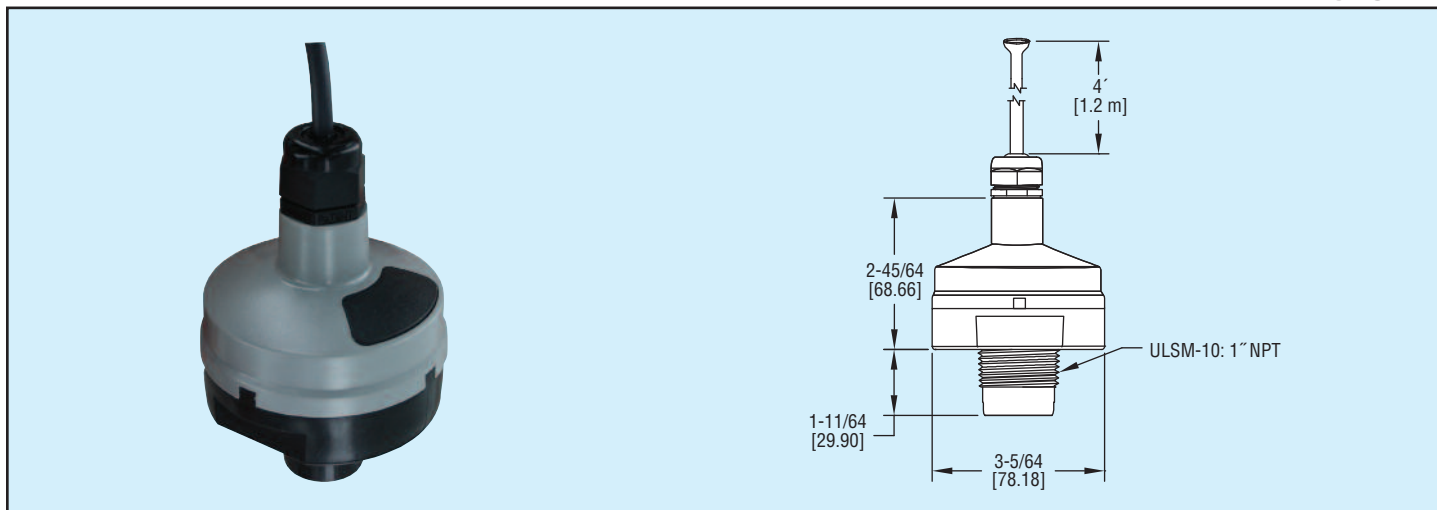




Model  
ULSM

# Ultrasonic Level Sensor

9.8' (3 m) Measuring Range, Non-Contact  
Transmitter, 4 SPST Programmable Relays



The Model ULSM Ultrasonic Level Sensor provides non-contact, continuous ultrasonic level measurement of fluids for medium range applications. Ultrasonic technology paired with automatic temperature compensation provides accurate and reliable measurements in almost all conditions. The Model ULSM has failsafe logic that is easily configured to custom applications via free software removing the need for target calibration. Using the free software, the Model ULSM can be programmed to transmit an output signal as well as set the four relays for control applications. This rugged design comes with a NEMA 6P submersible enclosure rating to ensure a long lasting unit.

## FEATURES

- Selectable deadband
- Fail-safe logic for control applications
- Four programmable relays
- Narrow beam width and short dead band
- Automatic temperature compensation

## APPLICATIONS

- Dirty, corrosive, or sticky fluids
- Bulk containers
- Sump and process tanks

Model	Range
ULSM-10*	9.8 ft (3 m)

\*USB Adapter necessary for calibration. One adapter can program multiple units.

## ACCESSORIES

- ULS-ACC-USB, USB Adapter for Calibration
- ULS-ACC-121, 1" x 1" NPT Reducer Bushing Fitting (Sch. 40), PVC
- ULS-ACC-122, 1" x 1" NPT Reducer Bushing Fitting (Sch. 80), PVC
- ULS-ACC-221, 2" Socket x 1" NPT Reducer Bushing Fitting (Sch. 40), PVC
- ULS-ACC-222, 2" Socket x 1" NPT Reducer Bushing Fitting (Sch. 80), PVC
- ULS-ACC-510, 1" NPT Polypropylene Side Mount Bracket

## SPECIFICATIONS

- Service:** Compatible fluids.
- Wetted Materials:** Sensor: PVDF; O-ring: FKM.
- Ranges:** 9.8' (3 m).
- Accuracy:**  $\pm 0.2\%$  of range.
- Resolution:** 0.039" (1 mm).
- Blind Zone:** 4" (10 cm).
- Beam Width:** 2" (5 cm).
- Temperature Limits:**
  - Process: 20 to 140°F (-7 to 60°C);
  - Ambient: -31 to 140°F (-35 to 60°C).
- Temperature Compensation:** Automatic.
- Pressure Limits:** 30 psi (2 bar).
- Power Requirement:** 12 to 28 VDC.
- Output Signal:** 4 to 20 mA, 2-wire;
  - Invert: 4 to 20 mA or 20 to 4 mA;
  - Fail-safe: 4 mA, 20 mA, 21 mA, 22 mA, or hold last.
- Loop Resistance:** 400  $\Omega$  max.
- Electrical Connections:** 4' (1.2 m) 9 conductor shielded cable.
- Contact Type:** 4 SPST relays.
- Contact Rating:** 1 A max @ 28 VDC max.
- Deadband:** Selectable (no hysteresis, 1/4", 1/2", 1", 1/2 cm, 1 cm, 2 cm, 5 cm or not available).
- Process Connection:** 1" NPT, 1" BSPP (optional).
- Enclosure Rating:** NEMA 6P (IP68).
- Enclosure Material:** Polycarbonate; Gland: TPE.
- Mounting Orientation:** Vertical.
- Memory:** Non-volatile.
- Failsafe:**
  - Contact: Power loss: Hold last contact;
  - Power on: Open, close, or last contact.
- Programming:** Free PC software download (USB adapter required).
- Weight:** 1.5 lb (0.68 kg).
- Agency Approvals:** CE, RoHS.