

SF5100 - SF5200 - SF5300 Intelligent Detectors With Isolators



Features

- > LPCB approved to EN54-7 and EN54-5 A1R
- > High reliability communication protocol
- > In-built isolator in each device
- > Automatic Addressing
- > Manual Addressing
- > 240 devices up to 2Km per loop
- > Inbuilt diagnostics, hardware and software drift Compensation
- > 360° visible Bicolor (Red/Green) LED driven by Control Panel
- > Independent Remote Output
- > Magnetic Test features
- > Certificate No . 0832 CPR F1809 C1154b-(cl-1)-01
- > Product promoted and available only out of europe



The new TELEDATA intelligent detectors are delivered with a unique technology addressing both decentralized and centralized intelligence. The detectors are equipped with the latest microprocessor with inbuilt sophisticated fire algorithms to detect different fire criteria patterns. Each detector is equipped with Intelligence for drift compensation, short circuit detection and isolation, automatic and manual addressing and much more

The intelligent detector as well communicates back to the fire alarm control panel transmitting all detector parameters such as operating conditions, fault signals, as well as all the smoke obscuration levels and the exact temperature measurements via the sophisticated Variable Time Communication "VTC" protocol allowing further centralized analysis from the fire alarm control

Zero downtime

Each detector is supplied with in-built short circuit isolator, in case of a single fault; no device shall be lost on the loop. This shall only provide higher reliability to the performance as as well easy installation to comply with the latest standards and regulations.

Adaptive Drift Compensation

The sophisticated algorithms inside each detector, provides decentralized intelligence to compensate the obscuration measurements in case of dust and other similar contaminates inside the chamber. The "ADC" technology keeps the detection threshold window uniform with fixed detection sensitivity, unlike other drift compensation methods in the market that reduces the detection threshold window allowing a change in sensitivity.



Commissioning is never easier

TELEDATA wants to make it easy to the installer, no dip or rotary switches are required to address the detectors nor barcode scanners or other difficult methods of installation are needed. Automatic addressing is an added benefit to the many others of TELEDATA technology, were the fire alarm control panel addresses each device in a sequential manner, and make sure that no duplicate addresses are allowed. Furthermore when needed to assign an address in a non-sequential fashion, the manual programming via the TELEDATA detector programming tool is utilized.

TELEDATA magnetic test simulates the action of an alarm in the detector to drive the cause & effect and test the detector's functions when testing an installation.

Various options of detection technology

The TELEDATA intelligent smoke detectors operates on the light scattering principle, which makes the detector an excellent choice for smoldering fires "thanks to the advanced algorithms in built on each detector head." The combination of Smoke Scattering with the centralized low inertia thermistor makes the detector the best choice as a general detector to most types of fires, smoldering and fast burning fires. The detector is equipped with 10 sensitivity levels allowing the detector to operate according to user desire. The TELEDATA intelligent heat detectors operates on the centrally positioned thermal thermistor principle, which makes the detector an excellent choice to detect high energy emitting fires as well as low energy heat emitting fires that gradually increases with time, thanks for the advanced algorithms embedded in the detector head as well as the approved two sensitivity levels A1R which is Rate of Rise Detection of 58C° as well as the Class B which is High Temperature of up to 78C°.



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Physical construction and assembly

The TELEDATA range of products is constructed from a high impact, elegant ABS white enclosure, and the patented 360° symmetrical smoke chamber allows the smoke to easily enter the chamber from all the directions.

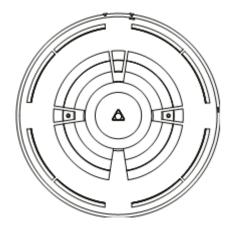
The chamber is complete with a patented Double Dust Trap "DDT" that protects the chamber from airborne contaminants thus reducing the problem of false alarms. The detector is supplied with a continuous screen, where protecting the smoke chamber from small insects.

Approvals & compliance with standards

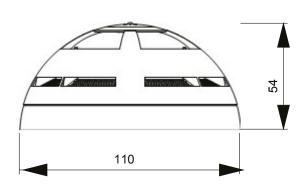
The entire TELEDATA systems confirm to BS 5839 part 1 and EN54 standards. The entire range of TELEDATA intelligent detectors are LPCB listed to EN54 standard part 7 and 5. This only means enhanced reliability and precision performance

General Overview









Order Codes

Part No.	Description		
SF5100	Intelligent analogue addressable optical detector		
SF5200	Intelligent analogue addressable optical & heat detector		
SF5300	Intelligent analogue addressable heat detector		
BS5000	TELEDATA adaptor base		
40900-DP	TELEDATA deep adaptor base		



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Technical Specifications

Item	SF5100	SF5200	SF5300	
Standard	EN54 Part 7	EN54 Part 7	EN54 Part 5	
Sensitivity	4 levels	10 levels	3 levels	
Approval	LPCB			
Protocol	Advanced Variable Time Communication (VTC)			
Loop Connection	240 devices up to 2Km *			
Dimension (mm)	110x54			
Storage Temperature	-30C° to 70C°			
Operating Temperature	-30C° to 70C°			
Operating Humidity	95% RH (non-condensing)			
Ingress Protection	IP30 estimated on flat ceiling IP45 estimated with optional gasket			
Air Flow	10m/s gusting for up to 30 minutes 5m/s continuous			
Vibration	5-6011z			
Color RAL	9016 as standards Decorative Colors on demand optional			
LED	Bicolor (Red/Green) visible at 500Lux ambient light at 3m installed height From Finished Floor Level			
Average Current consumption	I=70 uA			
Power Supply	15-40 V			
Output driver current	6mA @24Vdc			
LED current consumption	6mA @24Vdc			
Weight	110g			
Mode of operation	Wired connection			

^{*} Note 1. Subject to load calculations and correct cable selection