Multi Criteria - Photo Optical / Heat Enhanced Detector

Axis detectors communicate on a fully digital protocol.

The multi criteria detector combines a photoelectric and thermal sensing element with very sophisticated algorithms to enhance response to valid fire conditions while at the same time reducing unwanted environmental phenomena causing alarms.

A symmetrical smoke chamber ensures optimal smoke sensitivity from all directions.

The double dust trap protects the smoke chamber from airborne contamination and external light. A special dust compensation algorithm reduces maintenance periods.

The photo detector component of this detector contains sophisticated technological algorithms whereby both contamination and ambient light levels are compensated to suit the installed environment.

A single, centrally positioned, thermistor supervises ambient temperature with low thermal inertia.

The detector efficiently analyses the status of the protected area, guaranteeing a high rejection to false and unwanted alarms. A continuous screen provides a high level of protection from small insects.

Soft and safe addressing allows accurate configuration of system installation.

The unit provides a fast and secure response enhanced by incorporating a bidirectional short circuit isolator. A unique range of Decorline finishes are available.

Features

- Approved to AS7240-7 and AS7240-5 A1R
- SAI Global 5 Tick Quality Scheme accredited.
- BCA and AS1670 compliant
- Large capacity, up to 240 devices per loop
- Auto addressing capability (by the control panel) or manually using VPU100 handheld programmer
- Digital protocol allows quick and accurate information
- High reliability and error detection
- Short circuit isolators in each device to the requirements of EN54-17 (no Australian equivalent)
- 9 selectable alarm thresholds including programmable mode/sensitivity change
- 360° visible bicolour (red or green) LED driven by the control panel
- Independent remote output which can be used for an additional relay output or sounder base
- Magnet test feature

Specification

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
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<tbody>
<tr>
<td>Voltage range</td>
<td>15 - 40V</td>
</tr>
<tr>
<td>Average current consumption</td>
<td>70uA</td>
</tr>
<tr>
<td>Output driver current</td>
<td>20mA @ 24V</td>
</tr>
<tr>
<td>LED current consumption</td>
<td>20mA @ 24V</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>-30°C / +70°C</td>
</tr>
<tr>
<td>Humidity (non condensing)</td>
<td>95% RH</td>
</tr>
<tr>
<td>Dimensions H x D</td>
<td>110mm x 54mm</td>
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</tbody>
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Order Codes and Options

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Standard Base:</td>
<td>VB100</td>
</tr>
<tr>
<td>Deep Base:</td>
<td>DSB100</td>
</tr>
<tr>
<td>Relay Base:</td>
<td>BLR100</td>
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<tr>
<td>Programmer:</td>
<td>VPU100</td>
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</tbody>
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More Information

- The photo detector component of this detector contains sophisticated technological algorithms whereby both contamination and ambient light levels are compensated.
- The Double Dust Trap (1) system provides protection from dust contamination thanks to a particular maze for the smoke entrance, delaying the need for maintenance without invalidating the detection efficiency.
- A symmetrical housing (4) and chamber means that the detector has excellent air entry characteristics from all directions and offers an intrinsic immunity to the ambient light (2).
- The bicolour optical indicator (green/red), located in the centre of the detector, guarantees a 360° visibility and does not need orientation during installation (5). This device supports testing using a magnet. This magnet test is not a substitute for proper smoke or heat testing methods but can aid in initial system testing.

### Connection Diagram

Remote Indicator (Optional)

**LOOPI N**

**LOOPO UT**

* Must be externally limited

### Magnet Test Location

Two marks on the base indicate the position of the test sensor on the detector. Placing a magnet against the detector housing will cause the detector to change its analogue value to 255 for approximately 5 seconds.