

# orbis<sup>®</sup>

## CONVENTIONAL FIRE DETECTORS



- Optical smoke detector
- Multisensor smoke detector
- Heat detector
- Mounting bases
- TimeSaver Base<sup>®</sup>
- FasTest<sup>®</sup> for quick functional testing
- DirtAlert<sup>®</sup> indicates limit of drift compensation
- Tolerates extreme operating conditions
- False alarms reduced
- Flashing LED option

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# orbis®

## CONVENTIONAL FIRE DETECTORS

Orbis is a modern, stylish detector packed with practical features that make installation, commissioning and maintenance easy and efficient. Orbis utilises proven sensing and operating technologies that improves reliability and detection.

The Orbis range comprises an optical smoke detector, a multisensor detector, heat detectors and a choice of bases.

### Feature packed

- **TimeSaver Base®** is an established design that provides installers with an open working area and single quadrant terminals.
- **StartUp™** uses a flashing red LED to confirm that the devices are working and wired in the correct polarity.
- **Continuity Link** enables voltage testing of zone wiring prior to commissioning.
- **Wide Angle Optics** respond well to a wide range of fires.
- **DustDefy™** system prevents dust ingress while maintaining airflow.
- **Transient Rejection** uses algorithms to filter out temporary abnormal readings, helping to reduce false alarms.
- **Drift Compensation** maintains calibrated sensitivity levels even if the detector is contaminated.
- **DirtAlert®** uses a flashing yellow LED to show that the drift compensation limit has been reached.
- **SensAlert®** is a yellow flashing LED switched on in the unlikely event of incorrect detector operation.
- **FasTest®** maintenance procedure takes just 4 seconds to test and confirm that optical smoke and heat detectors are functioning correctly.
- **E-Z Fit Slots** allow base to be fixed in position without removing mounting screws, using a simple sliding action.
- **360° Visibility** of status LEDs.

Features may vary according to territory. Apollo reserves the right to modify specifications without notice.

The Orbis range is electrically compatible with Series 60 and Series 65 conventional products, making upgrades simple even though the Orbis base is different.

### Installation

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.

### Orbis Optical Smoke Detector

The Orbis Optical Smoke Detector's sensing technology makes it significantly different in design from existing optical smoke detectors.

Although the Orbis Optical Smoke Detector operates on the well-established light scatter principle, it has a proven optical system that reduces false alarms while still meeting international detection standards. The stability of the detector is further increased by the incorporation of drift compensation and the use of internal software to decide when the detector should change to the alarm state. This greatly reduces the likelihood of a detector producing an alarm as a result of smoke from a non-fire source.

### Orbis Multisensor Smoke Detector

The Orbis Multisensor Smoke Detector benefits from the same false alarm reduction technology as the optical smoke detector. It is a thermally enhanced smoke detector that is a development of the optical detector and goes even further in its capabilities of fire detection.

The optical sensor is influenced by the heat sensing element, making the detector more responsive to fast-burning, flaming fires.

It should be used as the detector of choice in areas of high risk with heat at an early stage of the configuration and with increased likelihood of unwanted alarms.

Orbis smoke detectors are recommended for use as general purpose fire detectors for early warning of fire in most areas.

### Orbis Heat Detector

Orbis Heat Detectors are suitable in atmospheres with high dust content or where fumes may temporarily be concentrated, such as vehicle loading bays.

There are seven heat detectors to suit a wide variety of operating conditions.

Static heat detectors respond only when a fixed temperature has been reached. Rate-of-rise detectors have a fixed upper limit too, but they also measure the rate of increase in temperature.

Orbis detectors operate over a wide range of voltages at extremes of temperature: 8.5 – 33V DC at –40°C to +70°C, a unique achievement for conventional detectors.

### Orbis TimeSaver Base®

The Orbis TimeSaver Base® is an established design that provides installers with an open working area with fixing holes shaped to allow a simple mounting procedure. The terminals are grouped to make it easier to wire.

Features include two fixing centres, an LED alignment mark, a guide to indicate the length of cable to be stripped, and a continuity link for voltage testing of zone wiring prior to commissioning. All bases have a mechanism for locking detectors if required.

### Orbis TimeSaver Diode Base

The Orbis TimeSaver Diode Base has the same design as the standard Orbis TimeSaver Base with the addition of a diode. It is used in systems which use active End-of-Line monitoring for head removal.

### Orbis TimeSaver Relay Base

The Orbis TimeSaver Relay Base incorporates a single-pole voltage-free change-over contact for switching external equipment. When the detector changes to the alarm state, the relay is energised, causing the contact to change state. The contact will remain in this condition until the detector is reset.

### Orbis LX Base

The Orbis LX Base has two slots for fixing screws at a spacing of 51mm to 69mm. Detectors fit into the base one way only and require clockwise rotation without force to be plugged in.

### Orbis Sav-Wire Base

The Orbis Sav-Wire Base is designed to allow Orbis detectors to be used in 'Sav-Wire' detection and alarm systems.

### Orbis Heater Base

The Orbis Heater Base is designed to be used in cold climates where environmental conditions could result in either icing or condensation affecting the operation of detectors. It is recommended that the Heater Base be used in conjunction with either a Waterproof Base Cover or Deckhead Mounting Box to minimise moisture ingress.

### Orbis Adaptor

The Orbis Adaptor enables detector to be fitted to a Series 60/65 base.

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Cert/LPCB ref. 010



Assessed to ISO 14001:2004  
Cert/LPCB ref. 010 EMS



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