

features

- Optical and thermal sensors
- Microprocessor controlled with internal algorithms
- Enhanced signal processing for improved stability
- High immunity to unwanted alarms
- 2 autolearn sensitivity settings
- 3 fixed sensitivity photo thermal settings
- Thermal only detection mode
- Twin LEDs for 360° visibility
- Built-in test
- Third party certified to CEA 4021, EN54-7:2000 and EN54-5:2000

The MI-PTSE multi sensor combines optical smoke detection, heat detection and microprocessor control with analogue addressable communications.

For smoke detection the MI-PTSE incorporates an improved sensing chamber design, linked to sophisticated processing circuitry with smoothing filters. This helps to eliminate the transient environmental noise conditions which can be the cause of false alarms. The sensor's performance is further enhanced by the integration of special algorithms which automatically compensate for contamination of the sensing chamber. This enables the sensor to provide a consistent level of sensitivity and increased immunity to unwanted alarms.

In combined modes of operation both the inputs from the optical and thermal sensors are processed using special algorithms before an alarm decision is made. If the presence of smoke is detected above a threshold value for a period of time, or if the heat sensor detects temperatures above 58°C then an alarm condition will be generated. In "heat only" mode only temperatures above 58°C will generate an alarm condition.

The MI-PTSE includes 2 self governing sensitivity settings. Whilst operating in these modes the detector will automatically adjust to short term changes in it's environment, helping to reduce the potential of unwanted alarms through activities within the protected space.

In areas where the normal daytime activities are likely to generate unwanted alarms the MI-PTSE can be programmed to operate in a "heat only" mode during the period of occupation and reverting to optical and thermal operation during the unoccupied period. The MI-PTSE offers performance flexibility coupled with superior environmental stability.



Charles Avenue, Burgess Hill
West Sussex, RH15 9UF
United Kingdom

Tel: +44 (0) 1444 23 55 56
Fax: +44 (0) 1444 25 44 10
Email: sales@morleyias.co.uk
www.morley-ias.co.uk

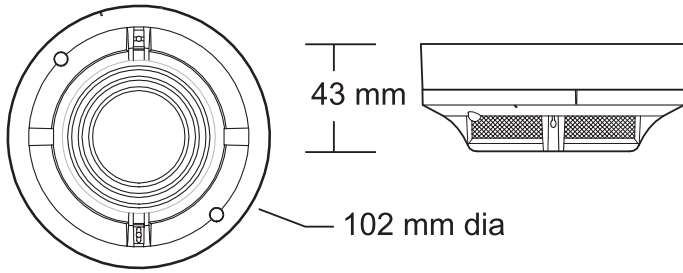
A Honeywell Company

MI-PTSE Optical Thermal Analogue Addressable Multisensor Data Sheet



mechanical

Dimensions:



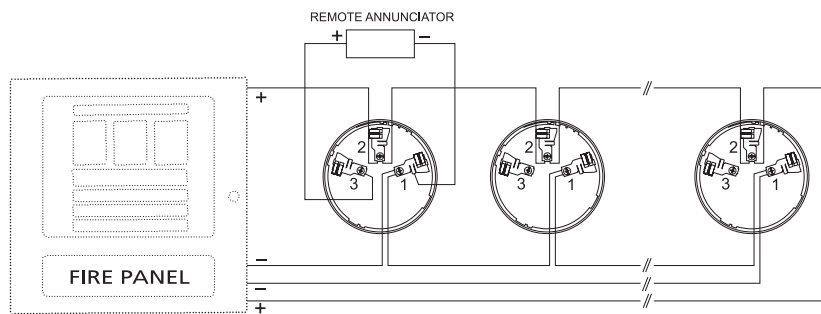
Weight: 115g
 Colour: Pantone warm grey 1C
 Material: Bayblend FR110
 Terminal wire gauge: 2.5mm² max.
 Operating temperature: -20°C to +60°C
 Relative humidity: 10% to 93%(non-condensing)

electrical

Voltage: +15 to +32Vdc
 Standby current: No communication: 250µA @ 24Vdc maximum
 One communication every 5 seconds, LED blink: 300µA @ 24Vdc maximum
 Alarm current: 7mA @ 24Vdc maximum

Sensitivity modes

- 1 High (1%/ft)
- 2 Medium to high - auto adjusting (1-2%/ft)
- 3 Medium (2%/ft)
- 4 Low to Medium - auto adjusting (2-3%/ft)
- 5 Low (3.5%/ft)
- 6 Thermal only - Class A1R(58°C)



approvals



REF: 199p/02

part numbers

MI-PTSE Optical Thermal multi sensor.

accessories

- MOD400R Detector sensitivity test tool. Use with most analogue or digital multimeters.
- SMK400 Surface mounting kit provides for entry of surface wiring conduit. For use with B501 base only.
- RMK400 Recess mounting kit. For use with B501 only.
- B501 Detector mounting base.
- B501IEFT Detector mounting base fitted with loop isolator.

Notes
 The MI-PTSE is compatible with B500 series bases and other Morley IAS sensors and modules.

local distributor

Every care has been taken in the preparation of this data sheet but no liability can be accepted for the use of information therein. Design features may be changed or amended without prior notice.

