

# IRU-6429 Ultrasonic Level Sensor



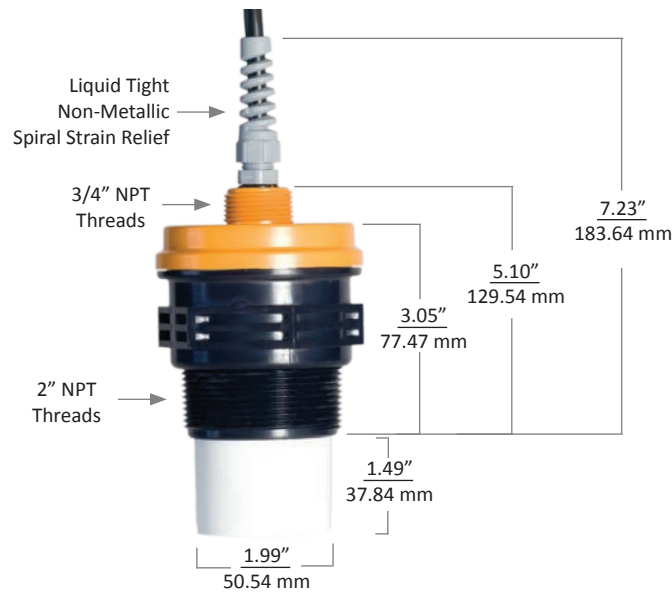
The IRU-6429 series provides a non-contact method of detecting level, presence/absence detection, volume, proximity and distance. With built in technology to compensate for unpredictable variables such as humidity, temperature and agitators the IRU-6429 is the right sensor for your application.

## Features

- AutoSense Software for hassle-free setup
- Internal Temperature Compensation
- Works on solids and liquids
- Excitation line to wake up sensor



# IRU-6429 Specifications



## Performance

- Operating Range  
1 - 30 ft. (0.3 - 9.1 m)
- Beam Pattern: 9° off axis
- Internal Temperature Compensation
- Frequency: 69 kHz
- Accuracy:  $\pm 0.25\%$  of detected range
- Resolution: 0.1 in. (2.5 mm)
- Response Time: Programmable (20 ms minimum)

## Connectivity

- Output:  
0-2.5 V / 0-5 V  
RS-232 (6429S only)
- Input  
Excitation for data logging

## Environmental

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

## Electrical

- Total Current Draw: 75 mA @ 24 VDC and 4 Hz
- Supply Voltage: 12-28 VDC
- Wiring Connection:  
4 or 5 conductor shielded cable  
5 or 8 pin micro connector

## Programming

- Interface with RST-3001/3002 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

- PVDF (Kynar®) transducer housing
- PC/PET upper housing
- Transducer Type: Ceramic, PVDF faced

## Certification

- CSA General Purpose
- IP65

# Common Model Configurations

Model Number	Model Description
IRU-6429-C6	1 - 30 ft range, 69 kHz, 2" MNPT, <b>0-2.5 V / 0-5V Output, 6 ft cable</b>
IRU-6429-M	1 - 30 ft range, 69 kHz, 2" MNPT, <b>0-2.5 V / 0-5V Output, Microconnector</b>

## IRU-6429 Accessories

Please order separately, by part number.

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

# Model Configuration Options



Model Number: IRU - 642      -       
   A        B

## A. Output

- 9**                   0-2.5 V / 0-5 V
- 9S**                0-2.5 V / 0-5 V (RS-232 option)

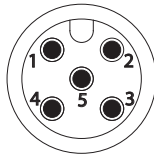
## B. Cable/Microconnector

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

## Wiring

IRU-6429	
<b>Red</b>	+24 VDC
<b>Black</b>	Ground
<b>White</b>	Voltage Out
<b>Green</b>	Analog Ground
<b>Orange</b>	Excitation

IRU-6429-M	
<b>1. Brown</b>	+24 VDC
<b>2. White</b>	Voltage Out
<b>3. Blue</b>	Ground
<b>4. Black</b>	Analog Ground
<b>5. Grey</b>	Excitation



IRU-6429S			
<b>Red</b>	+24 VDC	<b>Green</b>	Analog Ground
<b>Black</b>	Ground	<b>Brown</b>	RS-232 Ground
<b>Orange</b>	Excitation	<b>Yellow</b>	RS-232 TX
<b>White</b>	Voltage Out	<b>Blue</b>	RS-232 RX

IRU-6429S-M			
<b>1 White</b>	V Out	<b>7 Blue</b>	Ground
<b>2 Brown</b>	+24 VDC	<b>8 Red</b>	Excitation
<b>3 Green</b>	Analog Ground		
<b>4 Yellow</b>	RS-232 TX		
<b>5 Grey</b>	RS-232 Ground		
<b>6 Pink</b>	RS-232 RX		

