

# IRU-2420 Ultrasonic Level Sensor



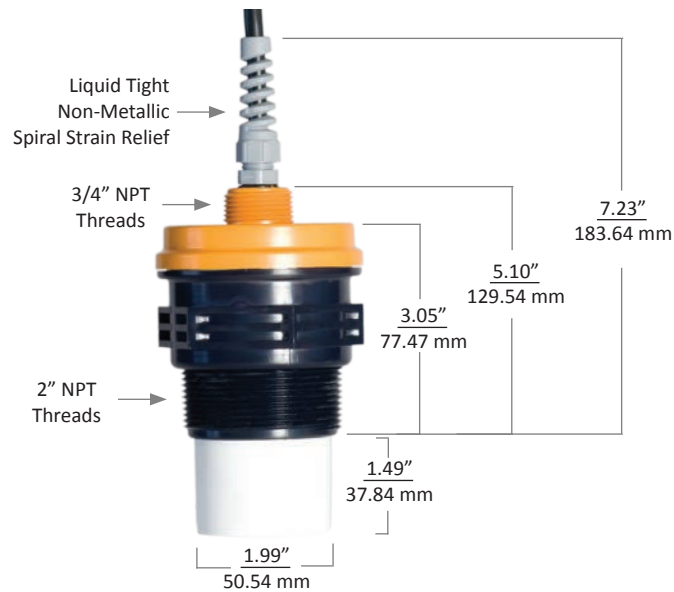
The IRU-2420 series provides a non-contact method of detecting level, presence/absence detection, volume, proximity and distance. With built in technology to compensate for unpredictable variables such as humidity, temperature and agitators the IRU-2420 is the right sensor for your application.

## Features

- AutoSense Software for hassle-free setup
- Internal Temperature Compensation
- Works on solids and liquids



# IRU-2420 Specifications



## Performance

- Operating Range  
1 - 25 ft. (0.3 - 7.6 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:

- 4-20 mA  
600 ohms @ 24 VDC  
150 ohms @ 12 VDC
- 4-20 mA with (2) NPN outputs

## Environmental

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

## 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-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

- Class 1, Div. 2, Groups A, B, C, D
- IP65

# Common Model Configurations

Model Number	Model Description
IRU-2423-C6	1 - 25 ft range, 69 kHz, 2" MNPT, <b>4-20 mA Output, 6 ft cable</b>
IRU-2423-M	1 - 25 ft range, 69 kHz, 2" MNPT, <b>4-20 mA Output, Microconnector</b>
IRU-2425-C6	1 - 25 ft range, 69 kHz, 2" MNPT, <b>4-20 mA / 2 NPN Outputs, 6 ft cable</b>
IRU-2425-M	1 - 25 ft range, 69 kHz, 2" MNPT, <b>4-20 mA / 2 NPN Outputs, Microconnector</b>

## IRU-2420 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 - 242      -       
   A        B

## A. Output

- 3**                   4-20 mA
- 5**                   4-20 mA with (2) NPN outputs

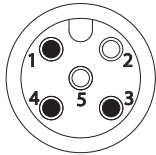
## B. Cable/Microconnector

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

## Wiring

IRU-2423-C	
<b>Red</b>	+24 VDC
<b>Black</b>	Ground
<b>White</b>	mA+

IRU-2423-M	
<b>1 Brown</b>	+24 VDC
<b>2 White</b>	Not used
<b>3 Blue</b>	Ground
<b>4 Black</b>	mA+
<b>5 Grey</b>	Not used



IRU-2425-C			
<b>Red</b>	+24 VDC	<b>Orange</b>	mA+
<b>Black</b>	Ground	<b>Green</b>	NPN2
<b>White</b>	NPN1		

IRU-2425-M	
<b>1 Brown</b>	+24 VDC
<b>2 White</b>	NPN 1
<b>3 Blue</b>	Ground
<b>4 Black</b>	mA+
<b>5 Grey</b>	NPN 2

