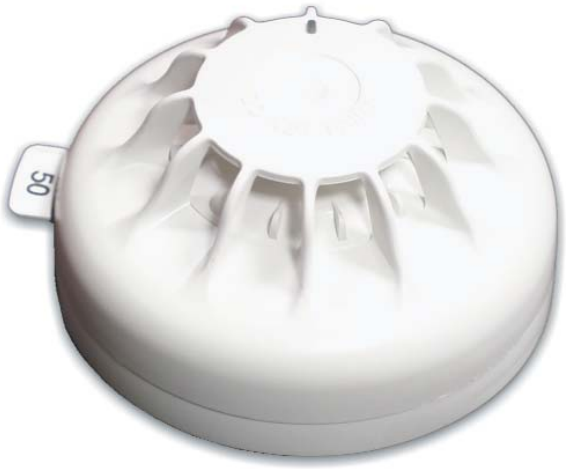


# MINERVA® MX

## MX Virtual Multi-Sensor Detectors

### Features

- Over 20 fire detection modes
- Tyco MX FASTLOGIC Expert algorithms
- MX HPO detection Algorithms
- Up to 250 detectors per loop
- Optional bi-directional line isolation with every detector
- Remote detector verification & temperature read out
- Programmable alarm LED with 360° viewing angle
- Optional detector locking pin
- Variety of sounder and relay detector bases
- Address flag stays with the base
- Internationally approved

MINERVA® MX is a comprehensive range of fire controllers designed and built to BSEN ISO9001/2 and EN54 for installation to BS5839 Pt. 1. An advanced proven microprocessor based system, MINERVA® MX provides conventional and digital addressable detection for new, refurbished and refitted detection systems.

A wide range of detectors and ancillaries makes MINERVA® MX suitable for applications from clean areas and offices to large industrial and hazardous areas.

The 800 Series detectors are supplied in an extremely robust and reliable fully sealed construction, which has undergone stringent environmental type testing. All electrical contacts are moulded into the plastic to eliminate any movement.

The detectors are constructed from hardwearing Fire Resistant FR110 plastic. The multi-sensor detectors are environmentally friendly. They use no radioactive parts and can be returned to the factory for recycling at the end of their life.

All 800 Series detectors are supplied with integral dust covers as part of the packaging. Dust covers are retained throughout installation and removed at commissioning time.

# MINERVA® MX MX Virtual Multi-Sensor Detectors

## Installation & Service Features

The 800 Series MX VIRTUAL detectors include a host of installation and service features which are provided to reduce installation and service costs and reduce repair times.

- Standard and 6" bases with multiple mounting options speed and simplify installation
- Unique 'park' position for commissioning and service procedures
- Detector Addressing programmed from the MX SERVICE Tool or MX Panel
- Address flag – fixed to the base to prevent mix ups during service
- Compatible with Tyco 600 and 900 Series bases – for easy upgrade
- Panel Auto-Config and Self learn functions – supported by the detectors
- Full range of remote installation and service tools
- Dirty Detector Read-out can be viewed on the MX SERVICE tool or panel

## Detection Modes

All 800 Series detectors communicate to the MX detection panel using the fast reliable MX DIGITAL loop protocol. This allows each detector to operate in one or two of several detection modes, thus allowing it to be easily optimised to the risk.

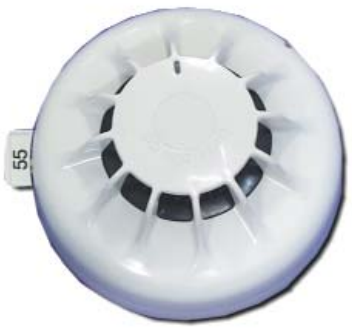
To meet detection applications with multiple risks the 800PH and 800CH detectors allow two detection modes to operate simultaneously.

## Virtual Detectors

The use of virtual detection means that installations can change the detection mode without any physical change, taking place. Not only can the detection be changed at the time of installation and commissioning but also during the life of the building as building usage changes.

