TMP\_Configurator

#### Software for TMP2 maintenance & configuration



Special software for TMP2 heat detectors maintenance and configuration. Data Log capability, Trends, Calibration report, Stand-Alone calibration station. Complete of USB/RS485 connection cable.

# **HD Series**



Thermal detectors of HD series guarantee high measure precision for long period and high immunity from EMI interference. Both peculiarities confer to HD high performance, reducing the probability of false alarms.

HD Sensors are compatible with all Morley-IAS control panels using them like normal smoke detectors. Direct wiring for conventional panels and connection through MI-DCZRM module, for intelligent panels.

The sensing element is a heat pick-up shield and a bi-metal switch.



Mounting box & cable gland included.

#### **Specifications**

• Dimensions (Ø x h):

82g

Weight:IP rating:

IP67

95 mm x 42 mm

HD6295 IP67 sensor. T°: 60°C

CPD number: 0845-CPD-232.1192; ATEX compliance: II 3 G Ex ic IIC T5 Gc X & II 3 D Ex ic IIIC T100 $^{\circ}$ C Dc X

HD6296 IP67 sensor. T°: 80°C

CPD number: 0845-CPD-232.1193; ATEX compliance: II 3 G Ex ic IIC T5 Gc X & II 3 D Ex ic IIIC T100°C Dc X

HD6297 IP67 sensor. T°: 100°C

CPD number: 0845-CPD-232.1194

HD6298 IP67 sensor. T°: 120°C

CPD number: 0845-CPD-232.1195

#### **Industrial sounders**

#### MS1/R

#### Industrial sounder max. 106dB



#### **Specifications**

• Dimensions (W x H x D):

· Voltage:

Current consumption:

IP rating:

· Approved to:

90 mm x 90 mm x 81 mm

24 VDC 20 - 110mA

IP54 EN54-3

VdS number: G28702

#### **Y05D**

#### Industrial sounder 24V 110dB



#### **Specifications**

Dimensions (W x H x D):

• Operation temperature:

• Storage temperature:

Current consumption:

Voltage: • Weight:

• IP rating:

Approved to:

VdS number: G28702

169 mm x 134 mm x 128 mm

-25°C to 55°C

-40°C to 70°C min. 20mA

24 VDC

0.55kg (DC)

IP54

EN54-3

#### **Y08D**

#### Industrial sounder 24V 116dB



#### **Specifications**

• Dimensions (W x H x D):

Operation temperature:

Storage temperature:

· Weight:

Current consumption:

· Voltage:

Approved to:

269 mm x 216 mm x 153 mm

269 mm x 216 mm x 153 mm

-25°C to 55°C

-40°C to 70°C

Min. 300mA 24 VDC

EN54-3

3kg

-25°C to 55°C

-40°C to 70°C

2.5kg

min. 300mA 24 VDC

EN54-3

# CPD number: 0086-CPD-96705

#### Y08/SD\_YA80/D/RF/SU

#### Industrial super sounder 24V 120dB





Item available on request only. Please check the last price list for lead time information.

#### **Specifications**

Dimensions (W x H x D):

Operation temperature:

Storage temperature:

Weight:

Current consumption:

Voltage:

Approved to:

CPD number: 0086-CPD-96705

For spare parts, please refer to § Spare Parts at the end of this chapter (04. Special Equipment)

# **Industrial strobes & Combined sounders**

#### MS2/R/R

Xenon strobe - 24VDC - 5W - red



#### **Specifications**

• Dimensions (W x H x D):

• Weight: Voltage:

• Current consumption: Operating temperature:

• IP rating: Approved to:

Vds number: G28714

90 mm x 90 mm x 81 mm

240g 24 VDC 3-65mA -40°C to +70°C

IP54 EN54-23

#### MS5/R/R

#### Industrial strobe and sounder 5 W - 106dB - 32 tones



#### **Specifications**

• Dimensions (W x H x D):

• Weight: • Voltage:

• Current consumption:

Operating temperature:

• IP rating: Approved to:

CPD number: 0086-CPD-96705

90 mm x 179 mm x 81 mm

450g 24 VDC

Flash: 300mA; Sounder: 35mA

-40°C to +70°C

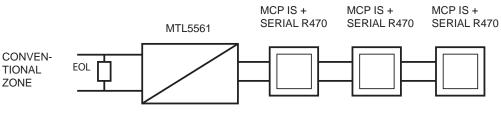
IP54 EN54-3

# Intrinsically safe devices

# **Conventional manual call points**



Manual break glass fire alarm call points for use with galvanic isolator in hazardous areas.



Maximum 10 MCP per zone



The below items are available on request only. Please check the last price list for lead time information.

#### Red



The red conventional call points contain:

- Operating element label: EN54-11 "Dot & Arrows"
- Function label: Burning House

For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches)



#### MCP1A-R470FG-01IS

#### IS MCP with break glass element 470R



Includes break glass element & monitoring resistor R470.

#### **Specifications**

- Dimensions (W x H x D):
- Weight:
- Ambient temperature range:
- Operating voltage range:
- Storage temperature range:
- Relative humidity:
- Material:
- IP rating:
- Color:
- ATEX compliance:

89 mm x 93 mm x 59,5 mm 130g (flush); 180g (surface)

-10°C to +55°C

14-28VDC (nominal 24VDC)

-40°C to +85°C

93 +/-3% (non-condensing)

PC/ABS

IP24D

Red, RAL3001

II 1G EX ia IIC T4 Ga

#### ATEX number: SIRA-04ATEX2350X\_ISS4



Please order surface mounting box separately.



Cable glands are not included.

#### MCP1A-R470FF-01IS

#### IS MCP with flexible element 470R

As MCP1A-R470FG-01IS but with flexible element.

For spare parts, please refer to § Spare Parts at the end of this chapter (04. Special Equipment)

# Intrinsically Safe Devices

#### MCP3A-R000FG-01IS

#### IS MCP with break glass element



Includes break glass element & a changeover contact (max. 30VDC).

#### **Specifications**

Dimensions (W x H x D): 89 mm x 93 mm x 59,5 mm 130g (flush); 180g (surface) · Weight:

Ambient temperature range: -10°C to +55°C

Relative humidity: 93 +/-3% (non-condensing)

Maximum voltage: 30VDC • IP rating: IP24D Material: PC/ABS

Color: Red, RAL3001 • ATEX compliance: II 1G EX ia IIC T4 Ga

#### ATEX number: SIRA-04ATEX2350X\_ISS4



Please order surface mounting box separately.



Cable glands are not included.

#### MCP3A-R000FF-01IS

#### IS MCP with flexible element

As MCP3A-R000FG-01IS but with flexible element.

#### WCP1A-R470SG-01IS

#### Waterproof IS MCP with break glass element



Includes break glass element, surface mounting box, a normally open contact (max. 30VDC) and 470R monitoring resistor.

#### **Specifications**

• Dimensions (W x H x D): 97.5 mm x 93 mm x 71 mm

Operating temperature range: -25°C to +70°C

Relative humidity: 0-93 +/-3% (non-condensing)

· IP rating: IP67 PC/ABS Material:

Color: Red, RAL3001 ATEX compliance: II 1GD Ex ia IIC T4 Ga; Ex ia IIIC

T135°C Da

#### ATEX number: SIRA06ATEX2131X ISSUE 5



Cable glands are included.

#### WCP1A-R470SF-01IS

#### Waterproof IS MCP with flexible element

As WCP1A-R470SG-01IS but with flexible element.









# Intrinsically Safe Devices

#### **WCP3A-R000SG-01IS**



#### Waterproof IS MCP with break glass element

Includes break glass element, surface mounting box & a changeover contact (max. 30VDC).

#### **Specifications**

• Dimensions (W x H x D):

Weight:

Operating temperature range:

Relative humidity:

IP rating:

Material:

Color:ATEX compliance:

97.5 mm x 93 mm x 71 mm

240g

-30°C to +70°C

0% to 95% (non-condensing)

IP67 PC/ABS

PC/ABS Red, RAL3001

II 1GD Ex ia IIC T4 Ga; Ex ia IIIC

T135°C Da

ATEX number: SIRA06ATEX2131X ISSUE 5



Cable glands are included.

#### **WCP3A-R000SF-01IS**

#### Waterproof IS MCP with flexible element

As WCP3A-R000SG-01IS but with flexible element.

# Other colours





The conventional call points in other colors contain:

- Operating element label: EN54-11 'dot & arrows'

- Function label: plain color

For other labels, please order the specific foil separately (See §. Foil with labels for Call Points & Switches)

- Surface mounting box.





Please replace "x" in the part n° by the code for the needed color: Y = yellow; G = green; B = blue; W = white



Items available on request only. Please check the last price list for lead time information.

# WCP1A-x470SG-01IS Waterproof IS MCP with break glass element WCP3A-x000SG-01IS Waterproof IS MCP with break glass element WCP1A-x470SF-01IS Waterproof IS MCP with flexible element WCP3A-x000SF-01IS Waterproof IS MCP with flexible element

## **Accessories**

#### MTL5561

#### 2 channel galvanic isolator for IS conv. det



#### **Specifications**

Weight: 130gNumber of channels: 2

Current range: 1 to 40mA, nominal

Integral input polarity protection: Input circuit protected against reverse

Hazardous-area output: M ax. output voltage 28VDC from 300Ω

Loop supply voltage: 6 to 35VDC



For connection from conventional zone to intelligent panel

#### **MI-DCZRM**

## Conventional zone input module



Complete with end of line resistors, plug in screw connections, direct decade address entry and tri-colour LED's complete with built-in isolator.

#### **Specifications**

External supply voltage conv. zone:
 Max. conventional zone current limit:
 Operating Temperature:
 12 to 28.5 VDC
 60mA
 -20°C to 60°C

Relative humidity: 5% to 95% (non-condensing)
Dimensions (W x H x D): 93 mm x 83 mm x 23 mm

• Weight: 110g

• Approved to: EN54-17 & EN54-18

CPD number: 0832-CPD-1392; VDS number: G213074

#### **M200-SMB**

#### Surface mount box



To be used with MI series modules.

#### **Specifications**

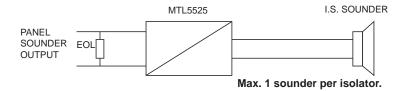
• Dimensions (W x H x D): 139 mm x 134 mm x 40 mm

• IP rating: IP50

## **Audio & Visual devices**



For use with galvanic isolator in hazardous areas.





The below items are available on request only. Please check the last price list for lead time information.



Cable glands are not included.

#### MS1/R/IS

## IS sounder 100dB, IP55, 32 selectable tones, incl. Slow whoop tone



#### **Specifications**

Dimensions (W x H x D): 90 mm x 180 mm x 81 mm
 Current: 25 mA

Operating temperature: -25°C to +40°C
 Relative humidity: 95% at 40°C
 Weight: 0,490Kg
 IP rating: IP55

Intrinsic safety Rating:
 II 1 G Ex ia IIC T4 Ga & II 1 D Ex ia
 IIIC T190°C Da

• Supply voltage: 24VDC

ATEX number: EECS-BAS02ATEX1190X; Baseefa 08 Atex 0194x

#### DA5-24VDC

#### IS sounder 100dB, IP65, 26 selectable tones incl. Slow whoop tone



#### **Specifications**

Dimensions (Ø x h): 93 mm x 103 mm

Supply voltage: 24VDCCurrent: 14 mAIP rating: IP65

Intrinsic safety Rating:
 Group II, Category 1G, EEX ia T4

• Supply voltage: 24VDC

ATEX number: BAS00ATEX1259

#### Y05/R/IS

IS sounder 105dB, IP65, 32 selectable tones incl. Slow whoop tone



#### **Specifications**

Dimensions (W x H x D): 169 mm x 134 mm x 128 mm · Intrinsic safety Rating: II 1 G Ex ia IIC T4 Ga; II 1 D Ex ia IIIC T190°C Da

28 mA Current: Operating temperature: -25°C to +40°C Relative humidity: 95% at 40°C 0,810Kg • Weight: IP rating: IP56

24VDC, 48VDC (BT) Operating voltage:

ATEX number: EECS-BAS02ATEX1190X; Baseefa 08 Atex 0194x

#### MTL5525

#### Galvanic isolator for IS sounders



## **Specifications**

· Minimum output voltage: 7V at 48mA Maximum output voltage: 24V from  $300\Omega$ 48mA Current limit:

Maximum current consumption: 100mA at 24VDC

• Safety description: V0=25VDC, I0=83.3mA, P0=0.52W, Um=253V RMS or DC

# **Explosion Proof Devices**

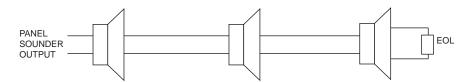
## Audible and visual alarm devices



- 2 stage alarm
- Independently selectable 2nd stage

· Omni directional sounder output

- · All units share a common explosion proof housing
- · Reduced installation costs
- · Meets UL, ATEX and IECEx Approvals
- ATEX approved for Gas & Dust
- · Low current consumption
- Dual cable entry, cable in cable out
- Aluminium enclosure
- Stainless steel fasteners
- · Polycarbonate dome
- · Lens guard provided as standard
- Weather proof flame retardant ABS horn
- Red Lens in flame retardant polycarbonate
- 32 selectable tones meeting international regulations





The below items are available on request only. Please check the last price list for lead time information.



Cable glands are not included.

#### Y06/R/24V

#### EEX sounder 110dB 32 tones - IP66 - red



#### **Specifications**

• Dimensions (Ø x h): 145 mm x 288 mm

Voltage: 24VDC Current consumption: 350mA Weight: 5.4kg

Intrinsic safety Rating:
 II 2G D EEx dIIB+H2 T135°C

ATEX number: Baseefa 02ATEX0222X

#### YL6/R/24V

## EEX Sounder-strobe 110dB 32 tones - IP66



#### **Specifications**

• Dimensions (Ø x h): 145 mm x 420 mm

Current consumption: 570mAVoltage: 24VDCWeight: 6kg

Intrinsic safety Rating:
 II 2G D EEx dIIB+H2 T135°C

ATEX number: Baseefa 02ATEX0222X

#### V6/R/24V

#### EEX Proof strobe - IP66 - Red



## **Specifications**

• Dimensions (Ø x h):

Voltage: Current consumption:

Weight:

Intrinsic safety Rating:

ing: II 2G D EEx dIIB+H2 T135°C

145 mm x 276 mm

24VDC

220mA (5J) 5.08kg

ATEX number: Baseefa 02ATEX0222X

## **Special Equipment**

## **Explosion Proof Devices**

V6/B/24V	EEX Proof strobe - IP66 - Blue lens
VCIOI04V	EEV Proof study IPCC Orean land
V6/G/24V	EEX Proof strobe - IP66 - Green lens
V6/Y/24V	EEX Proof strobe - IP66 - Yellow lens
V6/C/24V	EEX Proof strobe - IP66 - Clear lens

## **Flame Detector**



The below items are available on request only. Please check the last price list for lead time information.

#### FR-24006-01



· Separate transmitter and receiver units

Range 10 to 100 metres

Automatic drift compensation

• 3 selectable sensivity threshold levels

Approved to EN54:12

#### **FIRERAY 2000 EExd**

Explosion proof infrared beam smoke detector. End to end type, comprising control unit, explosion proof transmitter and receiver. Including test filter and 1x surface mount wall bracket (23835.00). ATEX approved.

