

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



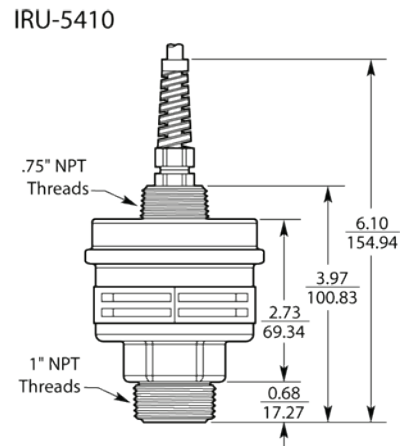
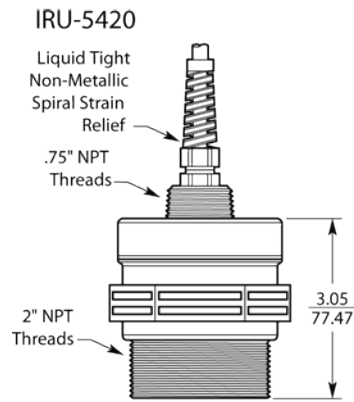
The IRU-5000 series provides a non-contact method of detecting level, presence/absence detection, and volume, proximity, or distance calculation. With built-in technology to compensate for unpredictable variables such as humidity, temperature, and agitators the IRU-5000 is designed to excel in short 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: $\pm 0.25\%$ 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

| Model Number | Model Description |
|--------------|--|
| IRU-5413-C6 | 4 - 79 in. range, 143 kHz, 1" MNPT, 4-20 mA Output, 6 ft cable |
| IRU-5415-C6 | 4 - 79 in. range, 143 kHz, 1" MNPT, 4-20 mA / 2 NPN Outputs, 6 ft cable |
| IRU-5423-C6 | 4 - 79 in. range, 143 kHz, 2" MNPT, 4-20 mA Output, 6 ft cable |
| IRU-5425-C6 | 4 - 79 in. range, 143 kHz, 2" MNPT, 4-20 mA / 2 NPN Outputs, 6 ft cable |

IRU-5000 Accessories

Please order separately, by part number.

| Description | Part Number |
|--|-------------|
| Over Molded Extension Cables with Foil Shield | |
| 4 Conductor | |
| Straight, 2 m | 135407-0002 |
| Right Angle, 2 m | 135407-1002 |
| Straight, 5 m | 135407-0005 |
| Right Angle, 5 m | 135407-1005 |
| 5 Conductor | |
| Straight, 2 m | 135415-0002 |
| Right Angle, 2 m | 135415-1002 |
| Straight, 5 m | 135415-0005 |
| Right Angle, 5 m | 135415-1005 |
| Programming Module | |
| RST-3001 (USB - 32 bit only) | 125389 |
| RST-3002 (USB - 32 and 64 bit compatible) | 125389-1000 |

Model Configuration Options



Model Number: IRU - 5 $\frac{\quad}{A}$ - $\frac{\quad}{B}$ - $\frac{\quad}{C}$

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