Some MX detection panels even allow the detection mode to be changed at different times of the day or automatically as occupancy and activity in the space changes. As well as providing great flexibility, using only two detector models means whole life costs are reduced by reducing manufacturing, stocking and service stocks. This also reduces the number of times detectors have to be changed during the life of the installation.

## 800PH Multi-Sensor Smoke and Heat Detectors



The 800PH is a state-of-the-art smoke and heat detector which allows a full set of detection modes to be implemented in the MX detection panel to suit most smoke and heat detection applications.
The 800PH incorporates a unique "mousehole" design optical chamber with an unrivalled signal to noise ratio providing high resilience to dust and dirt which means reduced service costs. In addition a unique chamber cover actually draws slow moving smoke into the chamber to provide a more responsive detector.

The 800PH provides all the features of MX VIRTUAL detectors including self verification, temperature and smoke level indication and unrivalled service functions.

## Technical Specification

| | |
|---|---|
| Dimensions | 109dia x 43H mm |
| Operating Temp | -20° to +70°C |
| Storage Temp | -40° to +80°C |
| Relative Humidity | 95% (non condensing) |
| Standards | EN54 pt 5,EN54 pt 7 |

# MINERVA® MX MX Virtual Multi-Sensor Detectors

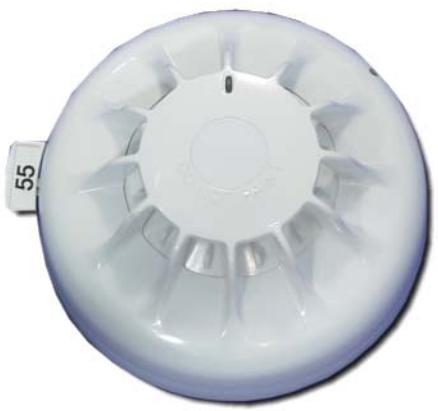
The 800CH is a state-of-the-art carbon monoxide and heat detector which allows a full set of detection modes to be implemented in the MX detection panel to suit most fire and heat detection applications. The 800CH is particularly well suited to sleeping risks, storage areas and applications where smoke detector positioning is difficult or where smoke detectors are prone to false alarm. The integration of heat detection into the 800CH allows the detector to operate in a wide variety of applications where combined risks mean that CO detection alone would be insufficient.

The 800CH incorporates a reliable electro-chemical CO detection cell and high specification low thermal mass thermistor for accurate temperature detection. The 800CH provides all the features of MX VIRTUAL detectors including self verification, temperature and CO level indication and unrivalled service functions.

## Technical Specification

| | |
|---|---|
| Dimensions | 109dia x 43H mm |
| Operating Temp | 0° to +55°C |
| Storage Temp | -20° to +55°C |
| Relative Humidity | 95% (non condensing) |
| Standards | EN54 pt 5 EN54 pt 7 |

## 800CH Multi-Sensor Carbon Monoxide and Heat Detectors



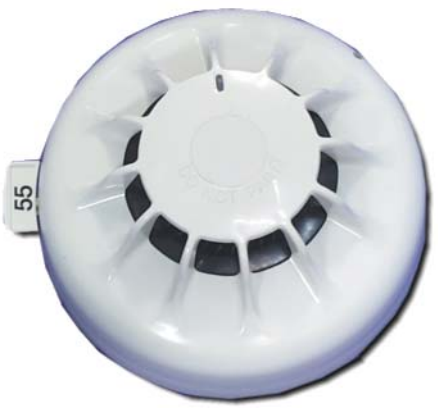

The 813P is a sophisticated photo optical smoke detector which provides economical fire detection coverage without the use of multi-sensor, day/night modes and fastlogic technology. High, normal or low sensitivity can be set in accordance with EN54 pt. 7. Like the highly featured 801PH multi-sensor device the 813P incorporates a unique "mousehole" design optical chamber with an unrivalled signal to noise ratio providing high resilience to dust and dirt which means reduced service costs. In addition a unique chamber cover actually draws slow moving smoke into the chamber to provide a more responsive detector. The unique design provides immunity to small insects and thrips without the need for a separate thirp filter.

