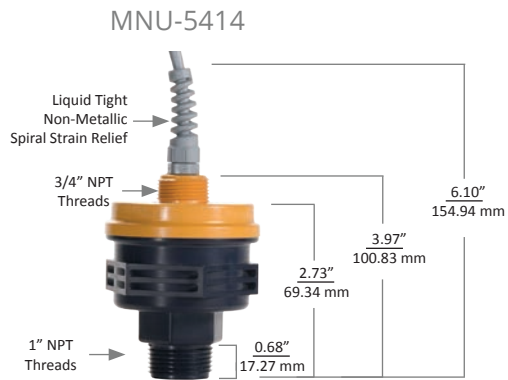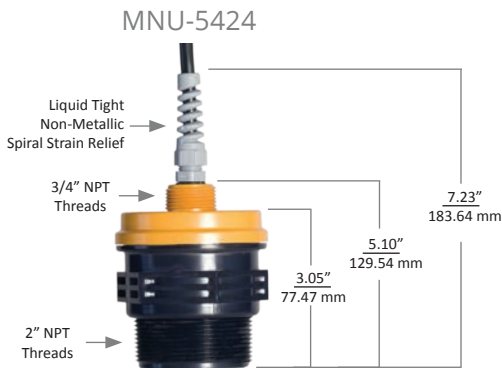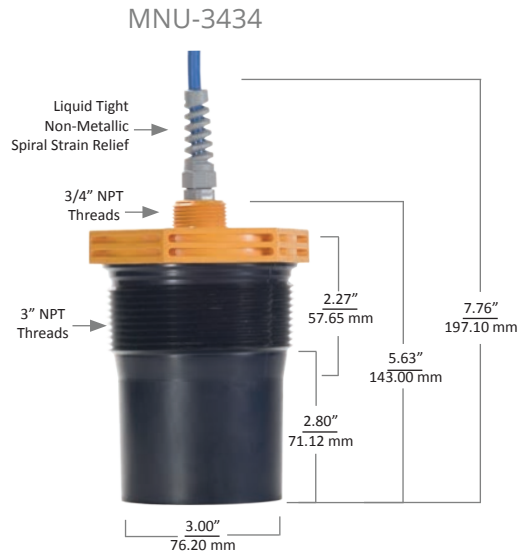# MNU Series Ultrasonic Sensor
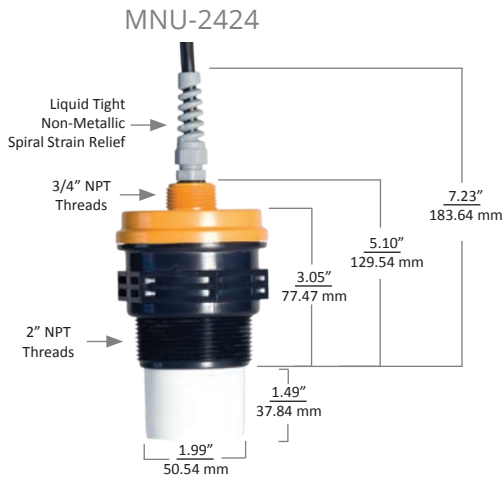

The MNU series sensors utilize standard Modbus RTU protocol (RS-485). The MNU is designed to work as a slave device. With the ability to measure volumn and distance, the MNU is the ideal sensor for your application.

Features

- Ranges from 4 in - 40 ft
- Self-Contained Sensor
- RS-485 Modbus RTU Interface
- Measure Distance, Level, or Volume
- Internal Temperature Compensation

MNU Specifications

MNU-2424

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

MNU-3434

Liquid Tight Non-Metallic Spiral Strain Relief

3/4" NPT Threads

3" NPT Threads

2.27"
57.65 mm

7.76"
197.10 mm

5.63"
143.00 mm

2.80"
71.12 mm

3.00"
76.20 mm

MNU-5424

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

MNU-5414

Liquid Tight Non-Metallic Spiral Strain Relief

3/4" NPT Threads

1" NPT Threads

6.10"
154.94 mm

3.97"
100.83 mm

2.73"
69.34 mm

0.68"
17.27 mm

Performance

- Operating Range:
  MNU-5414: 4 - 79 in (101 - 2007 mm)
  MNU-5424: 4 - 79 in (101 - 2007 mm)
  MNU-2424: 1 - 25 ft (0.30 - 7.62 m)
  MNU-3434: 1.5 - 40 ft (0.46 - 12.19 m)
- Beam Pattern: 9° off axis
- Internal Temperature Compensation
- Frequency:
  43 kHz (MNU-3434), 69 kHz (MNU-6424, 2424)
  170 kHz (MNU-5414)
- Accuracy: ±0.25% of detected range
- Resolution: 0.1 in. (2.5 mm)
- Response Time: Programmable

