

# Automatic RF Detectors

## Series FI720/RF



- **Bi-directional digital communication with RF Interface FI720/RF/W2W**
- **Optical Smoke Detector  
Optical-Thermal Detector  
Thermal Detector**
- **High range of radio transmission – up to 3km**
- **Long battery life of 8 years**
- **Base and batteries included**



### Description

The automatic RF detectors Series FI720/RF communicate with the fire detection control panel via a loop RF Interface FI720/RF/W2W or a conventional RF Interface FI720/RF/CWE. The radio detectors are especially suitable for areas where cabling is impossible or uneconomical.

The **Optical Radio Detector FI720/RF/O** uses an optical sensing chamber, based on the light scattering principle, and offers superior wide-spectrum detection of smoke aerosols generated by the majority of fires.

The **Optical-Thermal Radio Detector FI720/RF/OT** includes both an optical sensing chamber for smoke detection as well as a thermal rate-of-rise detection unit according to EN 54-5 Class A1R. The combination of both sensors ensures a high immunity to false alarms.

The **Thermal Radio Detector FI720/RF/T** can be parameterised as thermal detector according to EN 54-5 Class A1R or Class BS. Therefore, the detector reacts to a quick rise in temperature as well as to a maximum temperature of 58°C or to a maximum temperature of 78°C.

7 data channels in the frequency band 868MHz are available for the bi-directional data transmission. The

RF system is configured by means of the PC software WireEx. During the configuration process, the detector address is set in the range 2 to 240. In addition, the sensitivity of the optical sensor of each Optical Radio Detector and Optical-Thermal Radio Detector can be selected out of 3 levels.

For the power supply of the detectors, two batteries have to be installed into the detector housing, which reliably power the detector over a long time.

The two multicoloured LED indicators with 360° visibility indicate the activated condition of the detector as well as further operating conditions.

The automatic RF detectors Series FI720/RF are integrated in a white housing and are designed for indoor mounting. The detectors are delivered with a mounting base and both batteries.

If desired, the detectors and bases are also available in special designs – with wood grain, marble design or metal surface.

The base is equipped with an anti-tamper locking feature. Furthermore, the removal of the detector is transmitted to the RF interface.

## Specifications

Operating voltage	2 lithium batteries 3V, type CR123
Battery life	typ. 8 years
Range of radio transmission (free air)	max. 200m max. 3km with expanders
Frequency band	868MHz
Data channels	7
Ambient temperature	-10°C to +55°C
Dimensions Ø × H	110 × 65 (mm, incl. base)
Colour	white
Weight	190g (with batteries and base)

### Optical Radio Detector

Sensitivity	
Level 1	3.1%/m
Level 2	3.8%/m
Level 3	4.4%/m
Approvals	LPCB 928k/02 0832-CPRF1937
Order number	241192
Order name	Optical Detector/720/RF/Complete FI720/RF/O

### Optical-Thermal Radio Detector

Sensitivity optical sensing chamber	
Level 1	3.1%/m
Level 2	3.8%/m
Level 3	4.4%/m
Alarm temperature	58°C (Class A1R)
Application temperature	max. +50°C
Approvals	LPCB 928m/02 0832-CPRF1938
Order number	241193
Order name	Optical-Thermal Detector/720/RF/Compl. FI720/RF/OT

### Thermal Radio Detector

Alarm temperature	58°C (Class A1R) 78°C (Class BS)
Application temperature	max. +50°C (Class A1R) max. +65°C (Class BS)
Approvals	LPCB 928j/02 0832-CPRF1936
Order number	242087
Order name	Thermal Detector/720/RF/Complete FI720/RF/T

### Lithium battery CR123

Order number	249215
Order name	Lithium Battery 3V CR123