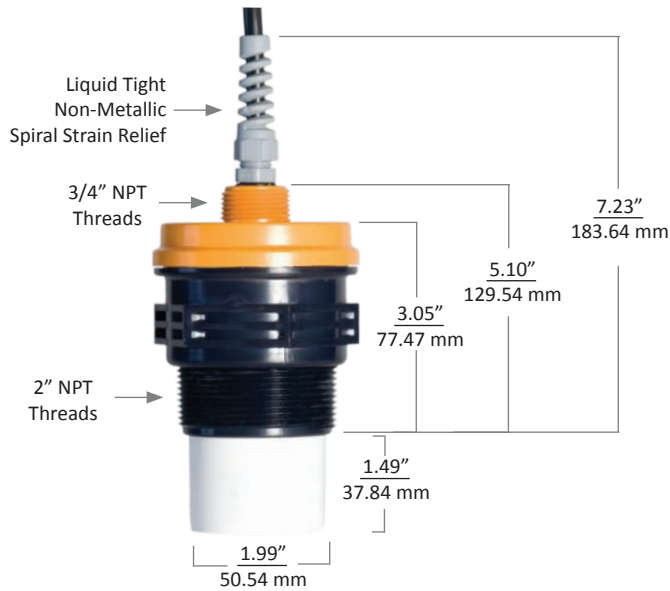# LPU-2428 Loop Powered Ultrasonic Sensor

APG®

With Class 1 Division 1 ratings, the loop powered LPU-2428 is built to handle the most hazardous locations. Add the ability to internally calculate volume or open channel flow data, and you have a unique and powerful ultrasonic sensor.

Features

- Loop powered 4-20 mA output
- Class 1 Division 1 rating
- Built-in calculations of current volume, flow, and flow totals

LPU-2428 Specifications

APG®

Liquid Tight
Non-Metallic →
Spiral Strain Relief

3/4" NPT →
Threads

2" NPT →
Threads

7.23"
183.64 mm

5.10"
129.54 mm

3.05"
77.47 mm

1.49"
37.84 mm

1.99"
50.54 mm

RST-4001

APG

5.5"
139.7 mm

3.25"
82.55 mm

Performance

- Operating Range
   - 1 - 25 ft. (0.3 - 7.6 m) on liquids
   - 1 - 10 ft. (0.3 - 3 m) on 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: Output dependent on output ranges from 0.6 - 3 seconds

Connectivity

- Output:
   - 4-20 mA (loop powered)
   - 600 ohms @ 24 VDC
   - 150 ohms @ 12 VDC
- Network/Web with the RST-5001

Environmental

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

Certification

- Class 1, Div. 1, Groups C & D
- Class 1, Zone 0, AEx iA IIB, T3; IP65

Electrical

- Total Current Draw: 4-20 mA
- Supply Voltage: 12-28 VDC
- Wiring Connection: 2-conductor shielded cable

Programming

- Interface with RST-4001 Programmer
   (purchase separately)
   - *The RST-4001 is powered by an internal 9v battery or a USB port connecting the RST to a computer*. A 2-conductor terminal strip allows the programmer to be connected in parallel with the 4-20 mA loop.*
- Volume Measurement Settings:
   Formulas for a wide variety of common tank types
- Flow Measurement Settings:
   Formulas for a wide variety of weirs and flumes
   total flow counter
- 32-point linearization table for unique tanks, weirs, and flumes
- User selected units of measure

Physical

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

*Note: The LPU-2428 software will only operate in a 32-bit Windows environment. It WILL NOT operate on a 64-bit Windows operating system.

Model Configuration Options

Model Number: LPU-2428 -C_____ Cable length in feet (6 ft. is standard)