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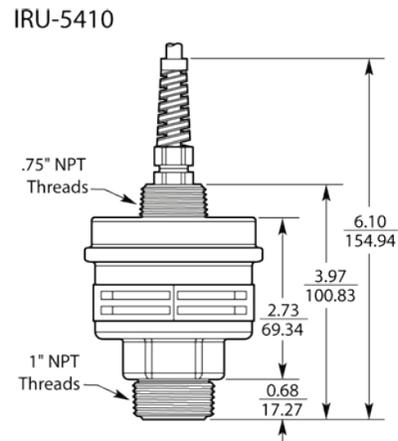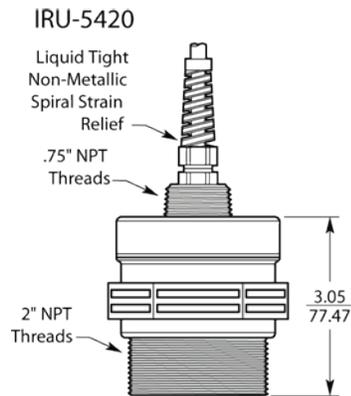# Series: IRU-5000

APG ®

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 unpredictiable 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

IRU-5420

Liquid Tight Non-Metallic Spiral Strain Relief

.75" NPT Threads

2" NPT Threads

3.05 / 77.47

IRU-5410

.75" NPT Threads

1" NPT Threads

6.10 / 154.94

3.97 / 100.83

2.73 / 69.34

0.68 / 17.27

Performance

- Operating Range
    4 - 79 in. (102 - 2007 mm)
- Beam Pattern: 9º 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: -40º - 140ºF (-40º - 60ºC)

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

APG®

1.800.561.8187   www.itm.com   information@itm.com

Model Configuration Options

APG®

Model Number: IRU - 5 _____ - _____ - _____
                            A   B   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