Protec
Protec Fire Detection plc

6000*PLUS*/OPHT/TS - Optical Smoke and Heat Sensor Plus Talking Sounder

- **Dual Technology Sensor**
- **Combined Smoke and Heat Sensor**
- **Ideal Multi-Application Sensor**
- **Integrated Voice Enhanced Sounder**
- **Seven Selectable Voice Messages**
- **Loop Powered**
- **Low Current**
- **Programmable Volume Control**
- **Integral Short Circuit Isolator**
- **Protec Algo-Tec™ 6000*PLUS* Protocol**
- **Devices Display Address Number**
- **FAST™ Addressing**
- **Reduced False Alarms**

The Protec Algo-Tec™ 6000*PLUS* sensor range has been developed to incorporate advanced fire sensing technology, electronic sounders, high intensity LED warning beacons and speech enhanced talking sounder capability, all integrated within the sensor head and powered from the loop.

6000*PLUS*/OPHT/TS 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 Algo-Tec™ 6000*PLUS* interactive programmable algorithms.
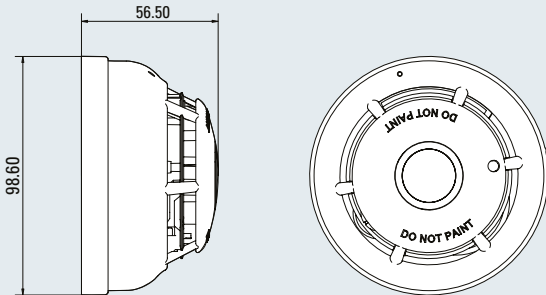
These sensors react across the range of fire products from large visible particles from smouldering fires to open flaming fires producing very hot smaller particles and

are therefore suitable for use in all smoke detection applications. The environmental conditioning algorithms can be selected to filter unwanted alarms and enhance performance.
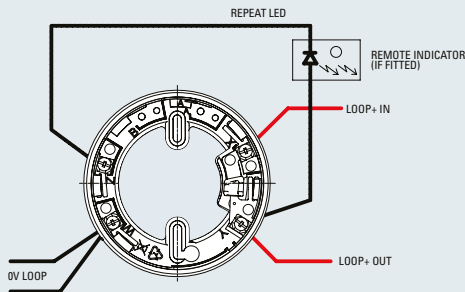
Sensor Talking Sounder - For the ultimate method of alerting building occupants of the incidence of an emergency, the Protec Algo-Tec™ 6000*PLUS* sensor is equipped with an integrated voice enhanced sounder. The talking sounder is capable of delivering synchronised alert and evacuate messages around a building, removing any ambiguity, particularly for anyone unfamiliar with the building alert and evacuation strategy, enabling a more prompt and safe building evacuation.

A D D R E S S I N G   S A F E T Y   S Y S T E M S   W I T H   I N T E L L I G E N C E

6000*PLUS*/OPHT/TS
Technical Specification

Dimensions (mm)

56.50

98.60

DO NOT PAINT
DO NOT PAINT

Typical Wiring using 6000*PLUS*/BASE

REPEAT LED

REMOTE INDICATOR (IF FITTED)

LOOP+ IN

LOOP+ OUT

0V LOOP

Technical Specification:

Environment	-10˚C to +50˚C (95% R.H. non condensing)
Ingress Protection	IP41
Weight (excluding base)	105g
Loop Powered	Yes
Loop Standby Load	0.4mA
Loop Alarm Load	8.4mA (10.4mA with Bell Sound)
Loop Voltage	18 - 28V
Isolator	Yes
Sounder Volume	85dB(A) (High), 75dB(A) (Mid), 65dB(A) (Low) *(measured at one metre)*
Device Protocol	Algo-Tec™ 6000*PLUS*
Product Approval	LPCB Certificate No: 201x/04 EC Certificate No: 0832-CPD-1173 Relevant Standard: EN 54-3, 5, 7 & 17, CE Marked

Talking Sounder Message Set

Message Number	Description	Preamble Tone	Duration(s)	Message Text
1	Female evacuation V1	Warble	9.4	Attention please, attention please. Fire has been reported in the building, please leave the building immediately by the nearest exit
2	Female alert	Pulse	7.5	May I have your attention please, an incident has been reported in the building please listen for further instructions
3	Female evacuation V2	Warble	7.5	Attention, attention. This is an emergency. Please leave the building by the nearest available exit
4	Female test	Warble	3.5	This is a test message, no action is required
5	Male evacuation V2	Warble	8	Attention, attention. This is an emergency. Please leave the building by the nearest available exit
6	Male alert	Pulse	8.1	May I have your attention please, an incident has been reported in the building. Please listen for further instructions
7	Male test	Warble	4	This is a test message, no action is required
8	Bell (accessed via msg 14/15)	None	Until Stopped	None
9	No tone or message	None	0	Used by control panel to allow user to 'turn off' sounder part of a talking sounder beacon
10	Bespoke message	W,P or C	max 10 sec	Client defined (must be stated when ordering sounder) additional cost
11	Warble electronic tone	None	Until Stopped	None
12	Pulsed electronic tone	None	Until Stopped	None
13	Continuous electronic tone	None	Until Stopped	None
14	Pulsed bell	None	Until Stopped	None
15	Continuous bell	None	Until Stopped	None

The preamble tone is played for 4 seconds, then a 1 second silence, then the message, then silence until the sequence is re-triggered. This sequence trigger is panel adjustable; preset to 15 seconds.

BASE Options:

6000*PLUS*/BASE

- Low profile common mounting base

6000*PLUS*/FFBASE

- Fast fixing semi recessed base

Note - base options above are included in the product approval.

LPCB
LOSS PREVENTION CERTIFICATION BOARD

UKAS PRODUCT CERTIFICATION
007

LPCB ref. no. 201x/04

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