

## Detectors



innovative light pipe technology allows LED to be seen from any angle



optical / photo-thermal / heat detectors

### Overview

The Menvier range of conventional detectors have been specifically designed to operate with Menvier control panels.

The Menvier optical detector MPD821 is suitable for most applications giving the fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

The Menvier photo-thermal detector MPT951 will respond quickly to fast clean burning fires yet maintain the advantage of optical detectors when detecting smouldering fires. The thermal enhancement of this detector allows a higher alarm threshold which provides a greater rejection of false alarms. The detector will also raise an alarm at temperatures exceeding 60°C.

The Menvier fixed heat detectors MMT860 and MHT890 will detect temperatures above 77°C and 92°C. The rate of rise heat detector MFR830 is used to detect rapid increases in temperature with a maximum threshold of 60°C.

These detectors are designed to be used in environments where the ambient conditions might cause false alarms if smoke detection were to be used, for example where there is a high level of dust, fumes, steam or smoke under normal conditions.

### Features

- Quick and simple to install
- Stylish low profile design
- 360° viewable LED
- Removable detector chamber
- Drift compensation

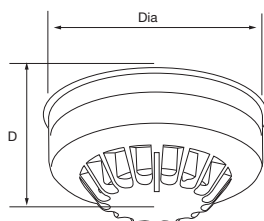
### Benefits

- 'Clean me' feature means detector can be cleaned on site using the Menvier manual cleaning procedure
- Common mounting base
- Positive 'lock' indication

## Technical Specification

Code	MPD821	MPT951	MFR830	MMT860	MHT890
Description	Optical smoke Detector	Photo-thermal detector	Rate of rise detector	Fixed heat detector (77°C)	Fixed heat detector (92°C)
Standards	EN54 Pt 7 2000, A1 2002	EN54 Pt 5 & Pt 7 2000, A1 2002	EN54 Pt 5 2000, A1 2002	EN54 Pt 5 2000, A1 2002	EN54 Pt 5 2000, A1 2002
<b>Supply Ratings</b>					
Operating Voltage	15V dc to 30V dc	15V dc to 30V dc	15V dc to 30V dc	15V dc to 30V dc	15V dc to 30V dc
Standby Current	30µA (max)	30µA (max)	30µA (max)	30µA (max)	30µA (max)
Startup Current	340µA (max)	340µA (max)	N/A	N/A	N/A
Alarm Current	25mA (max)	25mA (max)	25mA (max)	25mA (max)	25mA (max)
<b>Fixing Information</b>					
Mounting Position	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas
Mounting Options	Surface mount with MDB800 base	Surface mount with MDB800 base	Surface mount with MDB800 base	Surface mount with MDB800 base	Surface mount with MDB800 base
Area Coverage	100m <sup>2</sup> (subject to local standards)	100m <sup>2</sup> (subject to local standards)	50m <sup>2</sup> (subject to local standards)	50m <sup>2</sup> (subject to local standards)	50m <sup>2</sup> (subject to local standards)
System Wiring	2 Core	2 Core	2 Core	2 Core	2 Core
<b>Operation</b>					
Detection Mode	Light scatter principle	Light scatter principle & Heat sensitive element	Heat sensitive element	Heat sensitive element	Heat sensitive element
Heat Class	N/A	A2S	A2R	BS	CS
Alarm Temperature	N/A	60°C	60°C	77°C	92°C
Indication	360° visible LED	360° visible LED	360° visible LED	360° visible LED	360° visible LED
<b>Environmental</b>					
Operating Temperature	-20°C to 60°C	-20°C to 45°C	-20°C to 45°C	-20°C to 60°C	-20°C to 75°C
Humidity (Non Condensing)	0 to 93% RH	0 to 93% RH	0 to 93% RH	0 to 93% RH	0 to 93% RH
<b>Physical</b>					
Construction	PC/ABS	PC/ABS	PC/ABS	PC/ABS	PC/ABS
Colour	White	White	White	White	White
Dimensions Excl Base (Dia x H)	101mm x 33mm	101mm x 43mm	100mm x 43mm	101mm x 43mm	101mm x 43mm
Dimensions Incl Base (Dia x H)	101mm x 45mm	101mm x 55mm	100mm x 55mm	101mm x 55mm	101mm x 55mm
Ingress Protection	IP40	IP40	IP40	IP40	IP40
EMC	CE Marked	CE Marked	CE Marked	CE Marked	CE Marked
<b>Compatibility</b>					
Suitable for use with	Menvier conventional fire systems	Menvier conventional fire systems	Menvier conventional fire systems	Menvier conventional fire systems	Menvier conventional fire systems

## Dimensions



Description	Dia (mm)	D (mm) (excl base)	D (mm) (incl base)
Optical	101	33	45
Photo-thermal	101	43	55
Heat	101	43	55

## Installation

1. Detectors are fixed and wired via common mounting base.
2. Cable entry into base can be rear or side.
3. A locking facility is provided which can be activated if required to prevent unauthorised detector removal without the use of a special tool.
4. Positive click mechanism incorporated to provide clear indication when detector is correctly located in base.

**Note:** For wiring information please see MDB800 base.

## User Interface

1. Red LED to indicate alarm condition.
2. Amber LED to indicate chamber fault/drift compensation limit (enhanced versions only).
3. All wiring connections are via a common mounting base (supplied separately).

## Product Codes

Code	Description
MPD821	Conventional optical smoke detector
MPT951	Conventional photo-thermal detector
MFR830	Conventional rate of rise heat detector
MMT860	Conventional fixed heat detector (77°C)
MHT890	Conventional fixed heat detector (92°C)
MDB800	Conventional detector base
MDP201	Duct Probe