

Intelligent Multi Criteria Photoelectric Smoke/Thermal Detector FCOT321

Overview

- Advanced intelligent detection functionality
- Fully digital addressing technology
- Advanced maintenance and addressing features via remote hand-held test unit by IR or RF
- Three-colour LED detector status indicator
- Wide operating voltage 8 to 30VDC
- Automatic drift compensation
- Low profile design
- Low current draw
- Backward compatible
- Wide range of detector bases available
- Tested and approved to EN54-5:2000+A1:2002
EN 54-7:2000+A1:2002+A2:2006



Description

The FCOT321 intelligent addressable thermal detector forms several unique intelligent detection, programming and maintenance technologies. This range of detectors has been produced using the latest in manufacturing and design techniques, pushing out the boundaries of existing intelligent detector technology with its multitude of innovative features.

The FCOT321 photoelectric smoke/thermal detector incorporates an Application Specific Integrated Circuit (ASIC). Which in turn are continually monitored by on board processor by using algorithms developed specifically for the unit. An alarm signal is only enabled in the detector once the processor is satisfied that an incipient fire has been detected. By using a combination of inputs, the incidence of nuisance alarms is reduced while at the same time, the response time to an actual fire is also improved.

The FCOT321 detector incorporates a three colour LED indicator. The integral LED changes colour according to the detector's status - Green blink = Normal, Red = Alarm and Yellow = fault. This benefits the user by providing clear, instant visual indication of the detector's condition.

'Drift compensation' algorithms are one of the key features of the FCOT321 detector. These algorithms ensure a consistent alarm sensitivity threshold for periods between service intervals. This provides the user with both a reduction in the frequency of nuisance alarms and maintenance savings by extending the period before cleaning of the detector chamber is required.

The sensitivity of a smoke detector is critical to its overall performance, this is reflected in both its ability to detect real fire conditions and its resilience to non-fire stimuli. The FCOT321's performance can be optimised for its application by selecting from one of three preset alarm thresholds - Low, Medium and High, offering greater stability and optimum performance within the environment in which it has been installed. This is helping increasing effectiveness of intelligent detection functionalities by reliable algorithm evaluations. The selection is easily achieved also through the use of a remote hand-held tool.

The remote hand-held programming unit can also be used in conjunction with the Intelligent Series range of detectors to gain access to other advanced features. The features available include: read/write last maintenance date, read chamber contamination level, read value of thermal element and perform an alarm test by IR or RF communication.

All the features via the hand-held programming unit are achieved effectively and effortlessly without the need to remove the detector or having to gain direct physical access other than by the use of servicing tool, saving valuable commissioning/maintenance time.

They provide the end user with the confidence to know that his system is being regularly serviced and that it is operating at its optimum level, with minimum disruption to his own business activities.

Intelligent Multi Criteria Photoelectric Smoke/Thermal Detector FCOT321

Each unit can be given a unique address that will be displayed on the panel whenever the detector is in any kind of alarm or fault indication. All the features via panel or the hand-held programming unit are achieved effectively and effortlessly without the need to remove the detector or having to gain direct physical access.

They provide the end user with the confidence to know that his system is being regularly serviced and that it is operating at its optimum level, with minimum disruption to his own business activities.

A variety of detector bases and compatible accessories can be used with the FCOT321 detector, providing application flexibility and compatibility with a wide range of applications and different environments. All bases are fitted with a shorting spring to permit circuit testing prior to fitting the detector and have a tamper resistant feature, which when activated prevents removal of the detector without the use of a tool.

All ADEVA products are covered by our extended 5 years manufacturer warranty.

Electrical Specifications

Operating Voltage Range	8 to 30VDC (Nominal 12/24VDC)
Typical Standby Current @ 25pC	65µA @ 24VDC (LED no blink)
Maximum Alarm Current (LED On)	80mA @ 24VDC (Limited by panel)

Environmental Specifications

Application Temperature Range	-30°C to +70°C
Humidity	5 to 95% Relative Humidity (non condensing)

Mechanical Information

Height	38mm (plus 9mm for FCB301 base)
Diameter	102mm
Weight	105g (plus 60g for FCB301 base)
Max Wire Gauge for Terminals	0.75mm ² to 2.5mm ²
Colour	Pantone Warm Grey 1C
Material	Bayblend FR110

Product Range

Compatible Bases (see notes)	FCB301 Standard Base
	FCB301 DG Deep Base
Accessories	FCWPU RF Remote Programming Test Tool
	FCPTU Remote Programming Test Tool

ADEVA LTD. Fire Alarm Systems

Guldeste Sok. No:24 Yakacik Tel: +90 (0)216 5982800
Kartal / Istanbul / Turkey Fax: +90(0)216 5982899
Email: info@adevafire.com

www.adevafire.com