

## 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
- Auto addressing for devices on loops even with "T" connections
- Auto mapping function
- 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 monitor the fire alarm condition.

The advanced design of the optical chamber ensures excellent resistance to dust entry, which means 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 control unit with ONEPROTOCOLL protocol.

## Guaranteed communication

The **ONEDETECTOR** series detectors 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 greater system reliability is guaranteed.

## Drift compensation

The sophisticated drift compensation algorithm allows the detector to compensate for the darkening due to 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 in the detection threshold.



## Simplified installation

The installation of the detector is very simple, the programming of the addresses takes place via the ONEPROGRAMMER programmer or through auto addressing, no DIP switches or rotary switches are used.

Auto addressing for devices on loops also operates with "T" connections.

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.

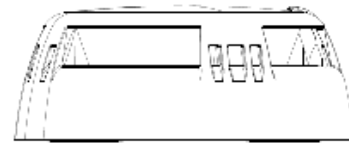
**DUAL OPTICAL.** The optical smoke detection exploits the TYN-DALL effect, in the optical chamber there are two transmitters and a receiver not aligned with each other. The smoke creates a slight diffraction of the brightness inside the chamber that, if detected, generates an alarm.

**DUAL OPTICAL THERMAL,** two thermistors have been introduced that measure temperature in degrees, offer optical and thermo-speed detection, a sophisticated algorithm uses both detection technologies 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.

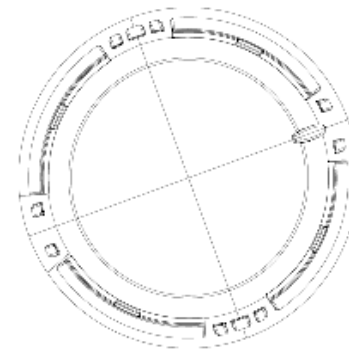


**Side View**

### Construction

The **ONEDETECTOR** range has been 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.



**Top Side View**

### Approvals and compliance

The entire **ONEDETECTOR** detector 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
<b>Type</b>	Dual optical and thermal	Dual optical	Thermal and thermovelocimetric
<b>Compliance</b>	EN54-5,EN54-7,EN54-17	EN54-7,EN54-17	EN54-5,EN54-17
<b>Certification body</b>	APPLUS		
<b>Protocol</b>	ONEPROTOCOLL		
<b>Loop</b>	Up to 240 devices along 2Km of cable *		
<b>Supply voltage</b>	27V		
<b>Stand by consumption</b>	90uA@27V		
<b>Max remote output current</b>	15ma		
<b>Operation temperature</b>	-30°C/+70°C		
<b>Humidity</b>	95% RH (without condensation)		
<b>Height with standard base</b>	48mm		
<b>Diameter</b>	92mm		
<b>Weight with standard base</b>	120g		

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