The VdS approved 813P provides detector condition monitorig and pre-alarm options but without the ability to drive functional bases or remote indicators. The standard 5B detector base or the 5BI isolator base can be used with the 813P

## Technical Specification

| | |
|---|---|
| Dimensions | 109dia x 43H mm |
| Operating Temp | -20 ° to +70° C |
| Storage Temp | -40° to +80° C |
| Relative Humidity | 95% (non condensing) |
| Standards | EN54 pt 7 |

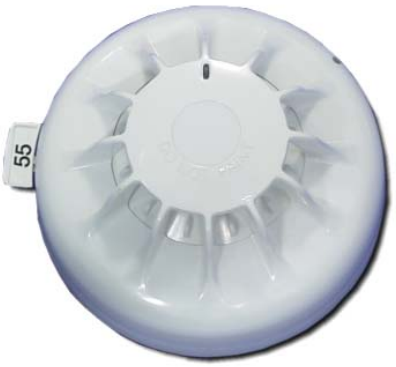
## 813P Photo Optical Smoke Detector



# MINERVA® MX MX Virtual Multi-Sensor Detectors

The 800H is a flexible cost-effective addressable heat detector with all the features of MX VIRTUAL detectors. The 800H returns the temperature to the MX detection panel which allows various detection modes to be implemented. The 800H uses a high quality thermistor with very low thermal mass. This allows the detectors to provide fast accurate temperature detection as well as heat detection.

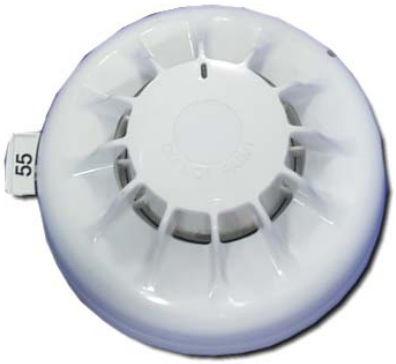
## 800H Heat Detectors




### Technical Specification

| | |
|---|---|
| Dimensions | 109dia x 43H mm |
| Operating temp | -25 to +70°C(-40 to +90°C for short periods) |
| Storage temp | -40 to +80°C |
| Standards | EN54:pt.5 |

## 800I Ionisation Smoke Detectors




The 800I ionisation detectors are offered for old specifications which still call for ionisation smoke detectors. The 800CH and 800PH detectors offer improved performance, significantly lower false alarms and environmental compatibility for smoke detection applications. The 800I nevertheless offers state-of-the-art ionisation smoke detection with self verification, smoke level indication and threshold compensation for detector condition monitoring.

### Technical Specification

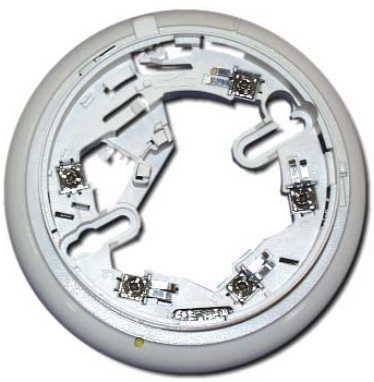
| | |
|---|---|
| Dimensions: | 109dia x 43H mm |
| Operating Temp: | -20 to +70°C |
| Storage Temp: | -40 to +80°C |
| Relative Humidity: | 95% (non condensing) |
| Standards: | EN54 pt 7 |

This is the most common base designed to fix directly to the ceiling or various common backboxes. This base allows a detector to be plugged in directly or a functional base to be plugged in between the base and detector.

### Features

- Variety of Fixing Options
- Remote LED Connections
- Anti-Tamper Facility
- Park position and address flag holder
- Integral breakout locking key

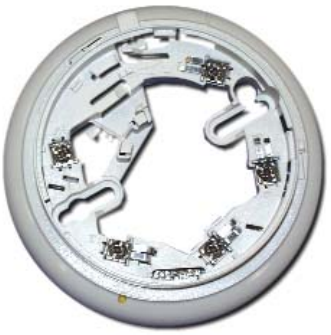
## 5B 5" Universal Base



# MINERVA® MX MX Virtual Multi-Sensor Detectors

## 5B 5" Isolator Base

With all the features of the 5B Universal Base the 5BI Isolator Base allows any or all 800 Series MX Detectors to be upgraded to incorporate bi-directional short circuit isolation. Implemented on every detector, the 5BI can ensure that no detector is lost on a system in the event of an open or short circuit.
Alternatively, the 5BI can be implemented between zones to provide short circuit isolation according to BS5839 Part 1 and EN54. The 5BI can be used as a stand alone line isolator fitted between callpoints and other ancillaries.