Connectivity

- Output:
  Modbus RTU (RS-485)

Environmental

- Ratings: NEMA 6P
- Operating Temp: -30° - 140°F (-34° - 60°C)

Electrical

- Total Current Draw: 22 mA
- Wiring Connection:
  4-conductor twisted-pair cable
  4-pin micro-connector

Programming

- Interface with RS-485 Modbus RTU
  Windows compatible software can be provided to adjust internal parameters.
- User selected units of measure

Physical

- PC/PBT blend upper housing
- Transducer Type: Ceramic, PVDF faced

Certification

- NEMA 6P

Model Configuration Options

Model Number: MNU- _____ - _____
                          A   B

A. Model

☐ **5414**   4 - 79 in (101 - 2007 mm) 1 inch NPT
☐ **5424**   4 - 79 in (101 - 2007 mm) 2 inch NPT
☐ **2424**   1 - 25 ft (0.30 - 7.62 m)
☐ **3434**   1.5 - 40 ft (0.46 - 12.19 m)

B. Cable/Micro Connector

☐ **CL**   Specify length - standard length is 6 ft
☐ **M**   Micro connector (note: Mating connector cable sold separately)

Common Model Configurations

Model Number	Model Description
MNU-2424-C6	**0 - 25 ft range, 69 kHz**, 6 ft cable
MNU-3434-C6	**1.5 - 40 ft range, 43 kHz**, 6 ft cable

MNU Accessories

Please order separately, by part number.

Description	Part Number
4 Conductor Over-molded Extension Cables with Foil Shield	
Straight, 2 m	135407-0002
Right angle, 2 m	135407-1002
Straight, 5 m	135407-0005
Right angle, 5 m	135407-1005

Tank Cloud

Put Your Tanks In The Cloud

❶ Remote Sensors

Connect to any 4-20mA signal or APG Modbus sensor for constant access to your data. Access up to 10 sensors on a single connection.

❷ Use the Internet Backbone

Connect the APG sensor or module to the Internet via landline, radio, cellular, or satellite.
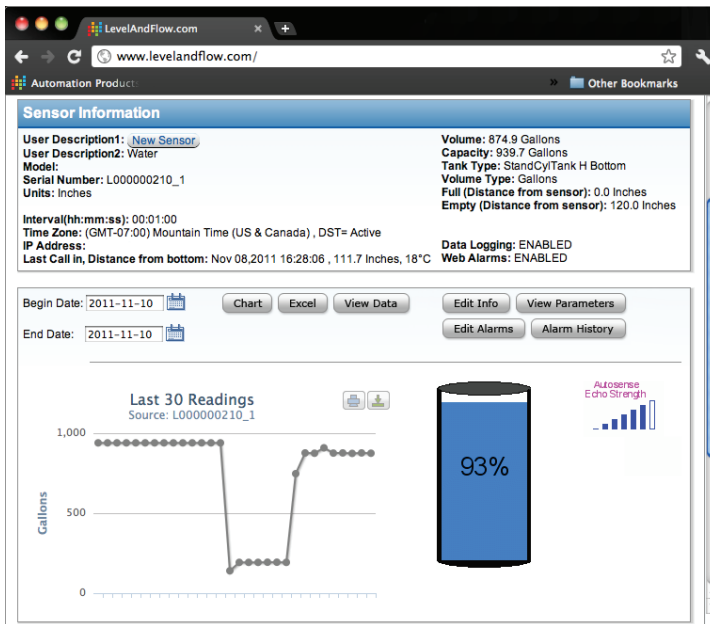
❸ View Secure Data 24/7

Access sensor data online through our secure portal at levelandflow.com. If the Internet is accessible, so is your information.

❹ Stay Up-To-Date

Program custom alarms - receive email and text (sms) message alerts on your computer, mobile phone, or tablet.

The Line-Up:

Online Data Portal

The Tank Cloud data portal, located online at www.levelandflow.com, displays everything you need to know about your measurement.

Here you can:

- View your current and past readings,
- Manage alarms,
- Configure your sensors,
- and Setup user permissions for others in your organization.

Measurements are sorted by location and grouped into sites. Simply select the site you would like to view, and then choose the sensor. Current readings are prominent in the center of the screen.

Contact us today at 888-525-7300 to set-up a demonstration of our sensors and online software. We are excited to show you how it can impact your business.