#### **Specifications**

Operating voltage range:Transmitter current:Fire relay contacts:

Fault relay contacts:Intrinsic safety Rating:

11.5 to 28VDC 1.6 to 5.6mA Normally open, VFCO 2A@ 30VDC,

resistive
Normally closed 2A@30VDC, resistive

II 2 G D IP 6x; EEx d IIB T6

CPD number: 0786-CPD-20196; ATEX number: Sira 03ATEX1504 issue3

#### FR-23835.00

#### **EExd wall bracket**

Surface mount wall bracket for use with FIRERAY 2000 EExd. Detector not included.

#### Flame detectors

## 40/40 series



- · Protection against hydrocarbon based fuel and gas fires, hydroxyl and hydrogen fires, as well as metal and inorganic fires
- · Highest performance, cost effective
- 5 year warranty
- Compliant with IEC 61508 Safety Integrity requirements (SIL2)
- CPD and LPCB certified, according to EN54-10

The SharpEye 40/40 Series Flame Detectors provide the most comprehensive protection against hydrocarbon based fuel and gas fires, hydroxyl and hydrogen fires, as well as metal and inorganic fires. The detectors provide early warning of fires at long distances with high immunity to false alarms.

The 40/40 series designs are the highest performance, cost effective flame detectors currently on the market. The flame detectors include a stainless steel housing with a heated window, to eliminate condensation and icing; HART capabilities for digital communications; lower power requirements; and a compact, lightweight but highly durable and weather resistant design.

The 40/40 flame detector series is highly reliable, with a newly extended 5-years warranty period and compliance with the IEC 61508 safety integrity requirements of SIL2.



Standard delivered with a special weather cover.

Test equipment for flame detectors is included in Part 6 of this catalogue.



The below items are available on request only. Please check the last price list for lead time information.

#### **Specifications**

Dimensions (W x H x D):

Weight:

Ex Approved for Zone 1:

Operating voltage:

· Power consumption:

90 mm x114 mm x 156 mm

- Detector (St.St.) 2.5 kg

- Detector, aluminum 1.2 kg

ATEX and IECEx

24 VDC nominal (18-32 VDC)

- Standby: max 100mA

- Alarm: max 150mA (add 50mA for

heated window)

Approved: LPCB EN54-10, TÜV SIL2, ATEX/IECEX & CPD

#### 40/40-U **UV** detector

Detector detects hydrocarbon based fuel and gas fires, invisible hydrogen flames and fires from hydrides, ammonia, silane and other organic materials with its unique UV solar blind sensor.

CPD approved: 0832-CPD-0979

#### UV detector with built in test kit 40/40-UB

CPD approved: 0832-CPD-0980

#### 40/40-L **UV/IR** dual detector

A dual UV and IR detector, comprising an IR sensor that operates at a wavelength of 2.5-3.0 µm and a UV solar blind sensor, the 40/40L detects hydrocarbon based fuel and gas fires, hydroxyl and hydrogen fires, as well as metal and inorganic fires.

CPD approved: 0832-CPD-0973

For spare parts, please refer to § Spare Parts at the end of this chapter (04. Special Equipment)

40/40-LB	UV/IR dual detector with built in test kit
	CPD approved: 0832-CPD-0976
40/40-L4	UV/IR (4,5μm) dual detector
	A dual UV and IR detector, comprising an IR sensor that operates at a wavelength of 4.5 $\mu$ m and a solar blind UV sensor, the 40/40L detects only hydrocarbon based fuel and gas fires.
	CPD approved: 0832-CPD-0974
40/40-L4B	UV/IR (4,5μm) dual detector with built in test kit
	CPD approved: 0832-CPD-0975
40/40-I	Triple IR detector
	Detects hydrocarbon fuel and gas fires at long distances and provides the highest immunity to false alarms with its triple spectrum design.  The IR3 can detect a 0.1m² gasoline pan fire at 65m in less than 5 seconds.
	CPD approved: 0832-CPD-0972
40/40-M	Multi sensor detector
	Detects hydrocarbon and hydrogen flames at long distances and provides the highest immunity to false alarms with its multi spectrum design. The 40/40M can detect a gasoline pan fire at 65m, or a hydrogen flame at 30m in less then 5 seconds.
	CPD approved: 0832-CPD-0977
40/40-R	Single IR detector
	Detects hydrocarbon based fuel and gas fires, comprising an IR sensor working at 4.5 µm wavelength for maximum sensitivity and provides immunity to false alarms from IR sources such as sunlight and IR projectors.
	CPD approved: 0832-CPD-0978

## **RIV Series**



Item available on request only. Please check the last price list for lead time information.

#### **RIV-601P/F**

#### IP66 waterproof IR flame detector



The IR flame detector model RIV-601P/F is an electronic optical fire detecting device which responds immediately to the thermal infrared radiation emitted by fire and is turned to the flickering frequency of the flame to ignore sun and lamp light.

#### **Specifications**

· Approved to:

Dimensions (W x H x D):
 180 mm x 85 mm x 65 mm

Weight: 700g

• Current consumption: 13mA stand-by, 50mA in alarm

Operating voltage: 24VDC

IP rating:
 Cable entry fitting:
 IP66 (Cast aluminium watertight case)
 M25, internal diameter 13-18mm

• Operating temperature: -20°C to +60°C

Relay output:
 One changeover relay contact rated

1A/30VDC EN54-10 Class 1

CPD number: 0786-CPD-21103; VdS number: G211093

#### RIV-601P/FA

#### RIV-601P/F IR flame detector with eex-proof enclosure



The RIV-601P/FA is the same IR flame detector as the RIV-601P/F, but in an explosion proof enclosure.

#### **Specifications**

Protection rating:
 II 2 GD Ex d IIC T6 Ex tD IP66

Max. case temperature: 85°C max

• Dimensions: 225 mm x 255 mm x 170 mm

• Weight: 11.5 kg

Atex number: BVI 07 ATEX 0023

#### **SOR-873P**

#### Variable direction stand for RIV-601P/F

#### **SOA-875**

#### Variable direction stand for RIV-601P/FA

## Mini 20/20MI Series



- · Available in Non Eex version.
- Multiple detection levels
- 90°/90° cone of vision
- · Adjustable time delay
- · Stainless steel 316

The SharpEye Mini-IR3 Flame Detector (20/20MI) is a high performance and high reliability compact, selfcontained triple spectrum infrared flame detector which offers the highest immunity to false alarms for applications in a wide range of industrial and commercial facilities, where the threat of accidental fire involves hydrocarbon fuels such as gasoline, kerosene, diesel fuel, aviation jet fuels like JP-4, JP-5, JP-8, hydraulic fluids, paints and solvents, monomers and polymers like ethylene and polyethylene, natural gas (LNG), town gas and liquefied petroleum gas (LPG), hydrocarbon gases like methane, ethane, propane, butane, acetylene, propylene, etc.



The below items are available on request only. Please check the last price list for lead time information.

## **Specifications**

Spectral response:
 Three IR bands

Field of View: 100° horizontal, 100° vertical
Sensitivity range: 20/20MI-1: 10m to 40m; 20/20MI-3 2,5m to 10m

Power supply:
 18-32VDC

Power consumption: Max.50 mA in Alarm

Relays:

Alarm (NO) & fault (NC) volt free contact rated at 2A/30VDC

Dimensions:

100 mm x 100 mm x 62 mm

Weight: 1,2Kg
 Relative humidity: Max. 95%
 Operating temperature range: -40°C to +70°C
 ID setting: IDS6

IP rating: IP66Approved to: EN54-10

CPD number: 0786-CPD-20916; Vds number: G207073

20/20MI-1-1-F Triple IR Detector low powered - 10-40m - non ATEX

20/20MI-3-1-F Triple IR detector low powered - 2,5-10m - non ATEX





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## Mini 20/20MPI-R

#### 20/20MPI-R

#### Triple IR detector flame detector, relay outputs



The 20/20 MPI-R is a high performance, compact triple IR (IR3) flame detector in a lightweight polycarbonate housing. It retains all the benefits if IR3 technology - long distance detection (up to 43 m) along with the highest immunity to false alarm. The IR3 detector is especially suited to indoor applications, such as airport terminals, train stations, storage areas, public buildings,...



This item is available on request only. Please check the last price list for lead time information.

#### **Specifications**

• Spectral response:

Field of View:

Power supply:

· Power consumption:

• Relays:

· Dimensions:

Weight:

Humidity:

• Operating temperature range:

VdS number: 0786-CPR-21344

IP rating:

Approved to:

Three IR bands

100° horizontal, 90° vertical

18-32VDC

Max.25 mA in Alarm

Alarm (NO) & fault (NC) volt free contact rated at 2A/30VDC

119 mm x 74 mm

300gr Max. 95% -40°C to +70°C

IP55 EN54-10

Flame detectors accessories



The below items are available on request only. Please check the last price list for lead time information.

20/20-005	Swivel mount stainless steel for 20/20-M series
20/20-787	Air shield for mini series
20/20-794079-3	Commissioning tools kit for mini series
	Used for change default delay and default sensitivity.
40/40-ADD-ST	Supplement for a stainless steel housing
40/40-ADD-85	Supplement for a calibration to 85°C
40/40-001	Tilt mount for 40/40 flame detectors



The tilt mount is an adjustable mounting bracket to allow the detector to be oriented towards the intended fire detection area to maximise coverage.

#### 40/40-777650

#### Air shield stainless steel



The air shield enables the connection of a compressed air line to provide an 'air curtain' that helps avoid accumulation of dirt on the detector window thereby reducing maintenance need and frequency in polluted or dirty environments.

#### 40/40-777163

## Stainless steel weather cover



The weather protector is designed to protect the detector from rain and snow and direct extreme temperatures from the sun (remember our detectors can operate in ambients up to 85°C without protection).

#### 40/40-777166

#### Laser pointer

The laser detection area coverage pointer enables designers and installers to assess and optimise, on site, the actual location and area coverage (cone of vision) of our flame detectors.

#### 40/40-789260-2

#### Pole mount (U-BOLT) - 2"

#### 40/40-789260-1

#### Pole mount (U-BOLT) - 3"

#### 40/40-777910

Window protector (dust cap) for 40/40 flame detectors

## 40/40-A0000231

#### TCC-80 RS-232 to RS-485 convertor

Serial port powered RS-232 to TS-485 convertor with 15 KV ESD Surge.

#### 40/40-794079-5

#### **USB** connection kit for PC

Includes USB to RS232 convertor, RS232 to RS485 convertor, cable and software.

#### 40/40-777820

#### Handheld pocket pc diagnostics kit



Mini PC kit containing all configuration software for 20/20 and 40/40 series flame detectors.

# **Spare parts**

Part number	Description	Spare part for:
02-FL53	Replacement filter for A300 Series 20PPI (Pack of 10)	A300 series aspiration
02-FL56	Replacement filter for A300 Series 45PPI (Pack of 10)	A300 series aspiration
20-LA00015-03	Replacement key to open an A300 housing	A300 series aspiration
BATV-23	Spare battery for FKAC 2100R	FKAC
CR-123	Main lithium battery for wireless devices	Wireless
CR-2032	Back up lithium battery for wireless devices	Wireless
CR-4148	Battery pack for FDKM 2100 R	FDKM
F-A3384-000	Integral filter for FAAST 8100E	FAAST
F-AF-2.0	Aspiration Reducing Film Sheet 2.0mm	Aspirating systems
F-AF-2.5	Aspiration Reducing Film Sheet 2.5mm	Aspirating systems
F-AF-3.0	Aspiration Reducing Film Sheet 3.0mm	Aspirating systems
F-AF-3.6	Aspiration Reducing Film Sheet 3.6mm	Aspirating systems
F-AF-4.0	Aspiration Reducing Film Sheet 4.0mm	Aspirating systems
F-AF-4.6	Aspiration Reducing Film Sheet 4.6mm	Aspirating systems
F-AF-5.0	Aspiration Reducing Film Sheet 5.0mm	Aspirating systems
F-AF-5.6	Aspiration Reducing Film Sheet 5.6mm	Aspirating systems
F-AF-6.0	Aspiration Reducing Film Sheet 6.0mm	Aspirating systems
F-A-LC-A	Language Card Faast 8100e	FAAST
F-BS	Banderole for Suction- Reducing Foil	Aspirating systems
FL-IF-6	FAAST LT integral filters (pack of 6)	FAAST LT
F-LT-EB	Earth bar for FAAST-LT	FAAST LT
F-PC	Pipe cutter, for pipes up to 27mm	Aspirating systems
MSD/A	Dome for MS2/ Amber	MS2
MSD/B	Dome for MS2/ Blue	MS2
MSD/R	Dome for MS2/ Red	MS2
NAS-2 FIL	NAS2 Main internal filter cartridge	NAS aspiration
NAS-2 FIL-INT	NAS-2 Second internal filter cartridge	NAS aspiration
NAS-2 KEYPAD	Replacement keypad for NAS-2	NAS aspiration
RF-FTX	Replacement filter for HPX-751E	HPX-751E
SAHEP-KEY	Spare key for MI-SAHEP-4	SAHEP
SAHEP-PCB	Replacement PCB for MI-SAHEP-4	SAHEP
SAHEP-PLEXI/M-IAS	Plexi breakglass for MI-SAHEP-4 (with Morley-IAS logo)	SAHEP
SG-M210	Spare test key for SGCP100	Wireless
VSP-005	Filter cartridge for Vesda	Vesda aspiration
VSP-850-G	External filter for very harsh environment	Aspirating systems
VSP-850-R	Inline filter red for tube 25mm & 3/4"	Aspirating systems
VSP-855-20	Replacement filter element for VSP-850-G (pack of 20)	Aspirating systems
VSP-855-4	Replacement filter element for VSP-850-G (pack of 4)	Aspirating systems



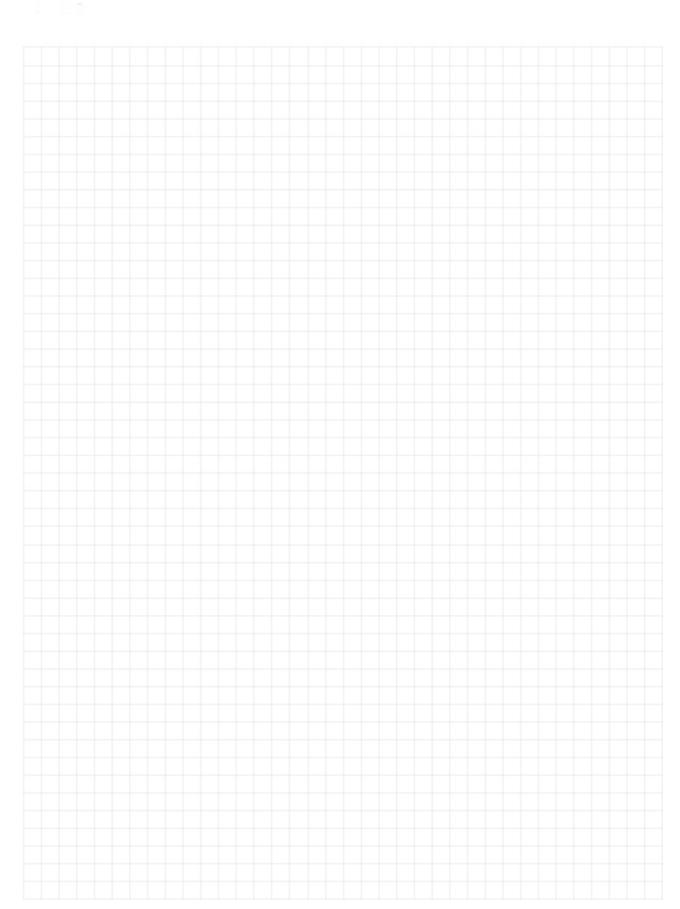


# Gas Detection Systems



# **Gas Detection Systems**

# **Notes**



## **Unipoint Controllers**



- · Small and medium integrated systems
- Custom control cabinets and panels
- Unmanned equipment rooms
- Boiler houses
- HVAC systems
- Analyser houses
- · Car parks
- Crane cabs
- Laboratories
- Ultra-clear backlit display
- System status codes
- Built-in audiovisual alarms
- Intuitive menu system

Z-2306B2000

Z-2306B1000

**Z-ZDINPSUX1** 

- Simple push button operation
- Remote accept, reset and inhibit inputs



The Unipoint controllers are available on request only. Please check the last price list for lead time information.

