GENERAL
The System Sensor 1151 and 2151 are low-profile ionization and photoelectric, plug-in type smoke detector heads. They offer superb performance and reliability, meeting the stringent performance criteria designated by UL 268 and ULC, in a profile of just 1.66" (42 mm). Aesthetically pleasing to engineers, architects, building owners and homeowners, the 1151 and 2151 can be used with four different adapter bases in a variety of wiring configurations and voltages. Model 1151 (ionization sensor) and 2151 (photoelectronic sensor) share the same sleek low-profile design.

FEATURES
- Sleek, low-profile design — only 1.66" (42 mm).
- Same aesthetically pleasing housing design for ion and photo models.
- Two LEDs blink in standby mode, providing 360° visibility.
- Low standby current.
- Field sensitivity metering of detector to meet NFPA 72 requirement.
- Broad range of adapter bases available — four different voltages/wiring configurations.
- Removable cover for field cleaning.
- Sealed against back pressure air flow, dirt and insects.
- Built-in tamper resistant feature.
- Built-in magnetic test switch.
- Head easily plugs into adapter mounting base.
- Remote LED option.
- Listed to UL 268.
- Auxiliary relay contacts (optional).

CONSTRUCTION AND OPERATION
The 1151 Ionization smoke detector contains a unique single-source dual-chamber design which will sense the presence of smoke particles produced by fast combustion as well as slow smoldering fires. This chamber exhibits increased stability, significantly reduces nuisance alarms, and provides better performance at higher velocities.

The 2151 Photoelectric smoke detector contains a unique optical sensing chamber designed to sense the presence of smoke particles produced by a wide range of combustion sources. A custom integrated circuit incorporates signal processing to help reduce false alarms.

The sensing chambers of both models are sealed from back pressure air flow, dirt, and insects. The chambers are protected by a fine mesh screen which can be cleaned or replaced. Additional key features include interchangeable ion and photo heads, a variety of mounting bases, and a full line of accessories.

GENERAL SPECIFICATIONS
Operating voltage/alarm current: mounting base dependent (see chart on page 2).

Standby current: Ion (1151): 40 µA. Photo (2151): 85 µA.
Sensitivity: 1151: 1.9% ± 0.62%/ft. 2151: 3% ± 0.7%/ft.
Weight: 3.6 oz. (102 g).
Size: 1.66" (42.164 mm) high; 4.1" (104.14 mm) diameter for unflanged base, 6.1" (154.94 mm) diameter for flanged base.
Construction: Flame-retardant thermoplastic.
Temperature: 32°F to 120°F (0°C to 49°C).
Humidity range: 10 - 93% RH non-condensing.
Air velocity: 1151 Ion: 0 – 1,200 ft. (365.76 m)/min. 2151 Photo: 0 – 3,000 ft. (914.4 m)/min.

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Fire-Lite Alarms, One Fire-Lite Place, Northford, Connecticut 06472. Phone: (800) 627-3473. Toll Free FAX: (877) 699-4105, FAX Back:(888) 388-3299
WEB: www.firelite.com
PRODUCT LINE INFORMATION

Model | Description
--- | ---
1151 | Low-profile ionization detector (requires B100LP Series base).
2151 | Low-profile photoelectric detector (requires B100LP Series base).
B110LP | Base, 2-wire, low-profile flangeless, 12/24 VDC.
B112LP | Base, 4-wire, low-profile, Form-A & -C, 24 VDC.
B114LP | Base, 4-wire, low-profile, Form-A & -C + A Supervisory, 120 VAC.
B116LP | Base, 2-wire, low-profile, Form-C, 24 VDC.
RA400Z | Remote annunciator for two- or four-wire systems, 3 - 32 V. Use with ion and photo plug-in detectors. Fits standard single-gang electrical box.
B401BH | Sounder base. Requires an external 24 VDC power supply. Mounts to a 4" (101.6 mm) square electrical box (1-1/2" [38.1 mm] minimum depth, 2-1/8" [53.975 mm] recommended).
MOD400R | Detector sensitivity test tool. Use with most analog or digital multimeters. Satisfies NFPA 72 requirement for sensitivity testing.
SMK400 | Surface-mounting kit provides for entry of surface wiring conduit. Use with B401 or B401R mounting bases only.
A77-716B | End-of-line relay for power supervision, 12/24 VDC systems.
M02-04-01 | Test magnet.

### MOUNTING BASE SELECTION GUIDE

*Functionality contingent on panel compatibility.
**Must be limited by control panel.
***Flangeless base.

RELAY CONTACT RATINGS: resistive or Inductive (60% power factor) load. Form-A: 2.0 A at 30 VAC/DC. Form-C: 0.6 A at 110 VDC; 2.0 A at 30 VDC; 1.0 A at 125 VAC; 2.0 A at 30 VAC.

<table>
<thead>
<tr>
<th>Base Model Number</th>
<th>Loop Type</th>
<th>Current Limit Resistor</th>
<th>Alarm Contact Type</th>
<th>Nominal Voltage</th>
<th>Current Draw on Alarm (mA)</th>
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</thead>
<tbody>
<tr>
<td>B110LP</td>
<td>2-wire*</td>
<td>No</td>
<td>—</td>
<td>12/24 VDC</td>
<td>10 to 100**</td>
</tr>
<tr>
<td>B110RLP</td>
<td>2-wire*</td>
<td>Yes</td>
<td>—</td>
<td>24 VDC</td>
<td>22 to 62</td>
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<tr>
<td>B112LP</td>
<td>4-wire</td>
<td>Yes</td>
<td>Form-A &amp; -C</td>
<td>24 VDC</td>
<td>14 to 39</td>
</tr>
<tr>
<td>B114LP</td>
<td>4-wire</td>
<td>Yes</td>
<td>Form-A &amp; -C + A Supervisory</td>
<td>120 VAC</td>
<td>75 mA AC maximum</td>
</tr>
<tr>
<td>B116LP</td>
<td>2-wire*</td>
<td>No</td>
<td>Form-C</td>
<td>24 VDC</td>
<td>12 to 100**</td>
</tr>
<tr>
<td>B401***</td>
<td>2-wire*</td>
<td>No</td>
<td>—</td>
<td>12/24 VDC</td>
<td>10 to 100**</td>
</tr>
</tbody>
</table>