

## Features

- APPLUS approved in compliance with EN54-7 EN54-5 and EN54-17 standards
- ONEPROTOCOLL communication protocol
- Isolator integrated in each device
- Manual addressing via the ONEPROGRAMMER programmer
- Reading of the voltage value at the terminals of the devices addressed
- Log of the 5 minutes preceding the fire alarm
- Log of the total number of fire alarms
- 2 TX channels and one RX channel
- 240 devices per loop
- Integrated hardware and diagnostic software with drift compensation
- Three-colour LED (red / green / yellow) controlled by the control unit visible at 360°
- Independent remote output
- **ONEDETECTOR** Certificate n°0370-CPR-3638
- **ONEDETECTOR1** Certificate n°0370-CPR-3639
- **ONEDETECTOR2** Certificate n°0370-CPR-3640



## Description

The new series of analogue detectors of the **ONEDETECTOR** line constantly monitors the fire alarm condition.

The advanced design of the optical chamber ensures excellent resistance to dust entering in, meaning that the detector's performance is not compromised.

Each detector is equipped with drift compensation, it communicates its parameters to the control unit, such as operating conditions, smoke darkening levels, dirt levels and temperature levels.

Each detector can be addressed manually, by ONEPROGRAMMER programmer or by fire detection control unit with ONEPROTOCOLL protocol or with auto addressing by fire detection panel with ONEPROTOCOLL protocol.

## Guaranteed communication

The detectors from the **ONEDETECTOR** series are equipped with an integrated short-circuit isolator.

This means that in the event of a failure on a loop or on a single device, communication with the devices themselves is not interrupted. Thus a greater system reliability is guaranteed.

## Drift compensation

The sophisticated drift compensation algorithm allows the detector to compensate for the darkening caused by the entry of dust and other contaminated substances into the optical chamber entrance.

This technology maintains the detection threshold range uniform at the sensitivity established without any change to the detection threshold.

## Simplified installation

Installation is very simple, the programming of the addresses takes place via the ONEPROGRAMMER programmer, no DIP switches or rotary switches are used.

In addition, the bases are equipped with an identification label and a short circuit spring which ensures continuity of the loop when the detector is removed.

The detector also offers the possibility to be locked once inserted into the base to avoid unwanted disassembly.

## Detection technologies

The **ONEDETECTOR** range offers DUAL OPTICAL, DUAL OPTICAL THERMAL, THERMOVELOCIMETRIC detection.

**DUAL OPTICAL**, The optical smoke detection exploits the TYNDALL effect, in the optical chamber there are two transmitters and a receiver not aligned with each other. The smoke creates a slight diffraction of the brightness inside the chamber that, if detected, generates an alarm.

**DUAL OPTICAL THERMAL**, two thermistors measure the temperature in degrees and offer optical and thermo-speed detection, a sophisticated algorithm uses both detection technologies combined to guarantee a high level of reliability and immunity to false alarms in Multisensor operation mode, the fire alarm intervenes through an algorithm that analyses the optical threshold in relation to the temperature increase (prEn 54 29).

The detector can also be programmed in **AND mode**, i.e. it is alarmed when both sections (optical and thermal) give alarm.

The detector can also be programmed in **OR mode**, i.e. it is alarmed when at least one section (optical or thermal) gives alarm.

**THERMAL**, the detection is carried out in two programmable ways: thermal at fixed temperature or thermovelocimetric.

### Construction

The **ONEDETECTOR** range is designed to be simply disassembled to allow normal maintenance operations.

The external plastics are made of white ABS V0 with a glossy finish, while the optical chamber is made of black POM and is equipped with protection against the intrusion of dust or small insects.

### Approvals and compliance

The entire **ONEDETECTOR** range is APPLUS certified according to the EN54 standard parts 7,5 and 17.

### Code Description

ONEDETECTOR	Dual optical and thermal detector
ONEDETECTOR1	Dual optical detector
ONEDETECTOR2	Thermal and thermovelocimetric detector

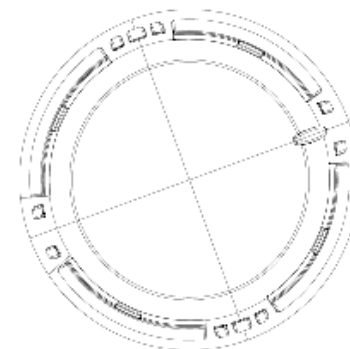
### Technical specifications

Device	ONEDETECTOR	ONEDETECTOR1	ONEDETECTOR2
Type	Dual optical and thermal	Dual optical	Thermal and thermovelocimetric
Compliance	EN54-5, EN54-7, EN54-17	EN54-7, EN54-17	EN54-5, EN54-17
Maximum coverage area	132 m <sup>2</sup>	132 m <sup>2</sup>	64 m <sup>2</sup>
Certification body	APPLUS		
Protocol	ONEPROTOCOLL		
Loop	Up to 240 devices along 5 Km of cable *		
Supply voltage	27 V		
Stand by consumption	90uA@27V		
Alarm current	6 mA		
Operation temperature	-30°C/+70°C		
Humidity	95% RH (without condensation)		
Height with standard base	48 mm		
Diameter	92 mm		
Weight with standard base	120 g		

\* note: subject to load calculations and use of appropriate cables



Side View



Top Side View