The Unipoint is a simple DIN rail mounted controller offering integrators a flexible and low cost solution to incorporate flammable, toxic or oxygen gas detection into their control systems.

Unipoint can be easily installed into any plastic or metal enclosure for use indoor or outdoor and even in potentially explosive atmospheres. With the addition of one of the range of flammable, toxic or oxygen detectors, systems may be configured to monitor gases in a wide range of applications from car parks and boiler houses to analyzer shelters or crane cabs in offshore facilities.

Each controller is supplied with all necessary removable terminals, DIN rail socket and power connector.

Each controller contains a buzzer and 3 (NO-NC) alarm relays and 1 (NO-NC) fault relay. Alarm levels are configurable per controller. Inputs for remote reset and inhibit functionality are available on each controller.

Password protection for configuration menu is possible.



Please note that a specific training is required for the installation of this item.

#### **Specifications**

· IP rating: Indoor, IP3x, to BS EN 60529: 1992 (controller to be installed in suitable enclosure)

Weight: 225g (controller only) -10°C to +40°C

Operating temperature range: Relative humidity: 10% to 90% (non-condensing)

Operating pressure range: 90-110kPa

• Storage: -25°C to +60°C, 20 to 80%RH (non condensing)

Approvals:

EMC/RFI EN50270; Electrical Safety EN61010, UL61010b

Performance ATEX measuring function EN60079-29-1; Other CE, TUV

Compatible with combustible gas detectors.

Unipoint controller mV input version

#### Unipoint controller mA input version

Compatible with toxic gas detectors (4-20mA).

## DIN rail mounted power supply 24Vdc - 1A

Up to 4 Unipoint controller modules can be connected.



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#### **Gas Detectors**

## **Signalpoint Range**



- Flammable, toxic and oxygen versions available
- IP54 as standard
- · Suitable for indoor use
- Surecell™ electrochemical sensors
- · Poison resistant catalytic bead
- Fast and reliable
- ATEX hazardous area approval
- Performance to EN50054
- Typical 5 years operational life

The Signalpoint range of flammable, toxic and oxygen gas detectors offer users a low cost solution to their indoor gas monitoring needs. Supplied with an integral prewired junction box, the detector can be installed using conduit or cable and glands depending on individual site standards.

Two basic arrangements are provided. Flammable detectors offer mV bridge output for use with dedicated gas control systems (such as Unipoint) and are certified under ATEX for use in potentially explosive atmospheres. Toxic and Oxygen detectors are designed for use in non explosive atmospheres. They are 2 wire 4-20mA loop powered and can be used with PLC or dedicated gas control systems.



The Signalpoint range is available on request only. Please check the last price list for lead time information.

#### **Specifications**

· Standards:

Operating humidity range:

Material: Sensor Polyphenylene Sulphide (PPS)

Integral Junction Box: Impact resistant

Nylon.

IP rating:

IP54 in accordance with EN60529:1992

Continuous: 20-90% RH (non condensing), Intermittent: 10-99% RH

(non condensing)

Operating pressure: 90-110kPa
 Storage conditions: 0°C to +25°C

Weight: Flammable (0-100%LEL): 465g

Toxic & Oxygen: 495g

Certification:

Flammable (0-100%LEL): Ex II 2G

EEx e d IIC T4; BAS98ATEX2085X Toxic & Oxygen: Safe area use only Toxic & Oxygen: MC to BS EN50081

part 1; BS EN50082 part 2; Performance to EN45544

## Z-2106B1100

#### Signalpoint 0-100% LEL comb. detector (mV output)

IP54; ATEX II2G Ex dc IIC T4 ( $T^amb. = -30^c$  to  $+40^c$ ); BAS98ATEX2085X. Average life time: 5 years.

# **Signalpoint Toxic**

## Z-2106B1305 Signalpoint CO 0-100 ppm toxic detector (mA output)

IP54 - Only to be used in safe zones. Average life time is 48 months.

#### Z-2106B1306 Signalpoint CO 0-200 ppm toxic detector (mA output)

IP54 - Only to be used in safe zones. Average life time is 48 months.

#### Z-2106B1307 Signalpoint CO 0-500 ppm toxic detector (mA output)

IP54 - Only to be used in safe zones. Average life time is 48 months.

Test and calibrating equipment for gas detectors is included in Part 6 of this catalogue. For spare parts, please refer to § Spare Parts at the end of this chapter (05. Gas Detection Systems)

Z-2106B1300	Signalpoint H2S 0-20 ppm toxic detector (mA output)
	IP54 - Only to be used in safe zones. Average life time is 48 months.
Z-2106B1301	Signalpoint H2S 0-50 ppm toxic detector (mA output)
	IP54 - Only to be used in safe zones. Average life time is 48 months.
Z-2106B1302	Signalpoint H2S 0-100 ppm toxic detector (mA output)
	IP54 - Only to be used in safe zones. Average life time is 48 months.
Z-2106B1316	Signalpoint O2 0-25%VOL toxic detector (mA output)
	IP54 - Only to be used in safe zones. Average life time is 12 months.
Z-2106B1310	Signalpoint Cl2 0-5 ppm toxic detector (mA output)
	IP54 - Only to be used in safe zones. Average life time is 18 months.
Z-2106B1311	Signalpoint Cl2 0-15 ppm toxic detector (mA output)
	IP54 - Only to be used in safe zones. Average life time is 18 months.
Z-2106B1313	Signalpoint NH3 0-50 ppm toxic detector (mA output)
	IP54 - Only to be used in safe zones. Average life time is 18 months.
Z-2106B1314	Signalpoint NH3 0-1000 ppm toxic detector (mA output)

IP54 - Only to be used in safe zones. Average life time is 18 months.

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## Sensepoint range



- Flammable, toxic and oxygen versions available
- · Suitable for indoor or outdoor use
- · IP65 as standard
- Surecel<sup>I™</sup> electrochemical sensors
- Poison resistant catalytic bead
- Fast and reliable
- · Typical 2 to 5 years operational life

The Sensepoint range of flammable, toxic and oxygen gas detectors offer users a low cost solution to their gas monitoring needs, in or out of doors and even in potentially explosive atmospheres. Supplied with a pre-wired junction box, a detector can be installed using conduit or armored cable and glands depending on individual site standards.

Sensepoint flammable and toxic gas detectors are designed for use in potentially explosive atmospheres and allow for hands free, unhindered access, to terminals via the hinged lid of the junction box. Installation should follow national guidelines using suitably approved armored cable and glands or conduit.



The Sensepoint range is available on request only. Please check the last price list for lead time information.

#### **Specifications**

· Operating temperature:

• IP rating: IP65 standard, IP66 with weather

protection in accordance with

EN60529:1992

Dependent upon gas type and

certification

Relative humidity: Continuous: 20-90% (non-condensing)
 Intermittent: 10-99% (non-condensing)

• Operating pressure: 90-110kPa

• Storage conditions instrument: -40°C to +50°C

EMC to EN540270, Flammable to EN60079-29-1, Toxic to EN445544 (only H2S)

#### **Z-SPSTAXF1**

#### 0-100% LEL methane detector (mV output)

IP65; ATEX II2GD EEx d IIC T6 (T°amb.= -55°C to +55°C). Average life time: 5 years.

#### **Z-SPSTAXC2**

## 0-500 ppm carbon monoxide (CO) detector (mA output)

IP65; ATEX II2GD EEx d IIC T4 (T°amb. = -20°C to +65°C). Average life time: 48 months.

#### **Z-SPSTAXO1**

#### 0-25% VOL oxygen (O2) detector (mA output)

IP65: ATEX II2GD EEx d IIC T4 (T°amb. = -20°C to +65°C). Average life time: 12 months.

#### **Z-SPSTAXA1**

#### 0-50 ppm ammonia (NH3) detector (mA output)

IP65; ATEX II2GD EEx d IIC T4 (T°amb. = -20°C to +65°C). Average life time: 18 months.

#### **Z-SPSTAXA2**

#### 0-1000 ppm ammonia (NH3) detector (mA output)

IP65; ATEX II2GD EEx d IIC T4 (T°amb. = -20°C to +65°C). Average life time: 18 months.



Other types of gas detectors are available on demand.

Test and calibrating equipment for gas detectors is included in Part 6 of this catalogue. For spare parts, please refer to § Spare Parts at the end of this chapter (05. Gas Detection Systems)

Z-02000-A-1635	Weatherproof CAP for Flammable detector
Z-02000-A-1640	Weatherproof CAP for Toxic/Oxygen detector
Z-02000-A-1642	Collecting cone for Flammable detector
Z-00780-A-0160	Right angle mounting bracket for ceiling mounting

Only compatible with Sensepoint series detectors.

## Sensepoint XCD range



The standard XCD detector is supplied including one of three types of plug-in stainless steel sensor. These sensors simply plug into the socket at the bottom of the transmitter and the transmitter recognizes the sensor type and automatically configures itself accordingly.

The Catalytic sensor is used to detect flammable gases in the range 0-100%LEL. The Infrared (IR) sensors are used for detecting Hydrocarbon gases in the range of 0-100%LEL and 0-100%V/V, as well as Carbon Dioxide (CO2) in the range 0-2.00%V/V

The Electrochemical Cell (ECC) sensor is used to detect Oxygen and toxic gases; Carbon Monoxide (CO), Hydrogen Sulphide (H2S) and Hydrogen (H2).



The Sensepoint XCD range is available on request only. Please check the last price list for lead time information.

- Flammable, toxic and oxygen versions available
- Suitable for indoor or outdoor use
- IP65 as standard Proven Sensor Technology
- Surecell™ electrochemical sensors
- · Poison resistant catalytic bead
- · Fast and reliable
- · Typical operational life:
  - 5 years (Catalytic)
  - 2 years (Electrochemical cells)

#### Global Certifications

- North American and European
- Compliant with UL and ATEX standards
- Includes hazardous area and performance approval

#### **Specifications**

Weight: Stainless Steel SS316: 5 kg

Alu LM25: 2 kg

• IP rating: IP66 as standard in accordance with EN60529:1992

Relative humidity: Continuous: 20-90% (non-condensing)
Intermittent: 10-99% (non-condensing)

Operating pressure:
 90-110kPa

Storage conditions instrument: -25°C to +65°C

Operating temperature:
 Depends on gas type and certification

ATEX: II2 GD Exd IIc GB T6 (Tamb. -40°C to +65°C); II2 GD Exd IIc GB T5 (Tamb. -40°C to +75°C); Ex td IIIc T85°C Db IP66 T100°C (Tamb. -40°C to +75°C)

EMC: EN50270:2006; EN6100-6-4: 2007

# Sensepoint XCD - Stainless Steel SS316

#### Z-SPXCDASMFX SENSEPOINT XCD flammable CAT 0-100% LEL

ATEX/IECEX & AP approved. (20 to 100%LEL, 10%LEL) with 316SS, M20 entry.

#### Z-SPXCDASMRX SP XCD CH4 (methane) IR 0-100% LEL

ATEX/IECEX & AP approved. (20 to 100%LEL, 10%LEL) with 316SS, M20 entry.

#### Z-SPXCDASMO1 SP XCD oxygen 25.0% /Vol

ATEX/IECEX & AP approved. With 316SS, M20 entry.

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Z-SPXCDASMHX	SP XCD hydrogen sulfide 0-50 ppm	
	ATEX/IECEX & AP approved. (10.0 to 100.0ppm, 1ppm) with 316SS, M20 entry.	
Z-SPXCDASMCX	SP XCD carbon monoxide 0-500 ppm	
	ATEX/IECEX & AP approved. (100 to 1000ppm, 100ppm) with 316SS, M20 Entry.	
Z-SPXCDASMG1	SP XCD hydrogen 0-1000 ppm	
Z-SPXCDASMG1	SP XCD hydrogen 0-1000 ppm  ATEX/IECEX & AP approved. With 316SS, M20 Entry.	
Z-SPXCDASMG1 Z-SPXCDASMB1		

Sensepoint XCD - Alu LM25		
Z-SPXCDALMFX	Sensepoint XCD flammable CAT 0-100% LEL	
	ATEX/IECEX & AP approved. (20 to 100%LEL, 10%LEL) with LM25, M20 entry.	
Z-SPXCDALMRX	SP XCD CH4 (methane) IR 0-100% LEL	
	ATEX/IECEX & AP approved. (20 to 100%LEL, 10%LEL) with LM25, M20 entry.	
Z-SPXCDALMO1	SP XCD oxygen 25.0% / Vol	
	ATEX/IECEX & AP approved. With LM25, M20 entry.	
Z-SPXCDALMHX	SP XCD hydrogen sulfide 0-50 ppm	
	ATEX/IECEX & AP approved. (10.0 to 100.0ppm, 1ppm) with LM25, M20 entry.	
Z-SPXCDALMCX	SP XCD carbon monoxide 0-500 ppm	
	ATEX/IECEX & AP approved. (100 to 1000ppm, 100ppm) with LM25, M20 Entry.	
Z-SPXCDALMG1	SP XCD hydrogen 0-1000 ppm	
	ATEX/IECEX & AP approved. With LM25, M20 Entry.	
Z-SPXCDALMB1	ATEX/IECEX & AP approved SP XCD carbon dioxide IR 0-2.00%VOL	

# **Accessories for Sensepoint XCD**



The below items are available on request only. Please check the last price list for lead time information.

Z-S3KCAL	Calibration cup	
Z-SPXCDCC	Collecting cone for use with lighter than air gases	
Z-SPXCDDMK	Duct mounting kit	
Z-SPXCD MTBR	Mounting bracket (inc. bolts, nuts, brackets)	
Z-SPXCDSDP	Sunshade / Deluge protection	
Z-00780-A-0100	ATEX approved junction box (Explosion proof)	

1

2







## **MULTISCAN++ S1**



- ATEX and SIL 1 certified (EN50402)
- Up to 4 open RS485 (EIA-485) galvanic isolated loops
- Up to 256 inputs (both 4-20 mA or intelligent loop daisy-chained)
- Up to 256 O/C or relay outputs via remote modules and 8 pre-configured relays onboard the control unit.
- Event log accessible from the front display or to be PC downloaded.
- RS232 serial port for PC connection for programming or supervising the system via a specific software
- · Parallel port for printer connection.

The MULTISCAN++S1 is a gas detection control unit designed to meet the widest range of flexibility required by the market.

The control panel is based on a powerful microprocessor which provides a wide range of self-diagnostic procedures to detect and locate possible faults.

