



## FDR50-EZ

Addressable Reflective Beam Detector, 50m

### General

The FDR50-EZ linear beam smoke detector is developed for use in areas where point type detectors would be difficult to install and maintain. The FDR50-EZ has a detection ranges of up to 50 metres.

A transmitter and receiver are contained in one enclosure. The transmitter emits an invisible infrared beam, which is reflected back to the receiver, by a prism mounted directly opposite and in clear line of sight. The presence of smoke obscures the beam and reduces the signal strength detected at the receiver.

### Unique alignment feature

Alarm thresholds of 25%, 35% and 50% obscuration are selectable, making the detector suitable for a wide range of building environments. The fire output can be set to latch, only cancelled by resetting the device, or auto reset where the detector is reset automatically 5 seconds after the received infrared signal has recovered to a level above the alarm threshold.

The detector and the reflecting prism are installed on opposite walls of the protected area, usually between 0.3 and 0.6 metres below ceiling height. With unique alignment features, the equipment is easy to install, provides high stability and freedom from false alarms.

### Continuously monitored

The FDR50-EZ incorporates continuous monitoring of both electrical and optical faults. If the infrared beam is obscured rapidly to a level above 90%, for approximately 10 seconds the condition is seen as a fault. Long-term degradation of signal strength is monitored and adjusted automatically.

Installed under flat horizontal ceilings, a single unit provides satisfactory smoke detection up to 7.5 metres on either side of the beam axis. For larger areas multi detector systems can be installed.

The FDR50-EZ addressable detector is connected directly to the ZP3 loop wiring and is configured with it's own address which the control panel poles every two seconds.



### Standard Features

- Single installation and maintenance point
- Fully addressable
- 50 metre detection range
- Unique simple alignment
- Selectable alarm thresholds
- Latching or auto reset fire output
- Automatic contamination compensation

# FDR50-EZ

## Addressable Reflective Beam Detector, 50m

### Specifications

Model No	FDR50-EZ
Description	FDR50-EZ addressable reflective beam detector 50 metre
Specification	EN54 Pt12
Compatibility	All ZP addressable systems
Mounting	Surface
Wiring	ZP Loop wiring
Monitoring	Signal lost, signal strength, adjustment limit exceeded
Indication	Fire, fault and power on, LEDs for beam alignment
Operating voltage	10.2 – 30 VDC
Current	5mA quiescent (no LEDs illuminated) <15mA alarm
Switched outputs	Fire – N/O, closes on fire. Fault – N/C, opens on fault
Reset	Via ZP loop
Application	Indoor installation
EN60529 rating	IP50
Temperature range	-30°C to +55°C
Humidity range	0 to 95% RH (non condensing)
EMC	CE marked (EEC89/336)
Material	Chassis – steel, Enclosure – flame retardant ABS
Dimensions	210mm (H) x 130mm (W) x 120mm (D)
Space requirement	220mm(H) x 155mm(W) x130mm(D) door clearance to right 190mm
Colour	White – enclosure, Black - lens cover
Weight	740g
Publication No	

### Ordering Information

Part No.	Description
FDR50-EZ	Addressable Reflective Beam Detector, 50m

