FSP-851AUS Series
Photelectric Smoke Detector
Intelligent/Addressable Devices

General
Notifier 851 Series intelligent plug-in smoke detectors with integral communication provide features that surpass conventional detectors.

Detector sensitivity can be programmed in the control panel software. Sensitivity is continuously monitored and reported to the panel. Point ID capability allows each detector’s address to be set with address switches, providing exact detector location for selective maintenance when chamber contamination reaches an unacceptable level. The FSP-851AUS-IV / FSP-851AUS-W photoelectric detector’s unique optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources. FSP-851AUS-IV / FSP-851AUS-W detectors are compatible with all Notifier intelligent Fire Alarm Control Panels (FACP).

FlashScan® is a communication protocol developed by Notifier that greatly increases the speed of communication between analog intelligent devices.

Intelligent devices communicate in a grouped fashion. If one of the devices in the group has new information, the panel’s CPU stops the group poll and concentrates on single points. The net effect is response speed greater than five times that of earlier designs.

Features
- Sleek, low-profile design.
- Addressable-analog communication.
- Stable communication technique with noise immunity.
- Low standby current.
- Two-wire SLC connection.
- Rotary, decimal addressing (1-99 on CLIP systems, 1-159 on FlashScan systems).
- Dual LED design provides 360° viewing angle.
- Visible bi-color LEDs blink green every time the detector is addressed, and illuminate steady red on alarm FlashScan systems only.
- Remote test feature from the panel.
- Walk test with address display (an address on 121 will blink the detector LED: 12-[pause]-1 (FlashScan systems only).
- Built-in functional test switch activated by external magnet.
- Built-in tamper-resistant feature.
- Sealed against back pressure.
- Optional relay, isolator, and sounder bases.
Specifications

PHYSICAL/OPERATING SPECIFICATIONS

- Size: 5.3cm high
  10.4 cm diameter when installed on B501AUS
- Weight: 147 g
- Operating Temperature Range: -10°C to 49°C
- Operating Humidity Range: 10% to 93% relative humidity, non-condensing
- Air Velocity: 0 to 1219 m/minute
- Isolator Load Rating: 0.0063*
- Self Diagnostics: Initiated by control panel; activated by test magnet
- Drift Compensation:
  - High sensitivity maintenance alert signal
  - Low sensitivity maintenance alert signal
  - Maintenance urgent signal

ELECTRICAL SPECIFICATIONS

- Operating Voltage Range: 15 to 32 VDC
- Standby / Operating Current (max. average): @ 24 VDC: 360 μA (one communication every 5 seconds with green LED blink on communication)
- Maximum Current: 6.5 mA @ 24 VDC (one communication every 5 seconds with amber LED solid on)
- Maximum Alarm Current: 6.5 mA @ 24 VDC (one communication every 5 seconds with red LED solid on)

Ordering Information

Detectors

<table>
<thead>
<tr>
<th>Detector Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSP-851AUS-IV</td>
<td>Intelligent Photo-optical Smoke Sensor - Ivory.</td>
</tr>
<tr>
<td>FSP-851AUS-W</td>
<td>Intelligent Photo-optical Smoke Sensor - White.</td>
</tr>
<tr>
<td>FSP-851AUS-BCK</td>
<td>Intelligent Photo-optical Smoke Sensor - Black.</td>
</tr>
</tbody>
</table>

Bases

<table>
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<th>Base Code</th>
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</thead>
<tbody>
<tr>
<td>B501AUS-IV</td>
<td>Universal addressable detector base - Ivory.</td>
</tr>
<tr>
<td>B501AUS-W</td>
<td>Universal addressable detector base - White.</td>
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</tbody>
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Agency Listings and Approvals

These listings and approvals apply to the devices specified in this document. In some cases, certain devices or applications may not be listed by certain approval agencies, or listing may be in process. Consult the factory for the latest listing status.

CSIRO ActivFire listed to

- AS 7240.7: 2018
- ActivFire certificate # afp: 33580