Extremely flexible and reliable, it can manage up to 64 or 128 or 256 gas detectors (according to the different 4 versions). The detectors can be either of addressable type, directly connected on buses, or 4-20mA analogical types connected via 8-input STG/IN8-S remote modules.

System architecture also includes 8 on-board machine relays and the potential to expand outputs up to 256 using remote STG/OUT16-S modules and 8-relay boards. Up to 4 serial buses can be connected to the unit.

The unit allows for three alarm thresholds to be set for each detector. The alarm threshold activation mode changes according to the type of gas detection profile and connected detector.

The unit is inserted in a plastic box complete with 27 Vdc 4 A power supply.



The Multiscan++S1 range is available on request only. Please check the last price list for lead time information.

#### **Specifications**

 Housing: plastic box, IP65 or 19" 6U (HE) rack for 256 version)

Dimensions (L x H x D): 470 mm x 426 mm x 148 mm

 Inputs: max. 256 RS485 comm. gas detectors bus connected (IDI version) or 4-20mA

through STG/IN8.S modules.

• Outputs: 8 relays on the unit + 128 or 256 open

collector outputs on STG/OUT16-S modules (optional STG/8REL relay

board)

• Serial ports: 4 RS485 ports (2 for 65 version)

1 RS232 for PC connection

Power consumption: Max 10 VA

Display: Graphic Liquid Crystal Display (LCD)

Visual indications LED:

Operating temperature:

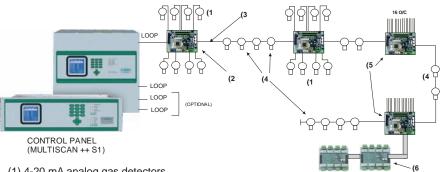
Double 9 LED raw
0-55°C

Storage: -20 / +60 C°
 Relative humidity: 15% to 85% (r

Relative humidity: 15% to 85% (non-condensing)
 Storage: 5% to 85% (non condensing)

Certification: IMG12ATEX002X; C-IS-213297-01

# **Block diagram for MULTISCAN++ S1**



- (1) 4-20 mA analog gas detectors
- (2) Analog 8 input module ST.G/IN8N or S
- (3) 2 Twisted wires for the RS485 bus + 2 wires for the power supply (12-24Vdc)
- (4) Gas detectors with RS485 output
- (5) 16 O/C output module ST.G/OUT16N or S
- (6) 8 relay ST.G/8REL module

# **Gas Detection Systems**

## Sensitron Gas Detection Panels

ST.MTS/S1	MULTISCAN++ S1 gas control panel, rack version; 256 gas detectors
	4 x RS485 type open bus lines or 2 closed loops. 256 Analog 4-20 mA gas detectors connected through remote 8-input modules or intelligent gas detectors daisy chained to the RS485 control panel's loops and 8 4-20mA input boards. 8 relay output and up to 256 O/C or relay outputs via remote modules.  The panels comes complete with 1 parallel printer port and 1 RS232 serial port for PC connection.  Housed on a 19" 3 U rack (24 VDC power supply is required).
ST.MTS/S1-256B	MULTISCAN++ S1 gas control panel, ABS box; 256 gas detectors
	As above but in IP65 ABS box. 230 VAC power supply.
ST.MTS/S1-128B	MULTISCAN++ S1 gas control panel, ABS box; 128 gas detectors
	As above but in IP65 ABS box. 230 VAC power supply.
ST.MTS/S1-64B	MULTISCAN++ S1 gas control panel, ABS box; 64 gas detectors
	As above but in IP65 ABS box. 230 VAC power supply. 2 RS485 type open bus lines or 1 closed loop.
ST.G/IN8-S	8-input remote max 16 modules
	High safety 8-input remote module with improved performance for MULTISCAN++S1. Max 16 modules per line for a total of 256 detectors connectable to the system.
ST.G/OUT16-S	16-output remote 8 modules
	High safety 16-output remote module (Open collector type) with improved performance for MULTISCAN++S1. Max 8 modules per line.
ST.G/8REL	Plug and play relay board
	Plug and play relay board to be connected to STG/OUT16 to provide 8 relay outputs.
ST.G/SER++	Additional Serial board
	Additional Serial board to implement serial lines in Multiscan++S1.
VMB/267V40	Power supply 24 Vdc/4A
	Metal Cabinet with enclosed power supply to house one of the above remote cards. 24 VDC 4A.
ST.G/BOX	IP55 Plastic box
	IP55 Plastic box to house one ST.G/IN8-S or ST.G/OUT16-S card.

## Sentox IDI+ Gas Control Panel



SENTOX IDI+ has been designed for light industrial applications and can be connected to max. 32 intelligent gas detectors daisy chained on the RS 485 bus line. A high brightness display provides an ongoing reading of the concentration being measured and, in case of an alarm, the alarm threshold attained and the respective channel. Each threshold or function is visualised by a double LEDs raw.

SENTOX IDI+ provides 4 relays output: three associated to the alarm thresholds and one to fault.

The panel also features the implementation of further 32 optional outputs via 2 ST.G/OUT16-N remote cards.

The unit comes into a metal cabinet, complete with 24VDC/5A power supply and offers the possibility to allocate 2 back-up batteries (max. 12V/7Ah). SENTOX IDI+ is SIL1 and ATEX certified according to EN60079-29-1

#### **Specifications**

- · Housing:
- Dimensions (L x H x D):
- · Relay contact rating:
- Power consumption:
- Backup battery:
- Operating temperature:
- Relative humidity:

ABS IP65 rated box

486 mm x 288 mm x 148 mm

1A/24VDC /60Va

Max. 6VA

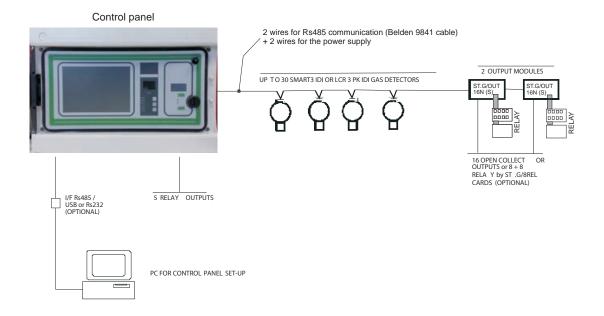
2 x 12V/7Ah max.

0°C to +55°C

15% to 85% (non-condensing)

ATEX number: IMG09ATEX027x

## **Block diagram for Sentox IDI+**



#### ST.SX/IDI+

#### Microprocessor based control panel

Microprocessor based control panel to manage up to 32 "IDI" gas detectors. 4 output upgradeable to 36 by connecting two remote 16-output cards. Housed in IP65 rated ABS box with enclosed 24 VDC/5A power supply.

## STPL4+ Gas Control Panel



- Real time reading of flammable, toxic and oxygen contents
- 4-8 input 4-20mA
- 5 relay outputs
- · Ideal for small plants
- ATEX and SIL1 certified

The STPL4+ gas control unit represents the best technology for the detection of flammable, toxic or oxigen compounds in small systems.

The STPL4+ has 4 intelligent 4-20mA inputs that can be extended to 8 by using the 4-input expansion board (ST.PL4/ESP), easy to plug in the control unit.

The panel is housed in a IP65 ABS box with a 12vdc 1.5A power supply integrated. Mode status LEDs for alarms and fault warning along with the backlit LCD display provide real time gas concentration reading.

An internal buzzer provides an audible alarm that will activate according to the programmed alarm thresholds.

Alarms are user selectable and for each input it is possible to set the type of detector, its full scale range and the alarm thresholds.

The panel can be easily programmed via the 3 position key-switch for Set, Unset and Program along with the Reset and Acknowledge push buttons.

The panel comes complete with 5 output relays: one for each threshold (AL1, AL2, AL3), 1 for fault (FLT) and 1 auxiliary and freely programmable.

By using the on 4-input expansion board, the panel can benefit of further 16 Open-collector outputs linked to the second and third alarm thresholds (AL2 - AL3) of each detector being connected.

The STPL4+ box can fit a 12Vdc 7Ah back-up battery to ensure the system correct working when the main power supply fails.

#### **Specifications**

Housing:

• Dimensions (L x H x D):

Microprocessor:

• Inputs:

• Outputs:

Display:

LED indications:

Power supply:

• Power consumption (@ 12Vdc):

Operating temperature:

Relative humidity:

ABS IP65 rated box

486 mm x 288 mm x 148 mm

8 BIT

4 intelligent inputs 4-20mA expandable to 8 by adding the ST.PL4/ESP board 5 relays on board the panel. 16 O/C outputs available on the ST.PL4/ESP

board

Backlit LCD; 16 caracters on 2 rows Main power supply; AL1; AL2; AL3;

Fault; Battery operated 230Vac +/- 10%

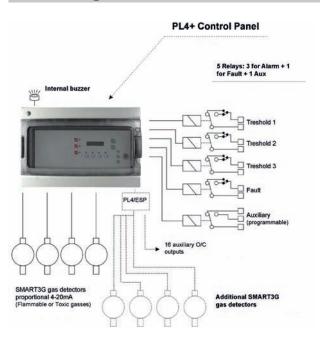
80mA normally; 160mA in alarm;

240mA with ST.PL4/ESP

0°C to +50°C

15% to 85% (non-condensing)

# Block diagram for STPL4+



STPL4+	Microprocessor based control panel	
	Gas control panel to manage up to 4 "IDI" gas detectors. Extendable to 8 by using the 4-input expansion board ST.PL4/ESP.	
ST.PL4/ESP	4 Channel extension card for STPL4+	

## Sensitron gas detectors

## **SMART3 NC Series**



Gas detectors series SMART3 NC have been designed to offer cost effective products with Hi-Tech professional features for car parks and non-classified areas. Available only for Methane, LPG, Petrol Vapours, CO, NO2 and CO2, these detectors employ a professional catalytic sensor for flammable gas detection, an electrochemical cell for CO and an infrared sensor for the CO2 detection.

The SMART3 NC provide an analog 4-20 mA output signal and can be implemented with additional features to allow the instrument to have an RS485 communication or three-relay outputs.

SMART3 NC gas detectors are IP55 rated. Estimated sensor lifetime is 4 years

## **SMART3 NCPK - For car parks**

S1450CO CA	RBON MONOXIDE (CO) detector
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Range value interface: 0-300 ppm, 4-20 mA.



The below SMART3 NCPK gas detectors are available on request only. Please check the last price list for lead time information.

#### S2396VB PETROL VAPOURS detector

Range value interface: 4-20mA.

#### S1451ND NO2 detector

Range value interface: 4-20mA.

# SMART3 NC - Flammable gas detectors for non classified areas

## S2396ME METHANE detector

0-100% LEL. Range value interface: 4-20mA.

#### S2396GP LPG detector

0-100% LEL. Range value interface: 4-20mA.

#### S2401CO2

#### **CARBON DIOXIDE (CO2) detector**

Range value interface: 0-5000 ppm, 4-20 mA.



Item available on request only. Please check the last price list for lead time information.

## SMART3G-D2



Designed to meet with tough industrial requirements, the SMART3G-D2 allows monitoring toxic and flammable contents in harsh environments and classified areas. They offer a 4-digit back-lit display and 5 status mode LED for the gas concentration reading.

Ideal in harsh environments, the SMART3G-D2 feature non intrusive calibration for an accurate and easy adjustment via Hall-effect switches, without opening the instrument and declassifying the area.

They can reliably monitor flammable compounds (%LEL), toxic compounds in ppm, Oxygen and CO2 contents in % by Vol.

#### SMART3G-D2 features:

- Non-intrusive one man calibration via Hall effect switches
- 4-digit display and 5 mode status LEDs
- Standard 4-20 mA 3 wires output
- · Optional 3 relays output
- Optional RS485 interface for Modbus communication to make the detectors communicate to MULTISCAN++ and SENTOX IDI+ control panels.
- Zero tracking to maintain the zero point steady from possible drifts
- · Ongoing system self diagnosis
- ATEX II2G (GD with optional adapter) and SIL 1 certified (EN50402)
- Wide range of sensors and detectable gases
- Wide range of accessories for installation and maintenance
- Easy sensor replacement

# SMART3G-D2 Flammable Gas (with Catalytic sensor)



The below items are available on request only. Please check the last price list for lead time information.



Range value interface: 4-20 mA, 0-100%LEL.

S2157ME	METHANE detector	
S2157GP	LPG detector	
S2157PR	PROPANE detector	
S2157BU	BUTANE detector	
S2157VB	PETROL VAPOURS detector	

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## SMART3G-D2 IRL - Flammable Gas (with infrared sensor)



The below items are available on request only. Please check the last price list for lead time information.



Range value interface: 4-20 mA, 0-100%LEL.

S2626ME METHANE detector (Old partnumber: S2602ME)

S2602PR PROPANE detector

S2602BU BUTANE detector

## SMART3G-C2 - Gas detectors for Zone 1 Category 2 areas



Designed to meet with tough industrial requirements, the SMART3G-C2 allows monitoring toxic and flammable contents in industrial environments and classified areas.

The SMART3G-C2 detectors can reliably monitor flammable compounds (%LEL), toxic compounds in ppm, Oxygen and CO2 contents in % by vol.

#### SMART3G-C2 features:

- Standard 4-20 mA 3 wires output
- · Optional 3 relay output
- Optional RS485 interface for Modbus communication to make the detectors communicate to MULTISCAN++ and SENTOX IDI+ control panels.
- Zero tracking to maintain the zero point steady from possible drifts
- · Ongoing system self diagnosis
- ATEX II2G (GD with optional adapter) and SIL 1 certified (EN50402)
- Wide range of sensors and detectable gases
- Wide range of accessories for installation and maintenance
- Easy sensor replacement



The below items are available on request only. Please check the last price list for lead time information.



Range value interface: 4-20 mA, 0-100%LEL.

S2097ME	METHANE detector		
S2097GP	LPG detector		
S2097BU	BUTANE detector		
S2097PR	PROPANE detector		
S2097VB	PETROL VAPOURS detector		

# **SMART3G-C2 IR - Flammable Gas (with infrared sensor)**



The below items are available on request only. Please check the last price list for lead time information.



Range value interface: 4-20 mA, 0-100%LEL.

S2624ME	METHANE detector (Old partnumber: S2654ME)
S2654PR	PROPANE detector
S2654BU	BUTANE detector

## SMART3G-C2 - Toxic Gases (with Electrochemical cell)



The below items are available on request only. Please check the last price list for lead time information.

	lead time information.
S2641O2	OXYGEN (O2) detector
	Range value interface: 0-25% Vol., 4-20mA
S2131CO	CARBON MONOXIDE (CO) detector
	Range value interface: 0-500 ppm, 4-20mA
S2133AM	AMMONIA (NH3) detector
	Range value interface: 0-200 ppm, 4-20mA
S2135AM	AMMONIA (NH3) detector
	Range value interface: 0-1000 ppm, 4-20mA
S2137HS	HYDROGEN SULPHIDE (H2S) detector
	Range value interface: 0-50 ppm, 4-20mA
S2145NO	NITRIC OXIDE (NO) detector
	Range value interface: 0-100 ppm, 4-20mA

## SMART3G-D3 - Gas detectors with display, for zone 2 category 3 areas



Designed to meet with industrial requirements, the SMART3G-D3 allow monitoring toxic and flammable contents in areas classified as zone 3.

They offer a 4-digits back-lit display and 5 mode status LEDs for the gas concentration reading and feature non intrusive calibration for an accurate and easy adjustment via Hall-effect switches, without opening the instrument and declassifying the area. The SMART3G-D3 detectors can reliably monitor flammable compounds (%LEL), toxic compounds in ppm, Oxygen and CO2 in % by vol.

