Non-Incendive Short Range Ultrasonic Level Sensor
Series: IRU-5000

The IRU-5000 series provides a non-contact method of detecting level, presence/absence detection, and volume, proximity, or distance calculation. With built-in technology to compensate for unpredictable variables such as humidity, temperature, and agitators the IRU-5000 is designed to excel in short range applications.

Features

• AutoSense Software for hassle-free setup
• Internal Temperature Compensation
• Works on solids and liquids
• Class I Div 2 Non-incendive for 4-20 mA output
IRU-5000 Specifications

**Performance**
- Operating Range: 4 - 79 in. (102 - 2007 mm)
- Beam Pattern: 9° off axis
- Internal Temperature Compensation
- Frequency: 143 kHz
- Accuracy: ±0.25% of detected range
- Resolution: 0.1 in. (2.5 mm)
- Response Time: Programmable (20 ms minimum)

**Connectivity**
- Output:
  - 4-20 mA
  - 4-20 mA with (2) NPN outputs
  - 0-2.5 V/0-5 V

**Environmental**
- Ratings: IP65
- Operating Temp: -40° - 140°F (-40° - 60°C)

**Certification**
- Class 1, Div. 2, Groups C, D, T6; Ex nA IIB T6*
- Class 1, Zone 2, Aex nA IIB, T6*
- IP65
  (*Models IRU-5413, -5415, -5423 & -5425 only)

**Electrical**
- Total Current Draw: 75 mA @ 24 VDC
- Supply Voltage: 12-28 VDC
- Wiring Connection: 4 or 5 conductor shielded cable

**Programming**
- Interface with RST-3002 Programmer (purchase separately - powered by USB)
  - The RST-3001 is 32 bit only
  - The RST-3002 is 32 and 64 bit compatible
- User selected units of measure

**Physical**
- PC/PET upper housing
- PC/PET Blend Transducer
## Common Model Configurations

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Model Description</th>
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</thead>
<tbody>
<tr>
<td>IRU-5413-C6</td>
<td>4 - 79 in. range, 143 kHz, 1” MNPT, 4-20 mA Output, 6 ft cable</td>
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<tr>
<td>IRU-5415-C6</td>
<td>4 - 79 in. range, 143 kHz, 1” MNPT, 4-20 mA / 2 NPN Outputs, 6 ft cable</td>
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<tr>
<td>IRU-5423-C6</td>
<td>4 - 79 in. range, 143 kHz, 2” MNPT, 4-20 mA Output, 6 ft cable</td>
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<tr>
<td>IRU-5425-C6</td>
<td>4 - 79 in. range, 143 kHz, 2” MNPT, 4-20 mA / 2 NPN Outputs, 6 ft cable</td>
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</tbody>
</table>

## IRU-5000 Accessories

Please order separately, by part number.

<table>
<thead>
<tr>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Over Molded Extension Cables with Foil Shield</td>
<td></td>
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<tr>
<td>4 Conductor</td>
<td></td>
</tr>
<tr>
<td>Straight, 2 m</td>
<td>135407-0002</td>
</tr>
<tr>
<td>Right Angle, 2 m</td>
<td>135407-1002</td>
</tr>
<tr>
<td>Straight, 5 m</td>
<td>135407-0005</td>
</tr>
<tr>
<td>Right Angle, 5 m</td>
<td>135407-1005</td>
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<tr>
<td>5 Conductor</td>
<td></td>
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<tr>
<td>Straight, 2 m</td>
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<td>135415-1005</td>
</tr>
<tr>
<td>Programming Module</td>
<td></td>
</tr>
<tr>
<td>RST-3001 (USB - 32 bit only)</td>
<td>125389</td>
</tr>
<tr>
<td>RST-3002 (USB - 32 and 64 bit compatible)</td>
<td>125389-1000</td>
</tr>
</tbody>
</table>
Model Configuration Options

Model Number: IRU - 5  _____ - _____ - _____

A. Mounting

- □ 41  1 in. NPT (Kynar T.F.)
- □ 42  2 in. NPT (Kynar T.F.)

B. Output

- □ 3  4-20 mA
- □ 5  4-20 mA with 2 NPN outputs
- □ 9* 0-2.5V / 0-5V
  *Note: Voltage Output does not carry Haz Loc certification

C. Cable/Microconnector

- □ C__  Cable (Specify Length in feet) Standard 6 feet of cable
- □ M   Micro Connector

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