

Modbus/Tank Ultrasonic Sensor Series: MNU



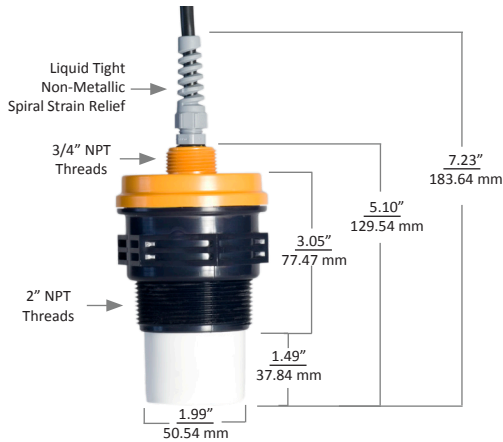
Series MNU Modbus Ultrasonic sensors bring the precision and control of Modbus to a wide variety of applications. MNU sensors use standard Modbus RTU protocol (RS-485) and are designed to work as a slave devices. With the ability to report measurements in distance, level, or volume, combined with four measurement ranges and four NPT mounting sizes, Series MNU sensors have the versatility to meet many needs.

Features

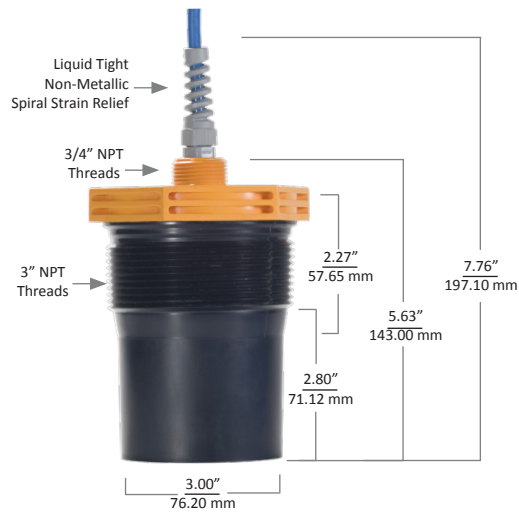
- Ranges from 4 in - 40 ft
 - Self-Contained Sensor
 - RS-485 Modbus RTU Interface
 - Measure Distance, Level, or Volume
 - Internal Temperature Compensation
-

MNU Specifications

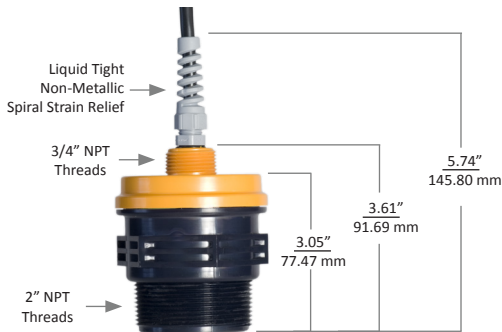
MNU-2424/8424-B81



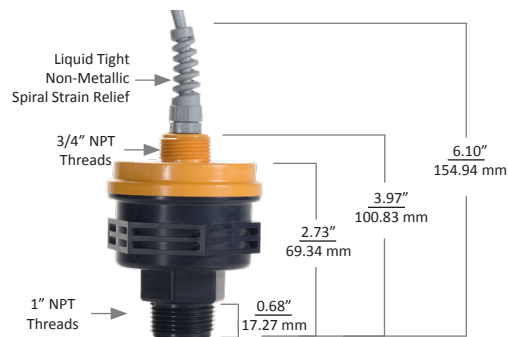
MNU-3434-B81



MNU-5424-B81



MNU-5414-B81



Performance

- Operating Range:
 - MNU-5414: 4 - 79 in (101 - 2007 mm)
 - MNU-5424: 4 - 79 in (101 - 2007 mm)
 - MNU-8424: 5 - 144 in (125 - 3658 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-2424)
 - 81 kHz (MNU-8424), 143 kHz (MNU-5414, 5424)
- 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

- Supply Voltage: 8-24 VDC
- 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- - -B81
 A B

A. Model

- 5414** 4 - 79 in (101 - 2007 mm), 1 inch NPT
- 5424** 4 - 79 in (101 - 2007 mm), 2 inch NPT
- 8424** 5 - 144 in (125 - 3658 mm), 2 inch NPT
- 2424** 1 - 25 ft (0.30 - 7.62 m), 2 inch NPT
- 3434** 1.5 - 40 ft (0.46 - 12.19 m), 3 inch NPT

B. Cable/Micro Connector

- CL** Specify length: L= Length in ft. Standard length is 6 ft
- M** Micro connector (note: Mating connector cable sold separately)

Common Model Configurations

Model Number	Model Description
MNU-2424-C6-B81	1 - 25 ft range, 69 kHz , 6 ft cable
MNU-3434-C6-B81	1.5 - 40 ft range, 43 kHz , 6 ft cable
MNU-8424-C6-B81	5 - 144 in range, 81 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-B81
Right angle, 2 m	135407-1002-B81
Straight, 5 m	135407-0005-B81
Right angle, 5 m	135407-1005-B81