Features

- Photoelectric, integrated low-flow technology
- Air velocity rating from 100 ft/min to 4000 ft/min (0.5 m/s to 20.32 m/sec)
- Versatile mounting options: square or rectangular configuration
- Broad ranges for operating temperature (-4°F to 158°F) and humidity (0% to 95% non-condensing)
- Patented sampling tube installs from front or back of the detector with no tools required
- Cover tamper signal
- Increased wiring space with a newly added 3/4-inch conduit knockout
- Available space within housing to accommodate mounting of relay module
- Easily accessible code wheels on photoelectric sensor head (sold separately)
- Clear cover for convenient visual inspection
- Remote testing capability
- Requires com line power only
- NEMA Type 4 UL listed for non-hazardous indoor and outdoor applications (DNRW only)
- UV Resistant, UL listed housing and cover material (DNRW only)

Architectural/Engineering Specifications

The air duct smoke detector shall be a System Sensor InnovairFlex™ DNR Intelligent Non-Relay Photoelectric Duct Smoke Detector and DNRW Watertight Non-Relay Photoelectric Duct Smoke Detector. The detector housing shall be UL listed per UL 268A specifically for use in air handling systems. The flexible housing of the duct smoke detector fits both square and rectangular footprints. The detector shall operate at air velocities of 100 ft/min to 4000 ft/min (0.5 m/sec to 20.32 m/sec). The unit shall be capable of providing a trouble signal in the event that the sensor cover is removed or improperly installed. It shall be capable of local testing via magnetic switch or remote testing using the RTS151KEY remote test station. Terminal connections shall be of the strip and clamp method suitable for 12–18 AWG wiring.

Warning: Duct smoke detectors have specific limitations.

**NOT** a substitute for an open area smoke detector,
**NOT** a substitute for early warning detection, and
**NOT** a replacement for a building’s regular fire detection system.

Refer to NFPA 72, 90A and CAN/ULC S524 for additional duct smoke detector application information.
Model Description
---
DNR* Intelligent non-relay photoelectric low-flow duct smoke detector housing. Requires photoelectric smoke detector (sold separately).
DNRW Watertight intelligent non-relay photoelectric low-flow duct smoke detector housing. (UL Listed only) Requires photoelectric smoke detector (sold separately).
MIX-2251B* Addressable low-profile photoelectric smoke detector
MIX-2251BR* Remote test capable addressable low-profile photoelectric smoke detector

Accessories
---
DCOIL 2-wire remote test coil required with RTS151/RTS151KEY
DST3 Metal sampling tube duct widths 2 ft to 4 ft (0.6 to 1.2 m)
DST5 Metal sampling tube duct widths 4 ft to 8 ft (1.2 to 2.4 m)
DST10 Metal sampling tube duct widths 8 ft to 12 ft (2.4 to 3.7 m)
ETX Metal exhaust tube duct width 1 ft (0.3 m)
DH4000E-1 Weatherproof Enclosure
RA100Z* Remote annunciator alarm LED
RTS151 Remote test station
RTS151KEY* Remote test station with key lock

* Add suffix “A” for Canadian models.

**Note:** DNR(W) duct detectors with a date code of 0013 or higher do not require a DCOIL or auxiliary 24VDC for remote test applications when used with a remote test capable smoke detector. DNR(W) duct detectors with a data code of 0012 or earlier require a DCOIL and auxiliary power for remote test applications.

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### Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNR*</td>
<td>Intelligent non-relay photoelectric low-flow duct smoke detector housing. Requires photoelectric smoke detector (sold separately).</td>
</tr>
<tr>
<td>DNRW</td>
<td>Watertight intelligent non-relay photoelectric low-flow duct smoke detector housing. (UL Listed only) Requires photoelectric smoke detector (sold separately).</td>
</tr>
<tr>
<td>MIX-2251B*</td>
<td>Addressable low-profile photoelectric smoke detector</td>
</tr>
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</tbody>
</table>

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### Accessory Current Loads @ 24 VDC

<table>
<thead>
<tr>
<th>Device</th>
<th>Standby</th>
<th>Alarm</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA100Z(A)</td>
<td>0 mA</td>
<td>12 mA Max.</td>
</tr>
<tr>
<td>RTS151 / RTS151KEY(A)</td>
<td>0 mA</td>
<td>12 mA Max.</td>
</tr>
</tbody>
</table>

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**Not to be used for installation purposes.**

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