#### SMART3G-D3 features:

- Non-intrusive one man calibration via Hall effect switches
- · 4-digit display and 5 mode status LEDs
- Standard 4-20 mA 3 wires output
- · Optional 3 relays output
- Optional RS485 interface for Modbus communication to make the detectors communicate to MULTISCAN++ and SENTOX IDI+ control panels.
- Zero tracking to maintain the zero point steady from possible drifts
- · Ongoing system self diagnosis
- ATEX II3G (GD with optional adapter) and SIL 1 certified (EN50402)
- · Wide range of sensors and detectable gases
- · Wide range of accessories for installation and maintenance
- · Easy sensor replacement



The below items are available on request only. Please check the last price list for lead time information.



Range value interface: 4-20 mA, 0-100%LEL.

S2156ME	METHANE detector		
S2156GP	LPG detector		
S2156PR	PROPANE detector		
S2156BU	BUTANE detector		
S2156VB	PETROL VAPOURS detector		

## SMART3G-D3 IR - Flammable Gas (with Infrared sensor)



The below items are available on request only. Please check the last price list for lead time information.



Range value interface: 4-20 mA, 0-100%LEL.

S2625ME	METHANE detector (Old partnumber: S2601ME)
S2601PR	PROPANE detector
S2601BU	BUTANE detector

## SMART3G-D3 - Toxic Gas (with Electrochemical cell)



The below items are available on request only. Please check the last price list for lead time information.

S2642O2 OXYGEN (O2) detector

Range value interface: 0-25% Vol., 4-20 mA.

S2162CO CARBON MONOXIDE (CO) detector

Range value interface: 0-500 ppm, 4-20 mA.

## SMART3G-C3 - Gas detectors for zone 2, category 3 areas



Designed to meet with light industrial requirements, the SMART3 GC-2 gas detectors allow monitoring toxic and flammable contents in areas classified as zone 3. The SMART3 GC-3 can reliably monitor flammable compounds (%LEL), toxic compounds in ppm, Oxygen and CO2 contents in % by vol.

#### SMART3 GC-3 features:

- Standard 4-20 mA 3 wires output
- Optional 3 relays output
- Optional RS485 interface for Modbus communication to make the detectors communicate to MULTISCAN++ and SENTOX IDI+ control panels.
- · Ongoing system self diagnostic
- ATEX II3G (GD with optional adapter) and SIL 1 certified (EN50402)
- · Wide range of sensors and detectable gases
- Wide range of accessories for installation and maintenance
- · Easy sensor replacement



The below items are available on request only. Please check the last price list for lead time information.



Range value interface: 4-20 mA, 0-100%LEL.

S2096ME	METHANE detector		
S2096GP	LPG detector		
S2096PR	PROPANE detector		
S2096BU	BUTANE detector		
S2096VB	PETROL VAPOURS detector		

# SMART3G-C3 IR - Flammable gases (with Infrared sensor)



The below items are available on request only. Please check the last price list for lead time information.



Range value interface: 4-20 mA, 0-100%LEL.

S2623ME	METHANE detector (Old partnumber: S2653ME)
S2653PR	PROPANE detector
S2653BU	BUTANE detector

# SMART3G-C3 - Toxic gases (with Electrochemical cell)



The below items are available on request only. Please check the last price list for lead time information.

S2640O2 OXYGEN (O2) detector

Range value interface: 0-25% Vol., 4-20 mA.

S2130CO CARBON MONOXIDE (CO) detector

Range value interface: 0-500 ppm, 4-20 mA.

## Gas detector accessories

ST.S/IDI	Plug-in RS485 interface
	Plug-in RS485 interface, to make SMART3 series gas detectors communicate with SENTOX IDI+ and MULTISCAN++ control panels.
ST.S/CKD	Handheld calibration keypad
	Handheld calibration keypad to be connected to the detector to adjust the Zero, Span and 4-20mA values.
ST.S3REL	3-Relay card with short flat cable
	3-Relay card for SMART3GC series gas detectors. Relay at 12÷24V. Includes short flatcable.

## **Gas Detection Systems**

#### Gas Detectors Accessories



The below items are available on request only. Please check the last price list for lead time information.

STGD/AD3	Adapter for type 3 sensor hea	ds
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Adapter for type 3 sensor heads to upgrade the protection from G to GD.

#### STGD/AD2 Adapter for type 2 sensor heads

Adapter for type 2 sensor heads to upgrade the protection from G to GD.

	Detector type				
	GD2	GD3	GG1	GC2	GC3
STS/CSW	Χ	Χ	Χ	Χ	Χ
ST.S/IDI	Χ	Χ	Χ	Χ	Χ
ST.S/CKD			Χ	Χ	Χ
ST.S3REL			Χ	Χ	Χ

#### ZM/TEST/2 Water protection/test adapter for sensor head type 2

Permanent water protection/test adapter suitable for sensor head type 2 (like S2096 and S2097).

#### ZM/TEST/3 Water protection/test adapter for sensor head type 3

Permanent water protection/test adapter suitable for sensor head type 3.

#### SL517 Stainless steel collector for sensor head type 3

Stainless steel collector and weather protection cone for Explosion proof gas detector (suitable for sensor head type 3).

## SL523 Stainless steel collector for sensor head type 2

Stainless steel collector and weather protection cone for Explosion proof gas detector suitable for sensor head type 2 (like S2096 and S2097).

#### SL647 Stainless steel weather protection roof, wall mount type



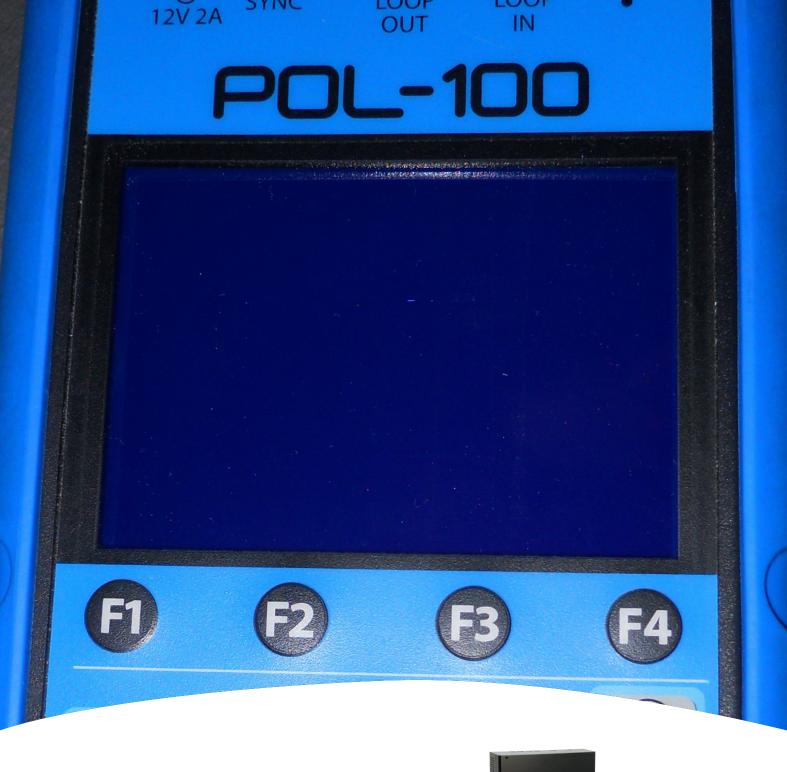






# **Spare parts**

Part number	Description	Spare part for:
Z-2106B1130	Signalpoint 0-100% LEL flam. replacement lid	Signalpoint
Z-2106B1545	Signalpoint O2 electrochemical cell	Signalpoint
Z-2106B1548	Signalpoint CO electrochemical cell	Signalpoint
Z-2106B1549	Signalpoint H2S electrochemical cell	Signalpoint
Z-2106B1596	Signalpoint 0-50PPM NH3 electrochemical cell	Signalpoint
Z-2306B3010	Unipoint terminal block (2x)	Unipoint
Z-2306B3020	Unipoint DIN rail socket	Unipoint
Z-2306B3030	Unipoint power connector	Unipoint
Z-SPPPMTS	Touchpoint TP1 or TP4 terminal screw and 'U' clamp (bag of 20)	Touchpoint
Z-SPSTAXO1SS	Sensepoint O2 electrochemical cell	Sensepoint
Z-SPSTAXA1SS	Sensepoint NH3 0-50PPM electrochemical cell	Sensepoint
Z-SPSTAXA2SS	Sensepoint NH3 0-1000PPM electrochemical cell	Sensepoint
Z-SPSTAXC2SS	Sensepoint CO electrochemical cell	Sensepoint
Z-SPSTAXF1SS	Sensepoint 0-100% LEL flam. replacement lid	Sensepoint
Z-TP1IDC	Touchpoint TP1 IDC lead (display to input module)	Touchpoint
Z-TP1MADM	Touchpoint TP1 replacement mA display module	Touchpoint
Z-TP1MAIM	Touchpoint TP1 replacement mA input module	Touchpoint
Z-TP1MVDM	Touchpoint TP1 replacement mV display module	Touchpoint
Z-TP1MVIM	Touchpoint TP1 replacement mV input module	Touchpoint
Z-TP1WMB	TP1 wall mounting bracket	Touchpoint
Z-TP4CMDM	Touchpoint TP4 replacement display module for common module	Touchpoint
Z-TP4CMIM	Touchpoint TP4 replacement input module for common module	Touchpoint
Z-TP4IDC	Touchpoint TP4 IDC lead (display to input module)	Touchpoint
Z-TP4INT	Touchpoint TP4 interconnect cable (input module to input module)	Touchpoint
Z-TP4MADM	Touchpoint TP4 replacement mA display module	Touchpoint
Z-TP4MAIM	Touchpoint TP4 replacement mA input module	Touchpoint
Z-TP4MVDM	Touchpoint TP4 replacement mV display module	Touchpoint
Z-TP4MVIM	Touchpoint TP4 replacement mV input module	Touchpoint
Z-TP4WMB	Touchpoint TP4 wall mounting bracket	Touchpoint





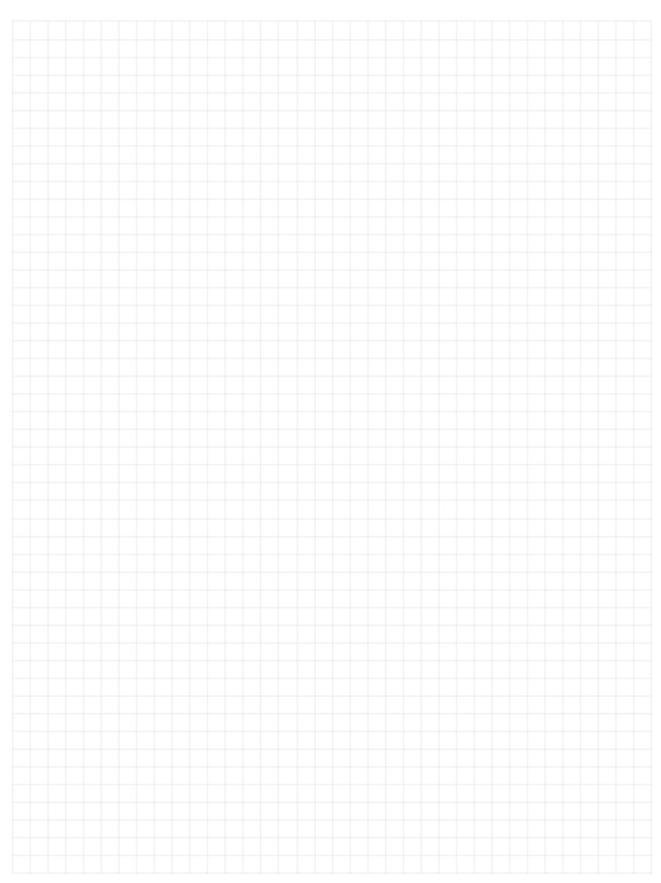




## Accessories

# **Notes**





## **Power Supplies**

### HLSPS25

### Power supply unit 24VDC - 3A (2 x 1,1A)



Earth monitoring and fault relay input to disable the battery charger when the fire panel is in alarm (providing 300mA extra current).

#### **Specifications**

Weight:

• Dimensions (W x H x D): 377 mm x 408 mm x 92 mm

• For battery type: 2 x 7.2Ah/12V

CPR certified (1134-CPR-085)

#### **HLSPS50**

### Power supply unit 24 VDC - 5A (2 x 2,2A)



Earth monitoring and fault relay input to disable the battery charger when the fire panel is in alarm (providing 600mA extra current).

### **Specifications**

Weight:

5.7kg

377 mm x 408 mm x 92 mm • Dimensions (W x H x D):

· For battery type: 2 x 17Ah/12V

CPR certified (1134-CPR-085)



The below items are available on request only. Please check the last price list for lead time information.

#### BF362-1

### PSU24V-1,5A with charger



Power supply with battery charger for batteries up to 17Ah. Housing inclusive power supply with space for 2 x 12V / 17Ah batteries.

### **Specifications**

230 V AC - 50/60 Hz · Input voltage: Output voltage: 24 VDC - 1.5 A 5°C to +40°C Operating temperature:

Dimensions (W x H x D): 404 mm x 404 mm x 110 mm

Weight: approx. 5 kg · For battery type: 2 x 17Ah/12V

CPD number: 0786-CPD-20891; VDS number: G 209196







#### BF362-5



#### PSU24V-5A with charger

Power supply with battery charger for batteries up to 17Ah. Housing inclusive power supply with space for 2 x 12V / 17Ah batteries.

### **Specifications**

Output voltage: 24 VDC - 5A
 Operating temperature: 5°C to +40°C

• Dimensions (W x H x D): 404 mm x 404 mm x 110 mm

Weight: approx. 5 kgFor battery type: 2 x 17A/12V

CPD number: 0786-CPD-20892; VDS number: G 209197

### **AES Series**

The AES series is designed to supply electrical power for fire detection systems approved to EN54-4/A8. The AES series is protected against lightning strikes and short circuits.

A dynamic regulation stabilizes the output voltage and keeps it within the preset tolerance range.

Elaborate filters eliminate all interferences and reduce the residual ripple from the 230 VAC mains. The status of the power device is locally displayed by leds and remotely by means of dry contacts.

To preserve the capacity of batteries, their discharge is limited in conjunction with automatic disconnection of the user circuit.

These units are both CPD and VDS approved.

#### NF Approved EN54-4/A8



The indicated power includes the battery charger consumption. Therefore, the total available power is 5% less (Exc. AES 28V 8A C85 SB).

