

DATASHEET

INTELLIGENT OPTICAL SMOKE DETECTOR

HFI-PA-05



The HFI-PA-05 Intelligent Optical Smoke Detector is a point detection device that continuously monitors the air in the protected area to provide the earliest warning of a fire condition. The advanced design of the smoke inlet and optical chamber guarantees a very high resistance to the entry of dust, ensuring a higher level of false alarm rejection without compromising sensing performance. This detector forms part of the Altair range of aesthetically pleasing low profile detection and alarm products and is fully compatible* with all fire control equipment utilising the Hyfire fully digital communication protocol.

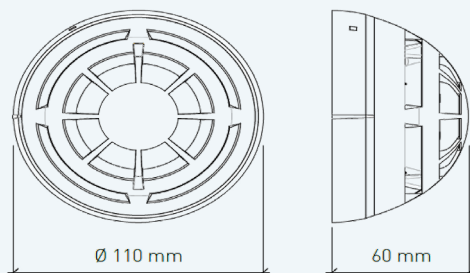
* For BASE COMPATIBILITY see page 2



KEY FEATURES

- Multiple fully approved sensitivity settings
- Auto addressing capability on compatible fire control panels
- Bi-directional isolator to protect against cable faults
- Utilises fully digital Hyfire protocol with high noise rejection
- Dual bi-colour LEDs providing 360deg cone of visibility
- Dust Restrict Chamber (DRC) technology offering advanced immunity to airborne contaminants
- Open style mounting base offers easy wiring and low pressure locking
- Programmable using the Device Programming Tool
- Self test magnet option
- 5 year product warranty

TECHNICAL INFORMATION



TECHNICAL SPECIFICATION

Loop voltage	15Vdc – 40Vdc *
Average standby current	85µA @ 24Vdc
Remote Output Max Current	20mA
Dimensions (inc. base)	110mm x 60mm
Temperature Range (no icing)	-10°C to +55°C **
Max tolerated humidity (non condensing)	95% RH
Max number of loop addresses	240
Weight (standard base included)	130 g

*Minimum 18V with LED operation **Performance may vary at extremes of range

STANDARDS & APPROVALS

BS EN 54-7 Smoke Detectors
- Point Detectors using scattered light, transmitted light or ionisation
BS EN 54-17: Short Circuit Isolator



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LED INDICATION

The detector is equipped with two tri-colour LEDs mounted to give 360 degree visibility. These indicators display device status and condition*:

NOTE: The LED indicators are managed directly by the fire control panel and the Green (blinking) can be disabled by the installer at the fire control panel or via the hand-held programming unit.

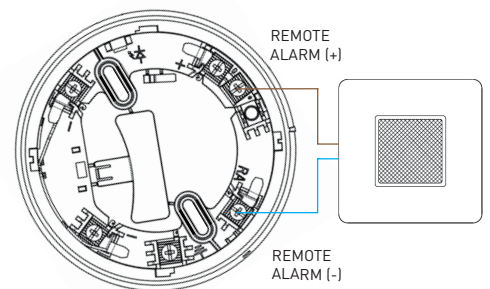
* All functionality may not be available on all control equipment

REMOTE OUTPUT CAPABILITY

A remote output capability is available as a standard feature on this device. This allows the connection of a Remote Indicator Module or a compatible Platform Sounder (check power requirements) to be connected to the detector base terminals and controlled from the fire alarm control panel.

NOTE: If other equipment is connected to the remote output, its supply current must be limited by using an adequate resistor. Consult the TECHNICAL SPECIFICATIONS on page 1 and assess the external device current absorption value. Ensure correct cable polarity.

- **Green:** (blinking) Normal operational status
- **Red:** Detector in an alarm condition
- **Amber:** Detector in a fault condition



INSTALLATION - WIRING

The detector must be mounted on a compatible detector base and all analogue loop wiring must be correctly terminated as shown:

- Connections to the detector base terminals are polarity sensitive.
- Care should be taken to ensure correct cable polarity.

BASE COMPATIBILITY

This device is compatible with the following Hyfire bases and base sounders:

- HFI-DMBS-05 Intelligent Base
- HFI-ABS-05 Intelligent Addressable Base Sounder
- HFI-ABSB-05 Intelligent Addressable Base Sounder VAD
- HFI-EBS-05 Platform Base Sounder
- HFI-EBSB-05 Platform Base Sounder VAD

