IRU-6429 Series

Mid-Range Datalogging Ultrasonic Level Sensor with Voltage Output
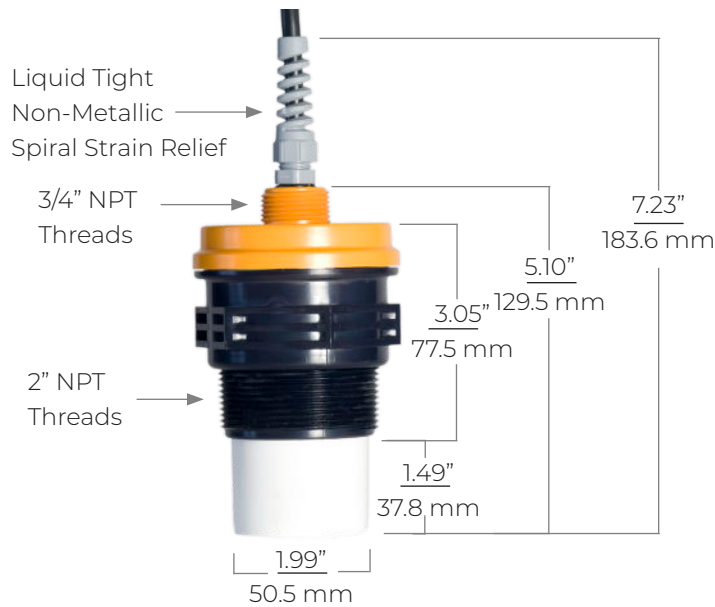
Datasheet

The IRU-6429 series provides a non-contact method of detecting level, with on-board volume and distance calculations. With an excitation input, and built-in technology to compensate for unpredictable variables such as humidity, temperature, and agitators, the IRU-6429 is designed to excel in short- to mid-range datalogging applications in indoor or protected outdoor environments.

Features

- Range: 1 - 30 ft. (0.3 - 9.1 m) for liquids and solids
- AutoSense Software for hassle-free setup
- Internal temperature compensation
- Works on liquids, solids, and bulk solids
- Excitation input for datalogging
- IP65 Enclosure rating: dust-tight, protected against water jets

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IRU-6429 SPECIFICATIONS

Liquid Tight Non-Metallic Spiral Strain Relief

3/4" NPT Threads

2" NPT Threads

7.23" 183.6 mm

5.10" 129.5 mm

3.05" 77.5 mm

1.49" 37.8 mm

1.99" 50.5 mm

Performance
- Operating Range
    - 1 - 30 ft. (0.3 - 9.1 m) for liquid and solid targets
    - 1 - 15 ft. (0.3 - 4.6 m) for bulk solids
- Beam Pattern: 9° off axis
- Internal Temperature Compensation
- Frequency: 69 kHz
- Accuracy: ±0.25% of detected range
- Resolution: 0.1 in. (2.5 mm)
- Response Time: Programmable (64 ms minimum @ 30 ft.)

Connectivity
- Output:
    - 0-2.5 V/0-5 V (selectable via software)
    - RS-232 option
- Excitation Input For Datalogging

Environmental
- Enclosure Protection: IP65
- Operating/Compensated Temperature Range:
    - -20° to 140°F (-30° to 60°C)

Electrical
- Total Current Draw: 75 mA @ 24 VDC
- Operational Supply Voltage: 12-28 VDC
- Excitation Supply Voltage: 5 VDC minimum
- Programming Supply Voltage
    - RST-3002:   15-28 VDC
    - RS-232:   15-28 VDC
- Wiring Connection:
    - 5 or 8-conductor shielded cable
    - 5 or 8-pin micro connector

Programming
- Interface with RST-3002 Programmer
    - (purchase separately - not needed for "S" option)
    - Interfaces with 32- and 64-bit operating systems
- User selected units of measure

Physical
- PC/PET upper housing
- PVDF transducer housing
- Transducer Type: Ceramic

Certification
- CSA General Purpose
- IP65

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COMMON MODEL CONFIGURATIONS

Model Number	Model Description
IRU-6429-C6	1 - 30 ft range, 69 kHz, 2" MNPT, **0-2.5 V / 0-5V Output, 6 ft cable**
IRU-6429-M	1 - 30 ft range, 69 kHz, 2" MNPT, **0-2.5 V / 0-5V Output, Micro connector**

MODEL CONFIGURATION OPTIONS

Model Number: IRU - 642 _____ - _____
                A   **B**

A. Output

☐ **9**   0-2.5V / 0-5V
☐ **9S**   0-2.5V / 0-5V with RS-232**†**

†Note: This option not CSA certified

B. Cable/Microconnector

☐ **CL**   Cable (Specify L=length in feet)
           Standard 6 feet of cable
☐ **M**   Micro Connector

IRU-6429 ACCESSORIES

Please order separately, by part number.

Description	Part Number
Over Molded Extension Cables with Foil Shield	
5 Conductor	
Straight, 2 m	135415-0002
Right Angle, 2 m	135415-1002
Straight, 5 m	135415-0005
Right Angle, 5 m	135415-1005
8 Conductor	
Straight, 2 m	135423-0002
Straight, 10 m	135423-0010
Programming Module	
RST-3002 (USB - 32 and 64 bit compatible)	125389-1000

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