Protec Fire Detection plc

6000/OPHT Interactive Optical Smoke and Heat

- **Dual Technology Sensor**

- **Combined Smoke and Heat Sensors**

- **Ideal Multi-application Sensor**

- **Independent Channel Control**

- **Day/Night Operation**

- **Protec Algo-Tec™ 6000 Protocol**

- **Devices Display Address Number**

- **Easy To Address**

- **FAST™ Addressing**

- **Reduced False Alarms**

The Protec Algo-Tec™ 6000 interactive fire sensors form a range of elegantly designed, aesthetic, low profile detectors that blend unobtrusively into modern working environments. All sensors are interchangeable with a variety of base options, including isolator bases, high efficiency sounder bases and combined sounder beacon bases. All sensors incorporate a discreet anti-tamper security screw and latching 'FIRE' LED indicator with the facility to activate a remote indicator unit.

The Protec Algo-Tec™ 6000 intelligent fire sensors utilise advanced discriminating algorithms for maximum reliability and immunity to false alarms. The Protec Algo-Tec™ 6000 sensors learn from their environment, applying interactive decision making algorithms to provide stability, threshold compensation and optimised performance.
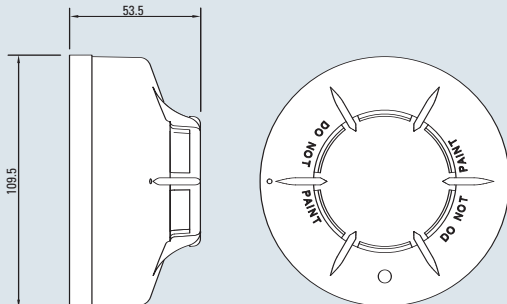
6000/OPHT Interactive Addressable High Performance Optical Smoke and Heat Multi-Sensor.

The dual technology multi-criteria fire detector uses detection of smoke by scattering of infra-red within the optical chamber coupled with thermal enhancement of the optical sensitivity, as well as providing temperature detection equivalent to grade A2. The smoke and heat channels can be controlled independently for day/night operation with intelligent data being evaluated by the Protec-AlgoTec™ 6000 interactive programmable algorithms.
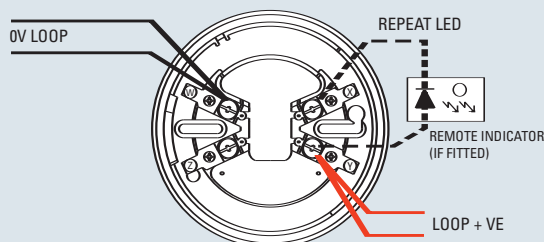
These sensors react across the range of fire products from large visible particles from smouldering fires to open flaming fires producing very hot smaller particles and are therefore suitable for use in all smoke detection applications. The environmental conditioning algorithms can be selected to filter unwanted alarms and enhance performance.

ADDRESSING SAFETY SYSTEMS WITH INTELLIGENCE

6000/OPHT Technical Specification

Dimensions

53.5

109.5

Typical Wiring using 6000/BASE

0V LOOP

REPEAT LED

REMOTE INDICATOR (IF FITTED)

LOOP + VE

Technical Specification:

Environment	-10˚C to 50˚C
Ingress Protection	95% R.H non condensing IP41
Applicable Standard	EN54 Part 7, EN54 Part 5
Approvals	LPCB to EN54 Part 7 : 2000 EN54 Part 5 : 2000 CEA 4021 : 1999 Office & Bedroom Mode LCPB Certificate No: 201q/01
Weight (excluding base)	119g
Loop Powered	Yes
Loop Standby Load	350µA
Loop Alarm Load	3mA
Device Protocol	Algo-Tec™ 6000

FAST™ Addressing

FAST™ (Firmware Addressed Secure Technology). Each Algo-Tec™ 6000 device is manufactured with a unique serial number factory programmed (firmware embedded) and device label. The label includes the serial number on 2 bar-coded segments, 2 of which are removable by the installer (one is a spare). The label is attached to an address location booklet, which is handed to the engineer prior to commissioning. During commissioning the engineer scans the address location booklet to download the loop, address and serial number details. The downloaded data is then checked and stored within the secure non-volatile memory of the control panel and the addressing is complete. FAST™ and easy eliminating troublesome and time consuming setting of address cards and DIL switches. FAST™ addressing is more secure than 'SOFT ADDRESSING' and easier to extend or amend, allowing greater flexibility and reduced costs.

RVAV™

RVAV™ (Remote Visual Address Verification). Once the system has been FAST™ addressed the correct location of each Algo-Tec™ device can be easily identified, using the devices in-built LED to indicate the device address number. The LED has a simple coded pulse making it quick and easy to count. Because the control panel sends the RVAV™ signal to each device, the RVAV™ walk test is confirming that the devices are correctly addressed and correctly communicating. As-fitted Drawings and device labels can also be checked during RVAV™ walk test, without the disruption of activating devices commonly associated with other manufactures of system.

BASE Options:

6000/BASE
Low profile common mounting base

6000/ASB2
Addressable loop powered electronic sounder base

6000/ASBEA2
Addressable loop powered electronic sounder beacon base

6000/DIB
Dual loop short circuit isolator base

6000/SB
24V DC Electronic sounder base

6000/SBEA
24V DC Electronic sounder beacon base

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