### C24 Box

### **AES 24V 3A C24 SB G**

# Specifications

Power supply unit 24V - 3A



• Dimensions (W x H x D): 322 mm x 248 mm x 126 mm

• Can hold up to 2 batteries: 12Ah / 12V

CPR number: 0333-CPR-075230; VDS number: G209209

### **C38 Box**

#### **AES 24V 3A C38 SB G**

Power supply unit 24V - 3A



#### **Specifications**

• Dimensions (W x H x D): 289 mm x 350 mm x 189 mm

• Can hold up to 2 batteries: 24Ah / 12V

CPR number: 0333-CPR-075373; VDS number: G209209

**AES 24V 4A C38 SB G** 

Power supply unit 24V - 4A

CPR number: 0333-CPR-075189; VDS number: G209026

**AES 24V 6A C38 SB G** 

Power supply unit 24V - 6A

CPR number: 0333-CPR-075180; VDS number: G209036

## C85 Box

#### **AES 24V 8A C85 SB G**

Power supply unit 24V - 8A



### **Specifications**

• Dimensions (W x H x D): 408 mm x 408 mm x 224 mm

Can hold up to 2 batteries:
 38Ah / 12V

CPR number: 0333-CPR-075220; VDS number: G210080

Accessories Batteries

### **Batteries**

### **VABO** batteries

#### RB012AHB

### 1,2 Ah / 12V sealed lead acid battery



### Specifications

• Dimensions (W x H x D):

Weight:

97 mm x 48 mm x 54 mm

570g

VDS number: G111062

### RB022AHB

### 2,2 Ah / 12V sealed lead acid battery



### **Specifications**

• Dimensions (W x H x D):

• Weight:

178 mm x 34 mm x 60 mm

1.05kg

VDS number: G111063

#### **RB040AHB**

### 4.5 Ah / 12V sealed lead acid battery





Item available on request only. Please check the last price list for lead time information.

### **Specifications**

Weight:

• Dimensions (W x H x D):

90 mm x 70 mm x 102 mm

1.7kg

### **RB070AHB**

### 7.2 Ah / 12V sealed lead acid battery



### **Specifications**

Dimensions (W x H x D):

• Weight:

151 mm x 65 mm x 94 mm

2.650kg

VDS number: G114067

**Accessories Batteries** 

### RB120AHB

### 12 Ah / 12V sealed lead acid battery



### **Specifications**

• Dimensions (W x H x D): 151 mm x 98 mm x 98 mm • Weight: 3.8kg

VDS number: G114068

### RB180AHB

### 18 Ah / 12V sealed lead acid battery



### **Specifications**

• Dimensions (W x H x D):

Weight:

VDS number: G114069

181 mm x 76 mm x 167 mm

6.3kg

#### RB260AHB

### 26 Ah / 12V sealed lead acid battery



### **Specifications**

• Dimensions (W x H x D):

• Weight:

166 mm x 175 mm x 125 mm

9.3kg

VDS number: G111066

### RB450AHB

### 45 Ah / 12V sealed lead acid battery



### **Specifications**

• Dimensions (W x H x D):

• Weight:

198 mm x 166 mm x 171 mm

14.5kg

VDS number: G111067

#### RB650AHB

### 65 Ah / 12V sealed lead acid battery



### **Specifications**

• Dimensions (W x H x D):

• Weight:

VDS number: G111104

350 mm x 166 mm x 174 mm

22.5kg



Accessories Batteries

### **YUASA** batteries

#### NP2.3-12

### 2,3Ah / 12V valve regulated lead acid battery



### **Specifications**

• Dimensions (L x W x H ): 178 mm x 34 mm x 64 mm

Weight: 0.95kg
Nominal voltage: 12V
20-hr rate Capacity to 1.75VPC at 20°C: 2.3 Ah
10-hr rate Capacity to 1.75VPC at 20°C: 2.1 Ah

VDS number: G101139

#### **NP7-12**

### 7Ah / 12V valve regulated lead acid battery



### **Specifications**

Dimensions (L x W x H ):
 151 mm x 65 mm x 97.5 mm

Weight: 2.65kg
Nominal voltage: 12V
20-hr rate Capacity to 1.75VPC at 20°C: 7Ah
10-hr rate Capacity to 1.75VPC at 20°C: 6.4 Ah

**VDS number: G189099** 

#### **NP12-6**

### 12Ah / 6V valve regulated lead acid battery





Item available on request only. Please check the last price list for lead time information.

#### **Specifications**

• Dimensions (L x W x H ): 151 mm x 50 mm x 97.5 mm

Weight: 2.05kg
Nominal voltage: 6V
20-hr rate Capacity to 1.75VPC at 20°C: 12 Ah
10-hr rate Capacity to 1.75VPC at 20°C: 11.1 Ah

VDS number: G194006

#### NP12-12

### 12Ah / 12V valve regulated lead acid battery



### **Specifications**

• Dimensions (L x W x H ): 151 mm x 98 mm x 97.5 mm

Weight: 4.05kg
Nominal voltage: 12V
20-hr rate Capacity to 1.75VPC at 20°C: 12 Ah
10-hr rate Capacity to 1.75VPC at 20°C: 11.1 Ah

**VDS number: G189170** 

### NP17-12

### 17Ah / 12V valve regulated lead acid battery



### **Specifications**

Dimensions (L x W x H):
 181 mm x 76 mm x 167 mm

Weight:

Nominal voltage:
20-hr rate Capacity to 1.75VPC at 20°C:
17 Ah
10-hr rate Capacity to 1.75VPC at 20°C:
15.7 Ah

VDS number: G197022

#### NP24-12

### 24Ah / 12V valve regulated lead acid battery



### Specifications

Dimensions (L x W x H ):
 166 mm x 175 mm x 125 mm

Weight: 9kg
Nominal voltage: 12V
20-hr rate Capacity to 1.75VPC at 20°C: 24 Ah
10-hr rate Capacity to 1.75VPC at 20°C: 22.3 Ah

VDS number: G182026

#### **NP38-12**

### 38Ah / 12V valve regulated lead acid battery



### **Specifications**

• Dimensions (L x W x H ): 197 mm x 165 mm x 170 mm

Weight: 14.2kg
Nominal voltage: 12V
20-hr rate Capacity to 1.75VPC at 20°C: 38 Ah
10-hr rate Capacity to 1.75VPC at 20°C: 35.3 Ah

VDS number: G182024

### NP65-12

### 65Ah / 12V valve regulated lead acid battery





Item available on request only. Please check the last price list for lead time information.

#### **Specifications**

• Dimensions (L x W x H ): 350 mm x 166 mm x 174 mm

Weight: 23kg
Nominal voltage: 12V
20-hr rate Capacity to 1.75VPC at 20°C: 65 Ah
10-hr rate Capacity to 1.75VPC at 20°C: 60.5 Ah

VDS number: G183008

5

7

### MEW

### **Electro Magnetic Door Holders**



- · Low profile design
- · Easy cable entry & exit
- Electronic connection via a terminal clamp
- · Door retainers have an integrate release
- · Door retainer can be mounted to the wall, to the floor or to the ceiling behind the door. Due to the large product range almost any requirement profile can be met
- The counterpart is the armature (keeper plate) which is mounted on the door
- Door retainer magnets are delivered with a suitable keeper plate
- · Electrical Protection IP54
- Anti-remanence pin
- Integrated reverse polarity and spark suppression diode
- Plastic parts consist of Bayblend material with 30% PA6 glass fiber

Honeywell's range of door holders provide attractive aesthetics and high performance for buildings requiring an automatic door release function in the event of a fire emergency.

Door Retainer Magnets are used as hold open devices for fire protection exclusions (fire protection swing doors, rolling gates, fire shutters with self-locking devices). The fire door is normally held in the open state to allow easy passage and access through busy corridors etc. Controlled by a fire detection or smoke protection control unit, the door retainer releases the door when the power is cut and the over-door closer quickly closes the fire door automatically to prevent the spread of fire and smoke throughout the building. Integrated into the design is a spring loaded antiremanence pin which ensures zero residual holding force when the magnet is de-energized, thus enabling faster closing of the fire door. Door holders are fitted with an integral manual release button, allowing the door to be closed without operating the fire

All the electromagnets are designed to comply with the latest requirements of EN1155 and DIN EN14637.

### 960120

### Wall mounted 24Vdc Door Holder - 400N



Includes keeper plate (960110).

#### **Specifications**

Current consumptions:

Power: Holding force:

Weight:

IP rating:

Dimensions: Approvals

0.067A

1.6W 400N

Approx. 600g

IP54

110 x 85 x 38 mm

EN155, CPR, EN14637

### 960119

### Wall mounted 24Vdc Door Holder - 850N





Includes keeper plate (960114).

#### **Specifications**

Current consumptions: 0.092A
Power: 2.2W
Holding force: 850N
Weight: Approx. 1000g
IP rating: IP54

Dimensions: 110 x 85 x 38 mm
 Approvals EN155, CPR, EN14637

### 960121

### Wall/floor mounted 24Vdc Door Holder - 400N





Includes keeper plate (960110). Swivel head 15-17.5 cm

### **Specifications**

Current consumptions:
Power:
Holding force:
Weight:
IP rating:
0.067A
40W
Aponox.
IP54

Dimensions: 90 x 80 x 150 mm (floor mounted) 90 x 80 x 175 mm (wall mounted)
 Approvals EN155, CPR, EN14637, CNPP

### 960122

### Wall/floor mounted 24Vdc Door Holder - 400N





Includes keeper plate (960110). Swivel head 30-32.5 cm

### **Specifications**

Current consumptions: 0.067A
Power: 1.6W
Holding force: 400N
Weight: Approx. 1000g
IP rating: IP54

Dimensions: 90 x 80 x 300 mm (floor mounted) 90 x 80 x 325 mm (wall mounted)
 Approvals EN155, CPR, EN14637, CNPP

### 960124

### Wall mounted 24Vdc Door Holder - 400N





Includes keeper plate (960110).

#### **Specifications**

Current consumptions:
Power:
Holding force:
Weight:
Approx. 500g

IP rating: IP54
Dimensions: 55 x

Dimensions: 55 x 55 x 33 mm
 Approvals EN155, CPR, EN14637

#### 960126

### Wall mounted 24Vdc Door Holder - 1372N





Keeper plate not included! Order keeper plate (960115) separately.

### **Specifications**

Current consumptions: 0.063A
Power: 1.5W
Holding force: 490N
Weight: Approx. 1000g

IP rating:
 Dimensions:
 Approvals
 IP54
 75 x 116 x 43 mm
 EN155, CPR, EN14637

### **Accessories**

#### 960127

#### Wall mounted bracket - 15 cm



### **Specifications**

Weight: Approx. 650g
 Dimensions: 100 x 140 x 150 mm

### 960128

### Wall mounted bracket - 30 cm



### **Specifications**

Weight: Approx. 1000g
 Dimensions: 100 x 140 x 300 mm

### 960115

## Keeper plate - 75mm diameter for 960126



#### **Specifications**

Plate diameter: 75mm
 Weight: Approx. 450g
 Dimensions: 75 x 75 x 56 mm

For spare parts, please refer to § Spare Parts at the end of this chapter (06. Accessories)

### **Fire Resistant Cables**

## Halogen free sheated & shielded cable



Polyester/aluminium shield and 0,5mm² tinned copper drain. Recommended for Morley-IAS intelligent loop installation. Flame non spreader, halogen free, low level of smoke emission and aggressively.



Reels of 500 meters.

2x1,5-LH-500

Twisted-shielded cable 2 wires 1,5mm<sup>2</sup>

2x2,5-LH-500

Twisted-shielded cable 2 wires 2,5mm<sup>2</sup>



Item available on request only. Please check the last price list for lead time information.

## Halogen free sheathed & shielded fire resistant cable





Reels of 500 meters.

2x1,5-LHR-500

Twisted-shielded cable 2 wires 1,5mm² fire resistant

2x2,5-LHR-500

Twisted-shielded cable 2 wires 2,5mm<sup>2</sup> fire resistant



Item available on request only. Please check the last price list for lead time information.

## Special communication cable



The below items are available on request only. Please check the last price list for lead time information.

CSR485-100

Twisted-shielded cable 2 wires 1mm<sup>2</sup> - 100m



Reel of 100 meters.

CSR485-500

Twisted-shielded cable 2 wires 1mm<sup>2</sup> - 500m



Reel of 100 meters.



## **Surge Protection Modules**



All modules are modular and easy to fit on standard DIN rails. These kind of modules can avoid big damage to the fire panel and auxiliary equipment in case of a lightning strike.

ZB24544	Surge protection module for 24V loop (use 1 loop, 2 channels)		
ZB24518	Surge protection module for RS485 interface		
7004570	Company and action we do to for a company authors		
ZB24578	Surge protection module for sounder output		



Item available on request only. Please check the last price list for lead time information.





The below items are available on request only. Please check the last price list for lead time information.

MA05/D/2	Surge protection module 220V - up to 5A
MA10/D/2	Surge protection module 220V - up to 10A
MA15/D/2/SI	Surge protection module 220V - up to 15A

### **Manual Call Point Accessories**



The below items are available on request only. Please check the last price list for lead time information.



Sold per pack of 50 pieces.

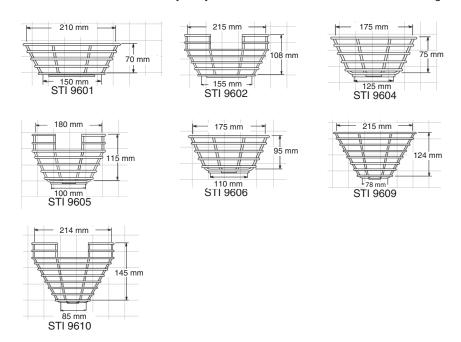
CG2 Nylon cable gland for IP55 AND IP67 call point

## **Protective Accessories**

## Steel protective covers for detectors



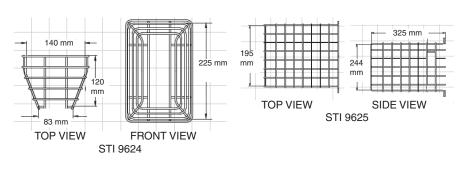
Steel web stoppers are for areas were abuse to smoke detectors, emergency lighting and so on, is severe. Constructed from plastic coated galvanised steel rod the cages can cope with the severest of abuse from vandalism or accidental damage. Installation and service is very easy with models for flush and surface mounting.

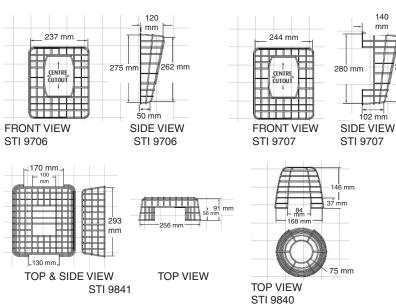


STI 9601	Low profile, flush mounting 70 (h) x 210 ( ) mm				
STI 9602	Low profile, surface mounting 108 (h) x 215 (Ø) mm				
STI 9604	Low profile, flush mounting 75 (h) x 175 (Ø) mm				
STI 9605	Low profile, surface mounting 115 (h) x 180 (Ø) mm				
STI 9606	Low profile, flush mounting 95 (h) x 175 (Ø) mm				
STI 9609	High profile, flush mounting 124 (h) x 215 (Ø) mm				
STI 9610	High profile, surface mounting 145 (h) x 214 (Ø) mm				

### Protective covers for beam detectors









The below items are available on request only. Please check the last price list for lead time information.

STI 9624	Detector guard 225 (h) x 140 (w) x 120 (d) mr

This guard is, for instance compatible with FireRay 50/100 beam detectors.

STI 9625 Beam detector guard 260 (h) x 195 (w) x 325 (d) mm

STI 9706 Beam detector guard 275 (h) x 237 (w) x 120 (d) mm

This guard is, for instance compatible with 6500, MI-LPB2(-S2I) beam detectors.

STI 9707 Surface mount beam detector guard 280 (h) x 244 (w) x 140 (d) mm

This guard is, for instance compatible with 6500, MI-LPB2(-S2I) beam detectors in surface mount.

