

# SF5100E SF5200E SF5300E Teledata LV Series Detectors



#### **Features**

- > LPCB approved to EN54-7 and EN54-5 A1R
- > High reliability communication protocol
- > Manual Addressin
- > 240 devices up to 2Km per loop
- > Inbuilt diagnostics, hardware and software drift Compensation
- > 360° visible Red LED driven by Control Panel
- > Independent Remote Output
- > Certificate No.0832-CPR-F1806 e C1154e-(cl-1)-01. (SF5100E)
- > Certificate No.0832-CPR-F1807 e C1154f-(cl-1)-01. (SF5200E)
- > Certificate No.0832-CPR-F1808 e C1154d-(cl-1)-01. (SF5300E)
- > Product promoted and available only out of Europe



## Decentralized intelligence, while centralized reporting

The new Light 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, 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 panel.

#### Easy to program

The entire LV range of detectors can be programmed via the hand-held programmer. No dip switches, or mechanical rotary switches are required. This unique feature allow to set the address required, in the sequence required making the installation and commissioning and easy task to the commissioning engineer.

The programmer shall as well provide vast amount of other usual information's such as contamination levels of the chambers, other useful parameters that indicates the healthiness of the detector's operation, batch and date of manufacturing's and much more. Sensitivity setting can be as well performed while programming the address, this shall save time, and make sure that accurate sensitivity setting is performed suitable to the environment of installation.

## **Adaptive Drift Compensation Algorithm**

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 compensations methods in the market that reduces the detection threshold window permitting a change in sensitivity.

## 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 Teledata detector the best choice as a general purpose detector to most types of fires, smoldering and fast burning.

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

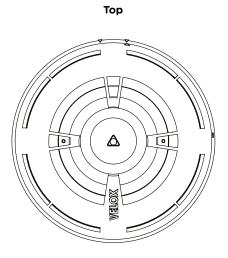
The Teledata range of products is constructed from a high impact, elegant ABS white enclosure, and the patented 360° symmetrical smoke chamber allows the smoke to easily enter the chamber from all the directions. The chamber is complete with a patented Double Dust Trap "DDT" that protects the chamber from airborne contaminants thus reducing the problem of false alarms.

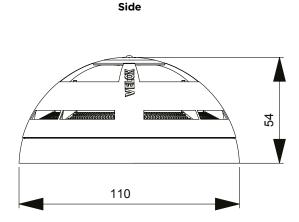
The detector is supplied with a continuous screen, where protecting the smoke chamber from small insects.

#### 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**

SF5100E	Intelligent analogue addressable optical detector without in-built isolator		
SF5200E	Intelligent analogue addressable optical & heat detector without in-built isolator		
SF5300E	Intelligent analogue addressable heat detector without in-built isolator		
BS5000	Teledata adaptor base		
40900-DP	Teledata deep adaptor base		

# SF5300E Teledata LV Series Detectors



# **Technical Specifications**

Item	SF5100E	SF5200E	SF5300E	
Standard	EN 54-7:2000+A1:2002 +A2:2006	EN 54-7:2000 & EN 54-5:2000		
Sensitivity	4 levels	10 levels	3 levels	
Approval	LPCB			
Protocol	Advanced Variable Time Communication ( VTC )			
Loop Connection	240 devices up to 5Km *			
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	5-60 Hz			
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			

<sup>\*</sup> Note 1. Subject to load calculations and correct cable selection