# Modbus Network Display Series: MND



The MND Modbus Network Display provides a local display that can be wired to a local Modbus network or sensor, displaying readings from any of the sensors in the network (up to 10). It is easy to use and very flexible. The MND can operate in either master or sniffer mode. An output relay can be configured to provide power to a slave sensor, allowing for precise sensor power control. With the ability to listen in on master-sensor communication or poll sensors for current readings, the MND provides a valuable display option for your network.

#### **Features**

- Large, full 5-digit display with 0.4 in. characters
- Environmentally sealed housings: IP67 (Plastic housing) or IP68 (aluminum housing)
- User selectable units of measure: barrels, cubic inches, liters, cubic meters, gallons, million cubic feet, cubic feet, custom
- Switchable power control for connected sensor

# MND Specifications





- RS-485 (Modbus RTU): 2400, 9600, 19200, 38400 baud rates
- Display readings: volume, level, distance, pressure



#### Connectivity

- Output Options: 4-20 mA, 0-3 VDC, Telecom Relay 5A (240 VAC / 220 VDC max)
- Control: Modbus RTU



#### **Environmental**

- Protection rating: IP67 / IP68
- Storage Temp: -30° 160°F (-30° 71°C)
- Operating Temp: 0° 160°F (-18° 71°C)



#### Certification

- IP67 Plastic Housing
- IP68 Aluminum Housing
- CE



Programmable Features:
 User selectable units of measure
 Sniffer mode
 Master mode
 Auto-Off



- External Power Option: 9-28 VDC
- Battery Option:
  - 1 9V Lithium
  - 1 3.6V Lithium
  - 2 AA Alkaline
  - Low battery detection with 25% increments



- Plastic Housing:
  - Injected molded case (EMI-X ® PDX-W-88341)
- · Aluminum Housing:
  - Cast aluminum, epoxy coated
- Display: 5 digit LCD, 0.4 in. digits

## **MND Mounting Options**

Rubber Boot (Option #1)

3.4"

86.75 mm

Standoff Bracket (Option #2)

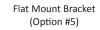
21.5 mm

4.00"

101.8 mm

Panel Mount Bracket (Option #4)







#### **MND** Accessories

Please order separately, by part number.

Description	Part Number
4-pin female micro connector (M12) Field Wireable	509087
4-pin female micro connector (M12) with cable	135407-00XX
	XX= 02, 05, 10, or 30 for meters of cable
4 Conductor Cable	135287
5 Conductor Cable	135296
6 Conductor Cable	135297
8 Conductor Cable	135300

### **Model Configuration Options**

Model Number: MND - \_\_\_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ - \_\_\_ -B8

#### **A. Input Power**

- □ **1** External Power (max 28VDC)
- □ 2 Battery 9V lithium
- □ 3 External Power low current (max 14.5VDC)
- □ **6** Batteries (2) AA Alkaline Series
- □ 8 Battery (1) AA 3.6V Lithium†

#### **B.** Analog Output

#### **Analog**

- □ 0 No Analog, RS-485 output
- □ **1** 4-20 mA & RS-485
- □ **2** 0-3 VDC & RS-485

#### C. Relays

- □ **0** No Relays
- □ **1** 2 Telecom NO Latching Relays
- □ **2** Relay 1 (controls on/off on a slave sensor)
- ☐ **3** One Telecom SPDT Latching Relay
- □ **4** 2 Telecom NC Latching Relays

#### D. Enclosure

- □ **0** 3" Round Plastic Housing
- □ **2** 3" Aluminum (1/2" NPT cable entry)
- □ **3** 4" Aluminum (3/4" NPT cable entry)
- □ 4 No Housing, 3" Round Plastic PCB Mount

#### E. Mounting/Cover

- □ **0** Standard Mounting
- □ **1** Rubber Boot
- □ **2** Standoff Bracket
- □ **4** Panel Mount Bracket (black delrin)
- □ **5** Flat Mount Bracket (black acrylic)
- □ **6** Flat Mount Bracket (black acrylic) and Rubber Boot

†Note: (1) 3.6V Lithium battery cannot be used to power a slave

<sup>▲</sup>This option is standard.

#### F. Main Connection Location

- □ **1** Position 1
- □ 2 Position 2
- □ **3** Position 3

#### G. Main Cable or Connector

- □ **C**\_ Cable, in feet, with flying leads (ex. C100=100 feet)
  - Availible in 1 ft increments; 6 ft standard
- □ **M**\_ Cable, in feet, with connector (ex. M5C5 = 4 pin M12 Female connector with 5 feet of cable) Availible in 1 ft increments; 6 ft standard
- □ Connector only

#### Connectors

- □ **1** 6 pin Tajimi Male
- □ **2** 4 pin M12 Male
- □ **3** 5 pin M12 Male
- □ **4** 8 pin M12 Male
- □ **5** 4 pin M12 Female
- □ **6** 8 pin M12 Male

#### H. Backlight

□ **0** No Backlight or Heater

#### **Requires External Power option**

□ **1** Backlight