STI 9841 Beam detector guard 293 (h) x 256 (w) x 91 (d) mm

This guard is, for instance compatible with the FIRERAY 5000 System Controller.

For spare parts, please refer to § Spare Parts at the end of this chapter (06. Accessories)

### STI 9840

### Beam detector guard 168 (h) x 168 (w) x 146 (d) mm

This guard is, for instance compatible with the FIRERAY 5000 motorised detector.

#### **OSID-WG**

#### Wire guard for OSID Imager and Emitter



Protective guard for OSID imager and emitter. The guard is plastic coated for durability and use in harsh environments. It protects the emitter and imager against vandalism or accidental damage.

#### **Specifications**

· Dimensions:

104 mm x 167 mm x 234 mm

### Steel Protective Covers for MCP





Protective cover to help stop malicious or accidental false fire alarms.

This unique device has been helping stop false fire alarms around the world for decades, without restricting legitimate operation of devices such as fire alarm break glass call points. It is ideal for schools, colleges, hospitals, nursing homes, hotels

and all public buildings where there is a threat of false fire alarms.

The Stopper consists of a clear, tamper-proof, tough polycarbonate cover and frame

that fits over the break glass call point. When lifted to gain access to the break glass, its optional battery powered integral sounder emits a piercing 120 dB. Immediate

attention is drawn to the area and a prankster will either run or be caught.

Constructed from tough clear polycarbonate.

 Protects equipment from accidental operation, vandalism, product misuse, dust and weather.

- · Available with or without integral sounder.
- Integral sounder powered by a 9V PP3 battery (included).
- Available for flush or surface mounted products.
- Lock or break seal options for added security.
- Weather proofing available with a choice of gaskets.
- Optional depth spacers to accommodate a wider variety of products.

STI 6530/n

STI 6531/n

STI 6532/n

Please replace "n" in the part n° by the code for the needed language: N = Dutch; F = French; E = Englisch; D = German; I = Italian



The below items are available on request only. Please check the last price list for Lead time information.

Stopper flush mounted without sounder

Stopper surface mounted without sounder

Stopper flush mounted with sounder

STI 6533/n Stopper surface mounted with sounder

STI 6534/n Weather stopper flush mounted without sounder

#### STI 6535/n



- Strong, durable cover to take even the severest of knocks.
- Protects equipment against damage, dust and grime as well as water ingress.
- A variety of cable entry gaskets are available.
- · Ideal in saline atmospheres.
- Optional depth spacers to accommodate a wider variety of products.
- Available for flush or surface mounted products.
- Available in red, yellow, green and blue.
- Lock or break seal options for added security.

#### Weather stopper surface mounted without sounder

Cover to protect against the ingress of dust or water. The Weather Stopper is a protective cover that is ideal for extending the life and reliability of weather exposed devices, such as manual call points. It offers protection against harsh environments and conditions both outside and inside, as well as preventing tampering, vandalism and damage from accidental operation.

Easy to install, the Weather Stopper consists of a clear, tamper-proof, tough poly-carbonate cover, frame and weather gasket that fits over the manual call point. The weather gasket seals the unit, preventing dust, grime and water from getting to the device. In the event of an emergency, simply lift the cover to gain access to the protected device.



For Green, Blue or Yellow add /G, /B, /Y



Options: extra cost

### /BS

#### Security break seal (to be ordered along with the stopper)

#### **CKS002**

#### Break seal conversion kit



This kit contains: 1 retainer, 2 break seals, instructions.

#### STI/BS

#### **Breakable seals**

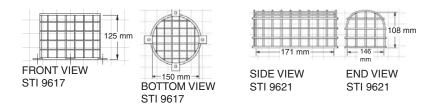


Pack of 10 pieces.

### /L

### Frangible lock

## Steel protective covers for Audio & Visual Devices



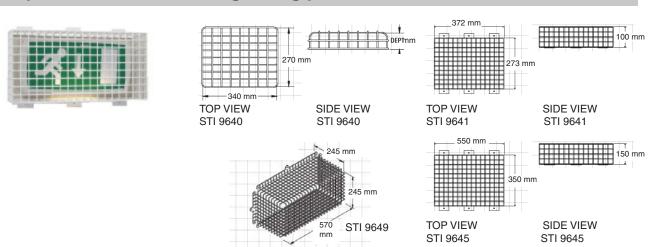


The below items are available on request only. Please check the last price list for lead time information.

STI 9617	Protective cover 150 (Ø) x 125 (h) mm		
	This guard is, for instance compatible with the intelligent audio & visual devices.		
STI 9621	Protective cover 171 (h) x 146 (w) x 108 (h) mm		

This guard is, for instance compatible with the old (NX/NS) audio & visual devices.

## Steel protective covers for signalling panels





The below items are available on request only. Please check the last price list for lead time information.

STI 9640	Exit light guard 270 (h) x 340 (w) x 65 (d) mm
STI 9641	Exit light guard 273 (h) x 372 (w) x 100 (d) mm
STI 9645	Exit light guard 350 (h) x 550 (w) x 150 (h) mm
STI 9649	Exit light guard 245 (h) x 570 (w) x 245 (h) mm

## **Detector Test Equipment**

### 25E smoke detector tester

#### HSI-25E

#### Smoke detector tester



Compatible with HSI-1490-1 delivery tube. 150ml - Flammable canister. AITA Rules for Air Freight: UN 1950 Class 2.1 No subsidiary risk.



Box of 12 cans.

Please note that next to the standard freight charge a special ADR cost will be charged following the transportation safety regulations for flammable or dangerous products.

### 25E smoke detector tester accessories

### HSI-1490-1

### 18" Fiberglass Delivery Tube for 25E



Compatible with HSI-25E Length of 45cm

### SDT series smoke detector testers

### SDT150-12

#### **Smoke detector testers**



Handheld unit for functional testing of smoke detectors. 150 ml - Non flammable canister.



Box of 12 cans.

### SDT250-12

### Smoke detector testers



For use with Solo 330 smoke dispenser. Not suitable for handheld use. 250ml - Non flammable canister.



Box of 12 cans.

### **SOLO A7**

#### **Detector duster**



For cleaning smoke detectors. 250ml - non flammable canister.



Box of 12 cans.

#### SDT150-S-12

### **Smoke Sabre**



Smoke detector tester for handheld use. Telescopic smoke dispenser included per can.

150 ml - UL listed - Flammable canister.



Box of 12 cans.

Please note that next to the standard freight charge a special ADR cost will be charged following the transportation safety regulations for flammable or dangerous products.

## SDT series smoke detector tester accessories

### **SOLO 810**

### Smoke detector test starter pack 2,5 m





1 x Solo 101 fibreglass extension pole - 1,13m

1 x Solo 330 aerosol smoke dispenser

### **SOLO 808**

### Smoke detector test starter pack 4 m





Includes:

1 x Solo 108 fibreglass extension pole - 2,5m

1 x Solo 330 aerosol smoke dispenser

#### **SOLO 809**

#### Smoke detector test starter pack 6 m





1 x Solo 100 fibreglass telescopic extension pole - 4,5m

1 x Solo 330 aerosol smoke dispenser

### **SOLO 811**

### Smoke detector test & removal set 6 m





Includes:

- 1 x Solo 100 fibreglass telescopic extension pole 4,5m
- 1 x Solo 200 universal removal tool
- 1 x Solo 330 aerosol smoke dispenser
- 1 x Solo 610 protective carrying/storage bag



Item available on request only. Please check the last price list for lead time information.

### **SOLO 814**

### Smoke & mains heat detector test set 6 m





Includes

- 1 x Solo 100 fibreglass telescopic extension pole 4,5m
- 1 x Solo 200 universal removal tool
- 1 x Solo 330 aerosol smoke dispenser
- 1 x Solo 424 240V heat detector tester
- 1 x Solo 610 protective carrying/storage bag



Item available on request only. Please check the last price list for lead time information.

#### **SOLO 822**

#### Smoke & cordless heat detector test set 6 m





#### Includes:

- 1 x Solo 100 fibreglass telescopic extension pole 4,5m
- 1 x Solo 200 universal removal tool
- 1 x Solo 330 aerosol smoke dispenser
- 1 x Solo 461 cordless heat detector test set
- 1 x Solo 610 protective carrying/storage bag

### **SOLO 610**

### Protective carrying storage bags



#### **SOLO 101**

### Fiberglass extension pole - 1,13m



Reach of 2,5 m including height of man.

### **SOLO 108**

### Fiberglass 2 section telescopic pole - 2,5m



Reach of 4 m including height of man.

### **SOLO 100**

### Fiberglass 4 section telescopic pole - 4,5m



Reach of 6 m including height of man.

### SOLO 713-001

### Adapter tool 713



Adapter for connection of ECO1000DRT. Compatible with Solo poles. Incl. magnet tester.

### **SOLO 200**

### Universal detector removal tool



Detector removal tool which is compatible with most types of fire detectors.

#### **SOLO 330**

### Aerosol smoke dispenser



Economic and easy for testing smoke detectors. For use with SOLO 100 poles.

### **SOLO 424**

### Heat detector tester 220V-240V



Complete with 5m cable.

### **SOLO 461**

### Cordless heat detector tester set





Includes:

1 x Solo 460-001 cordless heat unit

2 x Solo 760-001 NIMH battery baton

1 x Solo 725-001 fast charger

### **Testifire units**

#### **TESTIFIRE 1001-001**

#### Testifire 1001-001 smoke/heat kit





1 x Testifire 1000-001 head unit

1 x TS3-001 smoke capsule

2 x Solo 760 NIMH battery baton

1 x Solo 725-001 fast charger

### **TESTIFIRE 6001-001**

### Testifire 6001-001 smoke/heat kit 6 m





#### Includes:

1 x Testifire 1000-001 head unit

1 x TS3-001 smoke capsule

2 x Solo 760-001 NIMH battery baton

1 x Solo 725-001 fast charger

1 x Solo 100-001 fibreglass telescopic access pole 4.5 m

1 x Solo 200-001 universal detector removal tool

1 x Solo 610-001 protective carrying / storage bag

### **TESTIFIRE 9001-001**

### Testifire 9001-001 smoke/heat kit 9 m





#### Includes:

1 x Testifire 1000-001 head unit

1 x TS3-001 smoke capsule

2 x Solo 760-001 NIMH battery baton

1 x Solo 725-001 fast charger

1 x Solo 100-001 fibreglass telescopic access pole 4.5 m

3 x Solo 101-001 fibreglass extension pole 1.13m

1 x Solo 200-001 universal detector removal tool

1 x Solo 610-001 protective carrying / storage bag

### **TESTIFIRE 2001-001**

### Testifire 2001-001 smoke/heat/CO kit





1 x Testifire 2000-001 head unit

1 x TS3-001 smoke capsule

1 x TC3-001 CO capsule

2 x Solo 760-001 NIMH battery baton

1 x Solo 725-001 fast charger

### **TESTIFIRE 6201-001**

### Testifire 6201-001 smoke/heat/CO kit 6 m





Includes:

1 x Testifire 2000-001 head unit

1 x TS3-001 smoke capsule

1 x TC3-001 CO capsule

2 x Solo 760-001 NIMH battery baton

1 x Solo 725-001 fast charger

1 x Solo 100-001 fibreglass telescopic access pole 4.5 m

1 x Solo 200-001 universal detector removal tool

1 x Solo 610-001 protective carrying / storage bag

### **TESTIFIRE 9201-001**

### Testifire 9201-001 smoke/heat/CO kit 9 m





Includes:

1 x Testifire 2000-001 head unit

1 x TS3-001 smoke capsule

1 x TC3-001 CO capsule

2 x Solo 760-001 NIMH battery baton

1 x Solo 725-001 fast charger

1 x Solo 100-001 fibreglass telescopic access pole 4.5 m

 $3\ x\ Solo\ 101-001\ fibreglass\ extension\ pole\ 1.13m$ 

1 x Solo 200-001 universal detector removal tool

1 x Solo 610-001 protective carrying / storage bag

## **Testifire replacement capsules**

### TS3-3PACK-001

### Replacement smoke capsule



Up to 900 tests per capsule!



Pack of 3 capsules

### TS3-001

### Replacement smoke capsule



Up to 900 tests per capsule!



Pack of 6 capsules

#### TC3-3PACK-001

### Replacement CO capsule



Up to 900 tests per capsule!



Pack of 3 capsules

## **Testifire accessories**

### **TESTIFIRE 25**

### IR controller for Testifire



The remote control for Testifire is required for situations where the IR test beam of Testifire that triggers or stops a test is not broken by a physical presence. Typical situations are the sampling ports of aspirating detection systems or detectors with 'virtual chambers'. The Testifire 25 is then used to initiate the test procedure.

## **System Sensor test equipment Series**

#### **ECO1000 DRT**

#### Detector removal tool for ECO1000 detectors



Compatible with SOLO 100 pole series by SOLO 713-001 adapter.



Item available on request only. Please check the last price list for lead time information.

### **ECO1000 RTU**

### Remote laser test unit



The unit transmits a coded message, preventing spurious alarms being generated by other laser-based devices. With a range of several metres, the handheld test unit provides an effortless way of remotely alarm testing the range of ECO1000 detectors and removes the need for any direct physical access to the detector by the user.

#### M02-04-00

#### **Test magnet**

For all Series Detectors except ECO series. Activates internal reed switch to give alarm.



Item available on request only. Please check the last price list for lead time information.

## **POL-100 Portable Loop Polling Tool**



Compatible with Morley-IAS loop protocol.

The POL-100 is designed to help the technician for the intelligent loop commissioning. The POL-100 is equipped with a blue backlit display and removable terminals. It is powered via batteries.

The POL-100 displays:

- Resistance between loop wires & wires and earth
- Voltage on the loop
- Identification of devices (auto-learn)
- Eventually, the double or missed address
- PW value of each detector

It is also able to register informations of a device for later diagnostic.

#### **POL-100**

### Polling tool

## Scorpion® Tester for Aspirating systems & Point detectors



- · Improved access benefits
- Time and cost saving benefits
- Up to 8 Scorpion heads (ASD or Point) connected to a single Control panel
- Battery powered

Scorpion ® ASD is a unique, functional remote smoke detector test system for Aspirating Smoke Detection (ASD) Systems, and offers an approved, benign and effectively non-contaminating test particulate delivered in a controlled and repeatable manner.

#### **Specifications**

- · ASD particle lifetime:
- Testing capacity:

Suitable for 120sec / 100m pipe runs Up to 240 tests of 15 seconds of smoke per Scorpion

### **SCORP 8000-001**

### Scorpion control panel (Incl. mounting box)

#### **SCORP 2001-001**

### Scorpion ASD head unit kit



#### **SCORP 1001-001**

### Scorpion point detector head unit kit





Item available on request only. Please check the last price list for lead time information.

#### **SCORP 7000-001**

### Scorpion portable controller



Includes SCORP 60 battery cable for SOLO 760 and SPARE 1054 control cable to access point.



Item available on request only. Please check the last price list for lead time information.

#### **SCORP 25-001**

### Scorpion access point



For use with SCORP 7000 portable controller (one required per head unit).



Item available on request only. Please check the last price list for lead time information.

For spare parts, please refer to § Spare Parts at the end of this chapter (06. Accessories)

## **Scorpion® Tester accessories**

### **SCORP 50-001**

### Scorpion battery pack, NiMH rechargeable nominal 7.2V/2.2Ah





Item available on request only. Please check the last price list for lead time information.

