# Intrinsically Safe Ultrasonic Level Sensor with 4-20 mA Output Series: LPU-2428







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, Intrinsically Safe rating
- Built-in calculations of current volume, flow, and flow totals



# **LPU-2428 Specifications**





# • 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: Dependent on output, ranges from 0.6 - 3 seconds

# **Connectivity**

Output: 4-20 mA (loop powered)
 Loop Resistance: 600 ohms @ 24 VDC
 150 ohms @ 12 VDC

Network/Web with the RST-5000 series module or LOE

# **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-4101 USB Module
  - (purchase separately)
  - -The RST-4101 is powered by a USB port connecting the RST to a computer. A 2-conductor terminal strip allows the module 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 $^{ ext{@}}$ ) transducer housing
- PC/PBT upper housing
- Transducer Type: Ceramic, PVDF faced

# **Model Configuration Options**

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

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