IRU-2420 Series

Non-Incendive Mid-Range Ultrasonic Level Sensor 4-20 mA Output

Datasheet



The IRU-2420 series provides a non-contact method of detecting distance or proximity, with on-board level or volume calculations. With built-in technology to compensate for unpredictable variables such as humidity, temperature, and agitators, the IRU-2420 has the flexibility to provide precision measurements in a wide variety of indoor and protected outdoor applications.

Features

- Range: 1 25 ft. (0.3 7.6 m) for liquid and solid targets
- AutoSense Software for hassle-free setup
- · Internal temperature compensation

- · Works on liquids, solids, and bulk solids
- · Class I Div 2 Non-incendive
- IP65 Enclosure rating: dust-tight, protected against water jets



IRU-2420 SPECIFICATIONS



Performance

- Operating Range
 - 1 25 ft. (0.3 7.6 m) for liquid or solid targets
 - 1 10 ft. (0.3 3.0 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 (55 ms minimum •
 @ 25 ft.)

Connectivity

- · Output:
 - 4-20 mA
 - 4-20 mA with (2) NPN outputs

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
- Programming Supply Voltage: 15-28 VDC
- · Wiring Connection:
 - 3 or 5-conductor shielded cable
 - 4 or 5-pin micro connector

Programming

- Interface with RST-3002 Programmer
 - (purchase separately)
 - 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

- · IP65
- · CSA:

Inputs: 12 - 28 VDC; Outputs: 4-20 mA, NPN Class I Division 2 Groups C & D T6 (Ta 60°C)

Ex nA IIB T6

Class I, Zone 2; AEx nA IIB T6



MODEL CONFIGURATION OPTIONS

Model Number: IRU - 242 ____ - ___

A. Output

□ **3** 4-20 mA

□ **5** 4-20 mA with 2 NPN outputs

B. Cable/Micro Connector

□ **C**__ Cable (Specify Length in feet) Standard 6 feet of cable

□ **M** Micro Connector

COMMON MODEL CONFIGURATIONS

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

IRU-2420 ACCESSORIES

Please order separately, by part number.

Description	Part Number		
Over Molded Extension Cables with Foil Shield			
4 Conductor (for 4-20 mA ou	tput)		
Straight, 2 m	135407-0002		
Right Angle, 2 m	135407-1002		
Straight, 5 m	135407-0005		
Right Angle, 5 m	135407-1005		
5 Conductor (for 4-20 mA / 2	NPN output)		
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-3002 (USB - 32 and 64 bit	compatible) 125389-1000		





Automation Products Group, Inc. Tel: 1 (888) 525-7300 or 1 (435) 753-7300

> e-mail: sales@apgsensors.com www.apgsensors.com

Automation Products Group, Inc. 1025 W. 1700 N. Logan, UT 84321