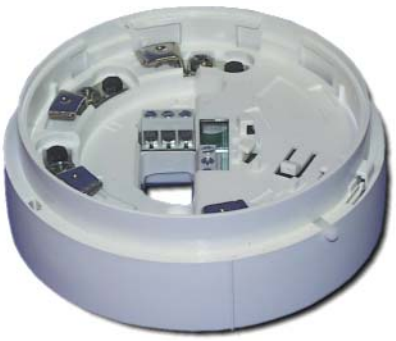


### Features

- All the features of the 5B
- Integral yellow LED to indicate when the in-built isolator has been tripped

## 801RB - Functional Relay Base

The 801RB provides dual relay contacts for signalling external devices on MX addressable systems. A very low operating current even when the relay is energised enables the relay base to be used without any additional power. The dual contacts are under the control of a programmable output, through the powerful cause and effect software.



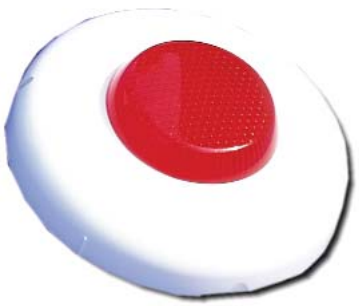
### Features

- Dual pole 24V DC relay contacts (60VA)
- Status indication LED
- Very low power consumption (<20µA except startup)

## SAB800 Sounder Addressable Beacon

The SAB 800 Sounder Addressable Beacon is an MX Addressable Beacon that fits into the Standard MINERVA® Universal Base. Alternatively the SAB 800 may be fitted to the 802SB and 901SB Sounder Bases to enable the MX Control Panel to communicate with and control these sounder bases and also provide a Flashing Beacon effectively turning the 802SB and 901SB into a combined addressable loop powered sounder and beacon.

The SAB 800 is suitable for wall or ceiling mounting. Sound selection and tones will be as per the 802SB and 901SB.



## MKII Sounder Base

A new low current range of sounder bases for use with the MX Fire Alarm Control Panel.

### Features

- Manufactured to EN54 part 3
- Integral sounder and detector base
- Volume and tone adjustable after installation
- Low Power Synchronisation
- Do not require use of a standard base (maybe installed directly onto a standard besa box)

## SAM800 Sounder Addressable Module

The SAM 800 Sounder Addressable Module is an MX addressable device which may be fitted to the 802SB and 901SB Sounder Bases to enable the MX Control Panel to communicate with and control these sounder bases, without the need for a detector effectively turning the 802SB and 901SB into an addressable loop powered sounder.

The SAM 800 is suitable for wall or ceiling mounting. Sound selection and tones will be as per the 802SB and 901SB.

## 801RIL - Remote Indication LED

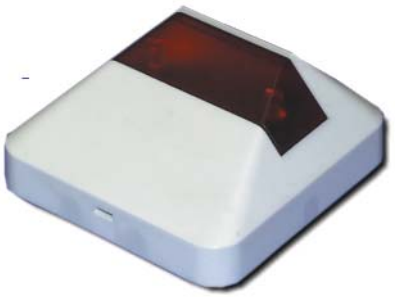
All detector bases have the ability to drive a remote LED in the event that the installed position of the detector is not easily visible. The 801RIL is primarily designed for LPCB influenced markets but is compatible with all 800 Series detectors.

### Features

- UK Single gang mounting
- High intensity red LED

## 800HL - Indication Lamp

The 800HL remote indicator lamp provides a larger indicator for use in place of the RIL when longer distances are involved or in VdS influenced markets. Typically used to indicate the source of an alarm in buildings with long corridors eg. Hotels, hospitals, apartments.



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