

# FEAO2000

## Fyreye Addressable Optical Smoke Detectors



The FEAO2000 is an analogue addressable Optical smoke detector that works to the Zeta Addressable protocol, compatible with Zeta alarm system control panels only.

The optical chamber consists of a removable plastic mesh, an IR LED & an IR receiver. These are arranged such that in normal conditions (clean air), no IR from the LED will reach the IR receiver.

Every second, the IR LED emits a burst of collimated infra red light. If there is any smoke in the chamber, it will scatter the IR, allowing it to reach the receiver. The amount of IR reaching the receiver is converted to an analogue smoke value, and sent digitally back to the fire alarm control panel as part of the detectors communication protocol.

The detector is supplied with a locking screw to prevent removal of the head by unauthorised personnel. The detector will return an analogue value of 55 counts with a smoke obscuration level of 2.4% obscuration per metre.

The Fyreye optical smoke detector is particularly suitable for detecting optically dense smoke, involving materials such as soft furnishings, PVC, plastic, foam, and similar materials which produce large visible small particles (0.5mm to 10 mm).

It is not affected by wind speed, so can be used in exposed places, where an ionisation detector might give false readings.

### Frequent Questions

- How many of these can I connect to my system? *126 per loop*
- Do I have to set a loop address? *Yes. Set with DIL switch on rear.*
- How do I test the detector? *The detector can be tested with a smoke test can, or a smoke detector test pole.*
- Do these detectors need cleaning? *We recommend that the detectors are checked at least yearly, and cleaned with a hand held vacuum cleaner, if necessary.*

### Compatible Bases (6" Versions available)

PART NO.	MODEL	DESCRIPTION
80-050	FE-CB	Fyreye Common Base
80-080	FEA-RB	Fyreye Addressable Relay Base
80-090	FE-IB	Fyreye Isolating Base
80-100	FEA-SB	Fyreye Sounder Base

MODEL	FEAO2000
PART NO.	80-120
CAPACITY PER LOOP	126
OPERATING VOLTAGE	17-28VDC
STANDBY CURRENT	340uA @ 24V
OPERATING TEMPERATURE	-20 to 60 °C
MIN> CONTINUOUS TEMP.	0 °C
RETURNS VALUE OF 55 AT	2.4% obscuration per metre
DETECTOR CLASS	Optical smoke
MAX. HUMIDITY	95%RH non condensing
MAX. WIND POWER	Not affected
ATMOSPHERIC PRESSURE	Not affected
IP RATING	43
COVERAGE	100m <sup>2</sup>
STORAGE TEMPERATURE	-30 °C to 80 °C
ALARM CURRENT	2mA
SIZE: DIAMETER X HEIGHT (BASE)	100mm x 39mm (100 x 47)
WEIGHT (BASE)	100g (157g)