

# Orbis Optical type Smoke detector

**L G M**  
**PRODUCTS**



Orbis is a range of modern, stylish detectors packed with practical features that make installation, commissioning and maintenance easy and efficient with new sensing and operating technologies that improve reliability and detection.

Orbis has been designed to make installation, commissioning and maintenance fast and simple. Orbis detectors have StartUp, a phase that uses a flashing red LED to confirm that the devices are wired in the correct polarity. Normal operation is resumed automatically after four minutes. A one second reset switches from normal operation to FasTest®, allowing functional testing with smoke or heat to be done in just 4 seconds.

## **SPECIFICATION**

### **Electrical**

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| Voltage                             | 8.5 - 33.0 Vdc                        |
| Supply Wiring                       | 2 wire polarity sensitive             |
| Max polarity reversal               | 0.2 secs                              |
| Power up time                       | <20 seconds                           |
| Switch on surge current @ 24 Vdc    | 120 $\mu$ A                           |
| Average quiescent current at 24 Vdc | 65 $\mu$ A                            |
| Alarm Current at 24 Vdc             | 40mA                                  |
| Alarm reset Voltage                 | <1 Vdc                                |
| Alarm reset time                    | 1 second                              |
| Alarm load                          | 600 $\Omega$                          |
| Alarm Indicator                     | LED indicator with 360 deg visibility |
| Sampling Frequency                  | Every 4 seconds                       |

### **Mechanical**

|                        |                                     |
|------------------------|-------------------------------------|
| Detector body material | Polycarbonate                       |
| Base material          | Polycarbonate                       |
| Detector & base colour | White                               |
| Max RH                 | 98% no condensation                 |
| Storage temp deg C     | -40 to +70 deg C                    |
| Operating temp deg C   | -40 to +70 deg C                    |
| Wind Speed             | Unaffected by wind                  |
| IP rating              | 23                                  |
| Detector & base dims   | Diameter 100mm<br>Height 57mm       |
| Detector + base weight | 0.14 Kg net<br>0.25 Kg gross packed |

Orbis Detectors are fully compatible with Apollo Series 60 and series 65 detectors

See separate data sheet for Heat detectors, Intrinsically Safe and Marine approved detectors

Part Numbers and Approval listings are on page 2

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## Part Numbers and Approvals

| Product  | Part No          | Approvals |     |       |     |
|--|------------------|-----------|-----|-------|-----|
|  |                  | LBCB      | VdS | VNIIP | CCC |
| Optical Detector with Sensalert/Fastest/Dirt Alert | ORB-OP-12001-APO | X         | X   |       |     |
| Optical Detector with Sensalert/Dirt Alert         | OPX-OP-12005-APO | X         | X   |       |     |
| Optical Detector with flashing LED                 | ORB-OP-12003-APO | X         |     |       |     |
| Optical Detector with flashing LED                 | ORB-OP-12003-PRC |           |     |       | X   |
| Optical Detector with flashing LED                 | ORX-OP-82010-APO |           |     | X     |     |
| Timesaver base                                     | ORB-MB-00001-APO |           |     |       |     |
| Timesaver deep base                                | ORB-MB-00019-APO |           |     |       |     |
| Timesaver relay base                               | ORB-RB-10004-APO |           |     |       |     |

Note: Orbis detectors are not UL or FM approved

## Other members of the Orbis family of heat and smoke detectors:

**Orbis Multisensor** - The Orbis Multisensor uses the innovative Orbis optical technology (see above) in conjunction with a heat sensor to further extend its capabilities as a smoke detector.

**Orbis Heat Detectors** - There are six heat detectors in the Orbis range. The detectors are classified according to EN54-5 as rate-of-rise or static and are designated 'R' or 'S' accordingly

**Orbis Marine Detectors** - Smoke and heat detectors approved by leading marine classification societies

**Orbis Intrinsically Safe Detectors** - ATEX Certified for use in zone 0 areas when used with approved intrinsically safe galvanic barriers. Please contact our sales office for full technical support or visit our web site [www.lgmproducts.com/hazardous\\_area.asp](http://www.lgmproducts.com/hazardous_area.asp)

Please contact our sales office for further information

Data sheets for all Orbis detectors are available on our web site

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