### **SCORP 60-001**

# Scorpion battery cable, for connecting SOLO 760 battery batton to Scorpion Control Panel





Item available on request only. Please check the last price list for lead time information.

### SOLO 726-101

### Solo battery batton, NiMH rechargeable nominal 7.2V/2.2Ah





Item available on request only. Please check the last price list for lead time information.

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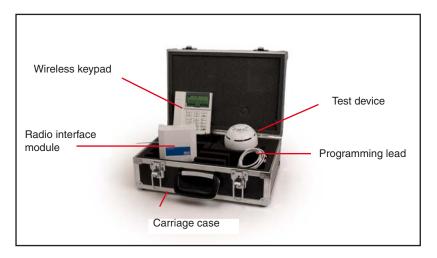
## **Test Equipment for Sagitarius wireless system**



Item available on request only. Please check the last price list for Lead time information.

#### **SGSK100**

### Test kit for Sagittarius wireless system



For SAGITTARIUS series wireless detectors. Compatible with SOLO 100 pole series using SOLO 713-001 adapter. Complies to EN 54-25.

The SGSK100 is composed of the following elements:

- 1. A carrying case.
- 2. A pair of carrying case's keys.
- 3. A test device.
- 4. A test device's adaptor base.
- 5. A battery for the test device: CR123A (3 V & 1.2 Ah).
- 6. A holding pole for the test device.
- 7. A radio interface module.
- 8. A power supply transformer unit for the radio interface.
- 9. A wireless keypad.
- 10. An ER9V battery for the wireless keypad (9 V & 1.2 Ah).
- 11. A programming lead for wireless keypad and radio interface connection.
- 12. A CD containing the wireless system configuration program (Wirelex) for the PC.

#### **SG-DRT**

#### **Detector head removal tools**

### Flame detector testers



Specially designed to use with the 20/20 series.

Based on a emitting of electromagnetic radiation recognized by the specific flame detectors.

Allows to test detectors under real conditions without the associated risks of an open flame.

The simulators use NiCd batteries as a rechargeable power source.

Possibility to add a collimator to extend the range of application.



Item available on request only. Please check the last price list for lead time information.



Did you know that Honeywell Fire Safety also offers to possibility to rent some of these fire simulators. Please consult the latest version of the price list for more information.

20/20-310	Fire simulator for triple IR flame detectors
	Can be used to test 20/20I, 20/20XI, 20/20SI, 20/20MI, 20/20FI, 20/20CTIN and CTIP.
20/20-311	Fire simulator for UV/IR flame detectors
	Can be used to test 20/20L-LB, 20/20ML, 20/20F, 20/20U-UB and 20/20MU.
20/20-312	Fire simulator for single IR flame detectors (20/20R and 20/20MR).
20/20-313	Fire simulator for hydrogen flame detectors
	Can be used to test 20/20H, 20/20SH and 20/20MH.

### NEW

20/20-190

### FS-1100



### **Tester for flame detectors**

Collimator for 20/20 simulators

The FS-1100 FLAME SIMULATOR is the essential complimentary tool to the self-testing capabilities of your Sharpeye<sup>™</sup> IR3 Flame Detectors. It brings fire prevention safety to a higher level by giving you the ability to fully test the operational readiness of your entire fire detection system.

The robust and reliable FS-1100 Flame Simulator allows remote testing of flame detectors, which are often located in difficult to access and/or classified hazardous areas (Zone 1, Zone 21).

### **Tester for RIV flame detectors**

#### **PTL611**



### Portable test lamp for RIV IR flame detector

The PTL-611 portable test lamp is a plastic explosion-proof shock-proof and antistatic torch lamp with high intensity light which is modulated at a frequency of 23Hz so as to be used for external testing of RIV-601/F IR flame detectors, as an alternative to the internal test feature built-in inside these detectors.

The working distance is over 10 meters, normally adequate for most common applications.

The portable test lamp is powered by 2 non rechargeable alkaline batteries size D (LR20) with an autonomy of more than 20 hours.

The lamp is turned on by a slide switch on the side.

The light beam aperture is about 3 degrees.

### **Specifications**

Krypton bulb lamp: 2.4V – 0.5A
 Light beam aperture: About 3 degrees

Modulation:
 By 50% pulses (50% on, 50% off) with

23Hz frequency Over 10 meters

Operating distance from detector:
 Type of batteries:
 Over 10 meters
 2 non rechargeable alkaline batteries

size D (LR20), autonomy of more than

20 hours, included.

• IP rating:

• Explosion-proof: Ex II 2GD T80°C EEx eib IIC T4

(ATEX zone 1 and zone 2 gas, zone

21 and zone 22 dust)

• Operating temperature: -20°C +55°C

Dimensions:
 Weight:
 200 mm x 85 mm x 60 mm
 600 grams with batteries and case

(net without batteries 240 grams).

## **Gas Detector Test Equipment**



The below items are available on request only. Please check the last price list for lead time information.

Gas detector calibration kit - combustible detectors
The test kit includes the following items:  1 x Z-02000-A1645 calibration gas flow housing Signalpoint & Sensepoint  1 x Z-REG-0.30 pre-set flow regulator  1 x Z-SPPPTUB tygon tube  1 x Z-GasCH4-22-AIR-34 2,2%VOL methane in cylindre  1 x Z-2302D0765 Case for storing the above products
Gas detector calibration kit - CO gas detectors
The test kit includes the following items:  1 x Z-02000-A1645 calibration gas flow housing Signalpoint & Sensepoint  1 x Z-REG-0.30 pre-set flow regulator  1 x Z-SPPPTUB tygon tube  1 x Z-GasCO-250-AIR-34 250ppm carbon monoxide in cylinder  1 x Z-2302D0765 case for storing the above products
Calibration gas flow housing for Signalpoint & Sensepoint
Calibration cup for Sensepoint Pro & Plus
Pre-set 0,3I/m flow regulator
1m tygon tubing (suitable for all gases)
Case for up to 2x2 alu. gas cylinders, regulator, tubing
2,2%Vol. Methane in air (EU=50% LEL, US=44% LEL)
20,9%Vol Oxygen in N2 (compressed air)
250 ppm Carbon monoxide in air
25 ppm Ammonia in air
300 ppm Ammonia in air
100 ppm Carbon monoxide in air



10 ppm H2S in air

Single gas cylinder (34 L) - Approximately 30 Calibrations.



Please note that next to the standard freight charge a special ADR cost will be charged following the transportation safety regulations for flammable or dangerous products.

This means a fix amount per shipment will be invoiced whenever a flammable smoke detector tester class 2.1 UN1950 will be shipped. Till 20 box, this amount will be 10 euro per shipment. For more than 20 boxes, 35 euro will be invoiced.

MORLEY N IA

**Z-GASH2S-10-AIR-34** 

### **Calibration & Installation Tools**



All SENSITRON gas detectors are factory calibrated prior to despatch. In order to fulfil the EN60079–17:2003, detectors have to undergo periodical operational testing, each three to six months according to the plant's risk assessment. Test results are to be recorded into a suitable book to be shown to the Authority in case of inspection.

In environments where polluting elements might alter the original sensor performances, periodical testing should be carried out at shorter time intervals. All tests should be carried out by employing a specific gas mixture, according to the manufacturer's advice.

The calibration carrying case has place for 2 sample gas bottles and comprises one flow indicator, hose and adaptors. On request, this calibration gas kit can be equipped with portable gas detectors available for different gases and ranges.



The below items are available on request only. Please check the last price list for lead time information.

#### VTX+XA

### Calibration gas case



Calibration gas case including one flow indicator, hose and adaptor. (Calibration gas cylinders not included).

#### SI.B/XXX

#### Disposable gas cylinders; 50% LEL

Disposable gas cylinders filled with either flammable or toxic non reactive gas mixtures.

Dangerous goods: ADR/RID UN 2037, Class 2, Packing instructions 203.



At the order please specify the gas type.

#### SG.B/XXX

### Disposable gas cylinders, 50% LEL

Disposable gas cylinders filled with reactive gas mixtures. Dangerous goods: ADR/RID UN 1956, Class 2.



At the order please specify the gas type.

### PC.VALVOLA

### Flow-meter valve

Flow-meter valve to be mounted on the gas cylinder to set the gas flow.

### ZMCAP/123

### Adapter

Adapter for all of Sensitron gas detectors.

Made anodized alloy, it allows the right quantity of gas inlet to flow to the detector. It comes complete with adapters to fit on the detectors' heads.

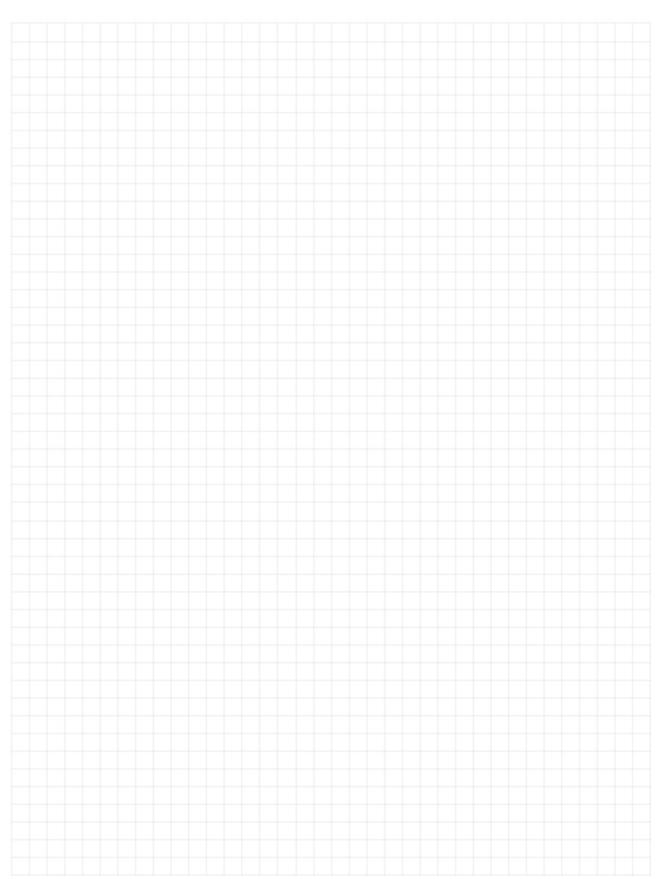
## **Spare parts**

Part number	Description	Spare part for:
960110	Keeper plate - 55mm diam. for 400N	Door holders
960114	Keeper plate - 65mm diam. for 850N	Door holders
MOD45R	Replacement cord for MOD400R	MOD400R
SOLO 460-001	Cordless heat detector head unit only	Test Equipment
SOLO 726-101	220/240V Mains & car charger	Test Equipment
SOLO 760-001	Nimh battery baton	Test Equipment
SPARE 1002	Pair of transparent grips for Solo 200	Test Equipment
SPARE 1005	Silicone membrane for Solo300	Test Equipment
SPARE 1049	Membrane ring for testifire	Test Equipment
SPARE 1028	Aerosol retaining cup	Test Equipment

## Accessories

## **Notes**



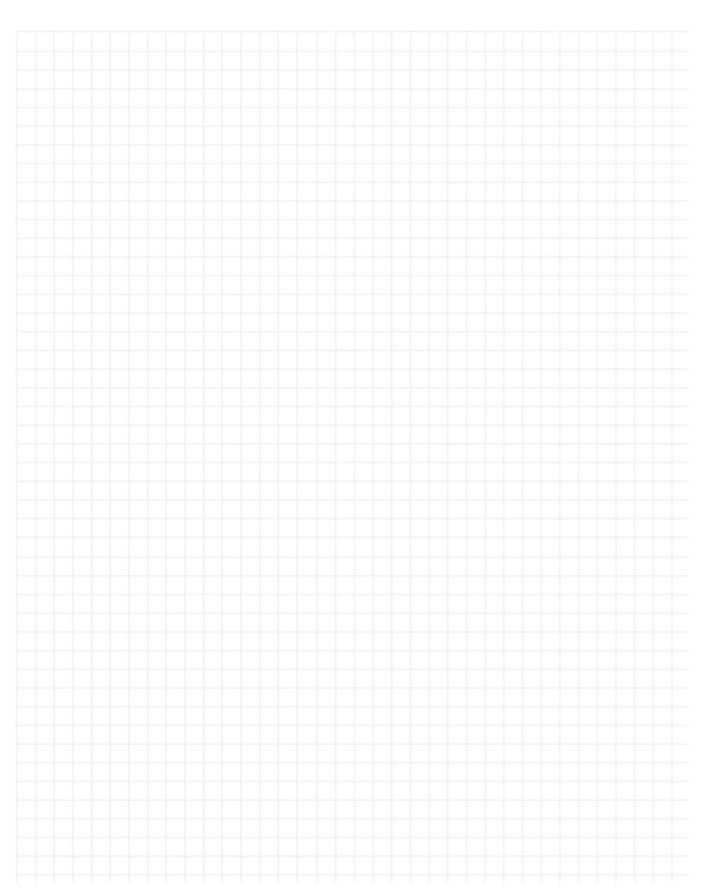


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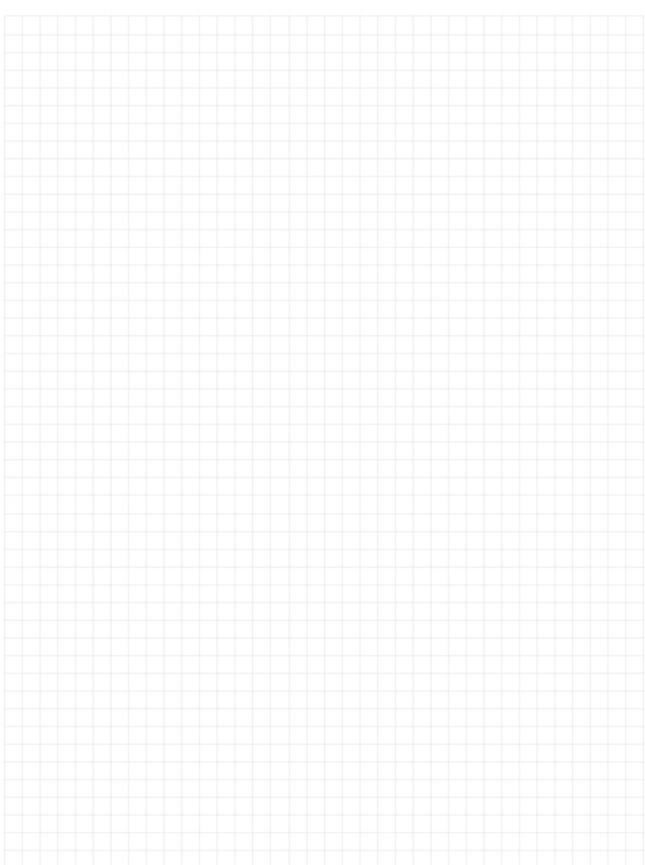






## **Notes**





# **Honeywell Life Safety Benelux**



Honeywell Life Safety Belgium

Liège Airport Business Park Building 50 4460 Grâce-Hollogne

T: (+32) 4 2470300 F: (+32) 4 2470220 Email: info.hlsbe@honeywell.com www.morley-ias.be

### **Honeywell Life Safety Netherlands**

Burgemeester Burgerslaan 40 5245 NH Rosmalen ('s Hertogenbosch)

T: (+31) 736273295 F: (+31) 736273298 Email: info.hlsnl@honeywell.com www.morley-ias.nl

