The Det-Tronics U5005 Smoke Detector is a sensitive yet rugged, state-of-the-art protection device that is designed for classified areas in hazardous industrial and commercial locations. The detector is designed to operate effectively with both slow smoldering and fast burning fires. The U5005 Smoke Detector includes an external alarm indicating LED, as well as alarm, power supervision and auxiliary relays. Typical applications that use the U5005 include:

- Combustible storage facilities
- Munitions manufacturing
- Volatile chemical storage
- Chemical processing plants
- Petroleum refineries
- Turbine enclosures.

The Det-Tronics U5006 Air Duct Smoke Detector, using the technology of the U5005 Smoke Detector mounted inside a fiberglass NEMA 4X enclosure, is designed to detect the presence of smoke for the primary purpose of controlling blowers and dampers in air conditioning and ventilation systems. The unit mounts directly to heating, ventilating, and air conditioning ducts and uses a cross sectional sampling tube arrangement that allows large volume air sampling. The U5006 includes the same relay outputs as the U5005.

The detectors are intended to be connected to a control unit and function as part of a fire protection system (4-wire system, 2 wires for detector power and 2 wires for detector output).
OPERATING VOLTAGE
20 to 28 vdc filtered supply, with less than 1.4 vpp at 60 to 120 Hz.

OPERATING CURRENT
U5005
Standby: 10 milliamperes.
Alarm: 35 milliamperes.
U5006
Standby: 10 milliamperes.
Alarm: 50 milliamperes.

TEMPERATURE RANGE
Operating: –13°F to +140°F (–25°C to +60°C).
Storage: –67°F to +185°F (–55°C to +85°C).

HUMIDITY RANGE
0 to 90% RH non-condensing.

AIR VELOCITY RANGE
600 to 4000 ft/min.

SENSITIVITY RANGE
Meets ANSI/UL268A visible smoke obscuration limits:
Grey smoke: 7.0% / ft maximum,
0.5% / ft minimum
Black smoke: 10.0% / ft maximum,
0.5% / ft minimum

ALARM AND SUPERVISORY RELAY CONTACT RATING
1.0 ampere at 30 vdc, SPST.

AUXILIARY ALARM RELAY
2.0 amperes at 30 vdc, Form C, SPDT.

FIBERGLASS ENCLOSURE
NEMA 4X. Cover is clear polycarbonate with closed cell neoprene gasket supplied with stainless steel screws.

CERTIFICATION
CSA Certified for Class I, Division 2, Groups A, B, C & D Hazardous Locations.

WEIGHT
U5005: 2 pounds (0.91 kilogram).
U5006: 13 pounds (5.9 kilograms).

DIMENSIONS
U5005:
L = 12.75 inches (32.5 cm)
W = 5.3 inches (13.5 cm)
D = 3.5 inches (8.9 cm).
U5006:
L = 14.75 inches (37.5 cm)
W = 11.6 inches (29.5 cm)
D = 6.1 inches (15.5 cm).

SAMPLING TUBES (U5006 ONLY)
Material: Galvanized steel tubing 3/4 inch EMT, length to be specified by customer (1, 3, 6, or 10 feet).
Return tube: 12 inch standard length sampling tube.

ORDERING INFORMATION
When ordering, please specify:
U5005 Smoke Detector
U5006 Air Duct Smoke Detector
When ordering the U5006, specify the air duct sampling tube length required.

The air duct sampling tube provides a cross sectional sampling of air moving through the duct and is available in four lengths. The air duct sampling tube should cover the entire width of the duct, therefore, specify the shortest sampling tube that is at least the width of the duct to be protected. It can then be cut to the exact length at the job site.

Available duct sampling tube sizes:

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 foot length</td>
<td>ST-1</td>
<td>004783-001</td>
</tr>
<tr>
<td>3 foot length</td>
<td>ST-3</td>
<td>004783-002</td>
</tr>
<tr>
<td>6 foot length</td>
<td>ST-6</td>
<td>004783-003</td>
</tr>
<tr>
<td>10 foot length</td>
<td>ST-10</td>
<td>004783-004</td>
</tr>
</tbody>
</table>