



Product Data Sheet

FD705RVDS

Reflective beam smoke detector 5 - 50m

General

The FD705RVDS and FD710RVDS consists of an infrared transmitter and receiver in one single compact housing. The infrared signal is reflected by a prism and analysed for smoke presence. It is particularly designed to be used where point smoke detectors are not applicable due to height or inaccessibility. The unit has C/O relay outputs for alarm and fault and fits as such all types of fire panels. The FD705RVDS has a range of 5-50 m and the FD710RVDS has a range of 50-100 m.

Installer friendly

Wiring is restricted to a minimum as the transmitter and receiver are in the same housing. The detector is very easily aligned by checking the red and green LED's. A course "Prism Find" and then "Alignment Mode" fine-tune ensures optimum operation.

Mechanical alignment is provided by two adjustment thumb wheels on two sides of the detector. Adjustment is achievable in both axis.

The low power consumption of the units allows multiple sets to be powered from a single power supply without compromising the systems autonomy.



Standard Features

- Area coverage up to 1500 m² per unit
- Range from 5 - 50 m and 50 - 100 m
- Up to ceiling heights of 25 m
- 10 to 30 VDC operation
- Low current consumption
- Manual or automatic reset
- 3 selectable alarm thresholds
- Self check and automatic contamination compensation
- Automatic discrimination between fire and fault
- Retro operation through prism
- Vertical or horizontal mount
- Easy wiring and unique alignment
- Microprocessor controlled
- EN54 approved
- VDS and UL certified

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Specifications

Supply voltage	10.2 - 30 VDC
Range	
FD705RVDS	5 - 50 m
FD710RVDS	50 - 100 m
Lateral detection	7.5 m
Current consumption	
Quiescent	< 4 mA
Alarm	< 15 mA
Optical wave length	880 nm
Operating temperature	-30°C to 55°C
Size	210 x 130 x 120 mm
IP rating	IP50
Construction	Flame retardent ABS
Colour	Gray-black

Ordering Information

Part No.	Description
FD705RVDS	Reflective beam smoke detector 5 - 50m
FD710RVDS	Reflective beam smoke detector 50 - 100m

Reducing false alarms

Alarm thresholds of 25%, 35% and 50% can be selected to suit the environment. If the received infrared signal reduces to below the selected threshold and is present for approximately 10 seconds, the fire relay is activated. The fire alarm offers both an auto reset mode and a latching mode.

If the infrared beam is obscured rapidly to a level of 90 % or greater for approximately 10 seconds the fault relay is activated. This condition can be entered in a number of ways, for example, an object being placed in the beam path, transmitter failure, loss of the prism, or sudden misalignment of the detector. The detector monitors long term degradation of signal strength caused by component ageing or build up of dirt on optical surfaces. The unit may easily be tested by using the graduated obscuration test card supplied.

