BENSAN
DISTRIBUTION

6KPNZ/HT/TSVAD

ADDRESSING SAFETY SYSTEMS WITH INTELLIGENCE

6KPNZ/HT/TSVAD
Heat Sensor Plus Talking Sounder And Visual Alarm Device

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

6KPNZ/HT/TSVAD Interactive addressable heat sensor with low thermal mass thermistor, giving fast response to temperature increases. The intelligent sensor data is evaluated by the Protec Algo-Tec™ 6000PLUS interactive programmable algorithms. Suitable for applications where smoke detection is unsuitable but require a high sensitivity heat detector. Examples are boiler rooms, kitchens, laundries and ventilated areas.
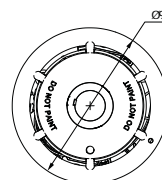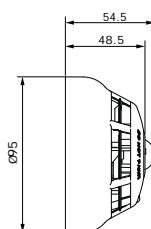
Sensor Talking Sounder - For the ultimate method of alerting building occupants of the incidence of an emergency, the Protec Algo-Tec™ 6000PLUS sensor is equipped with an integrated voice enhanced sounder. The talking sounder is capable of delivering synchronised alert and evacuate messages around a building, removing any ambiguity, particularly for anyone unfamiliar with the building alert and evacuation strategy, enabling a more prompt and safe building evacuation.

Sensor VAD - Compliance with DDA legislation is assisted by the addition of the Protec visual alarm device (VAD) to the 6000PLUSensor, to warn those with hearing impairments or in noisy environments. The VAD utilises a high intensity LED with lower power consumption and increased reliability when compared to alternative indicators. The VAD is located in the centre of the sensor, so can be viewed from all angles. Suitable for ceiling mounting the VAD distributes light in a cylindrical pattern to achieve the required minimum illumination of 0.4lux over the entire coverage area in accordance with AS7240-23 and EN54-23. The maximum mounting height is 3m with a coverage diameter of 7.5m. For smaller areas the device can be programmed on-site for coverage diameter of 3m or 5m at reduced power.
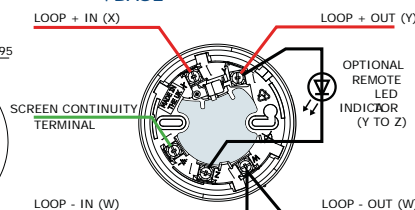
Order Code:
6KPNZ/HT/TSVAD - New Zealand Version

- Ideal Where Smoke Detection is Unsuitable
- Integrated AS7240 pt 23 / EN54-23 Visual Alarm Device
- Integrated Voice Enhanced Sounder
- Seven Selectable Voice Messages
- Loop Powered
- Low Current
- Programmable Volume Control
- Integral Short Circuit Isolator
- Protec Algo-Tec™ 6000PLUS Protocol
- FAST™ Addressing
- VAD Classification Adjustable from 3m to 7.5m Room Coverage Volume

Dimensions (mm)

54.5
48.5
Ø95
Ø95

Typical Wiring using 6000PLUS /BASE

LOOP + IN (X)
LOOP + OUT (Y)
SCREEN CONTINUITY TERMINAL
OPTIONAL REMOTE LED INDICATOR (Y TO Z)
LOOP - IN (W)
LOOP - OUT (W)
DO NOT PAINT

Protec
Protec Fire Detection Pty Ltd

Independently tested
Intertek
Certified Product
Australian Standard
15LHK1529-01

BENSAN

DISTRIBUTION

6KPNZ/HT/TSVAD

Design Guidance

Protec VAD's have been approved to BS EN 54-23 and use the rating codes below:

C-x-y (eg C-3-7.5)
Where:
C is ceiling mounted
x is the maximum height (M)
y is the illumination diameter for the cylindrical volume (M)

BS EN 54-23 approved VAD's are approved as ceiling mounted and must provide a minimum illumination level of 0.4 lux for the stated volume

6KPNZ/HT/TSVAD Technical Specification	
Environment	-10˚C to +50˚C (95% R.H. non condensing)
Ingress protection	IP21C
Weight (excluding base)	109.46g
Loop powered	Yes
Loop voltage	18 - 28V
Loop standby load	0.55mA
Peak alarm load	25mA
Mounting height	3m
Coverage	7.5m, 5m or 3m cylindrical diameter
VAD flash rate	1Hz or 0.5Hz white flash
Isolator	Yes
Device protocol	Algo-Tec™ 6000PLUS
Product approval	AS7240 Part 5
FPA listing number	

Table A: Direct Viewing
Coverage volumes for various ambient light levels (lux)

BS EN54-23 Rating	C-3-7.5
Mounting Position	Ceiling
Less than 100 lux	21dia
100 - 200 lux	18dia
200 - 300 lux	14.3dia
300 - 400 lux	10.5dia
400 - 500 lux	8.3dia
500 - 600 lux	6.8dia
600 - 700 lux	5.3dia
700 - 800 lux	3.8dia

Table B: Indirect Viewing
Coverage volumes for various ambient light levels (lux)

BS EN54-23 Rating	C-3-7.5
Mounting Position	Ceiling
Less than 100 lux	9.8dia
100 - 200 lux	9dia
200 - 300 lux	7.5dia
300 - 400 lux	6dia
400 - 500 lux	4.5dia
500 - 600 lux	3.8dia
600 - 700 lux	*
700 - 800 lux	*

Coverage volumes height, diameter, length and width dimensions are in metres.
* Where ambient light levels may, at any time, exceed 600 lux, direct viewing is preferred (CoP 001 clause 4.6.9.4)