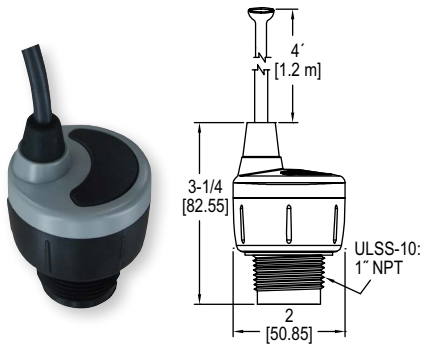
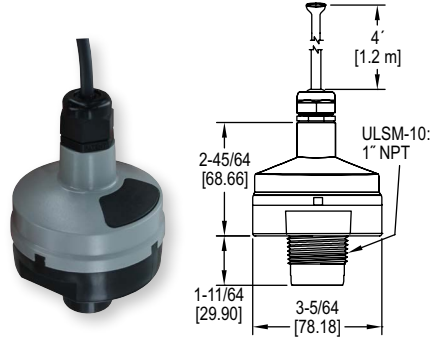


ULTRASONIC LEVEL SENSORS

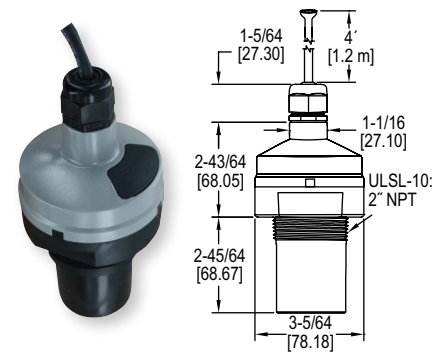
Non-Contact Transmitter, SPST Programmable Relays



ULSS



ULSM



ULSL



The **Series ULSS Ultrasonic Level Sensor** provides non-contact, continuous ultrasonic level measurement of fluids for short range applications. It has a 4.1' (1.2 m) measuring range with a 0.125" (3 mm) accuracy.

The **Series ULSM Ultrasonic Level Sensor** provides non-contact, continuous ultrasonic level measurement of fluids for medium range applications. It has a 9.8' (3 m) measuring range with a $\pm 0.2\%$ of range accuracy.

The **Series ULSL Ultrasonic Level Sensor** provides non-contact, continuous ultrasonic level measurement of fluids for tall range applications. It has a 18' (5.5 m) measuring range with a $\pm 0.2\%$ of range accuracy.

BENEFITS/FEATURES

- Via free software, units can be programmed to transmit an output signal and operate four relays for control applications
- Provides reliable, accurate, and non-contact level measurement of compatible liquids
- Non-contact technology offers no moving parts to wear, jam, corrode, or get coated like contact technologies
- Mapping software makes effective measuring surface only a 3" (76.2 mm) diameter column with no concerns of ladders, pipes, or other tank intrusions in the remaining sound cone
- Ultrasonic technology paired with automatic temperature compensation provides accurate and reliable measurements in almost all conditions
- Fail-safe logic is easily configured to custom applications via free software removing the need for target calibration
- Full NEMA 6P submersible enclosure rating to ensure excellent product durability

APPLICATIONS

- Water and wastewater
- Pulp and paper processing
- Sump and process tanks
- Chemical processing
- Food and beverage

MODEL CHART	
Model	Range
ULSS-10	4.1' (1.25 m)
ULSM-10	9.8' (3 m)
ULSL-10	18' (5.5 m)

Note: USB adaptor necessary for calibration. One adaptor can program multiple units.

SPECIFICATIONS

Service: Compatible fluids.
Wetted Materials: Sensor: PVDF; O-ring: FKM.
Ranges: See chart.
Accuracy: ULSS: 0.125" (3 mm); ULSM & ULSL: $\pm 0.2\%$ of range.
Resolution: ULSS: 0.019" (0.5 mm); ULSM: 0.039" (1 mm); ULSL: 0.079" (2 mm).
Blind Zone: ULSS: 2" (5 cm); ULSM: 4" (10 cm); ULSL: 8" (20 cm).
Beam Width: ULSS & ULSM: 2" (5 cm); ULSL: 3" (7.62 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 Limit: 30 psi (2 bar).
Power Requirement: 12-28 VDC.
Output Signal: 4-20 mA, 2-wire; Invert: 4-20 mA or 20-4 mA; Fail-safe: 4 mA, 20 mA, 21 mA, 22 mA, or hold last.
Loop Resistance: 400 Ω 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: Holds last contact; Power on: Open, close, or last contact.
Programming: Free PC software download (USB adaptor required).
Weight: 1 lb (0.45 kg).
Compliance: CE.

ACCESSORIES	
Model	Description
ULS-ACC-121	2" x 1" NPT reducer bushing fitting (sch. 40), PVC
ULS-ACC-122	2" x 1" NPT reducer bushing fitting (sch. 80), PVC
ULS-ACC-131	3" x 2" NPT reducer bushing fitting (sch. 40), PVC
ULS-ACC-132	3" x 2" NPT reducer bushing fitting (sch. 80), PVC
ULS-ACC-142	4" x 2" 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-231	3" socket x 2" NPT reducer bushing fitting (sch. 40), PVC
ULS-ACC-232	3" socket x 2" NPT reducer bushing fitting (sch. 80), PVC
ULS-ACC-241	4" socket x 2" NPT reducer bushing fitting (sch. 40), PVC
ULS-ACC-242	4" socket x 2" NPT reducer bushing fitting (sch. 80), PVC
ULS-ACC-510	1" NPT polypropylene side mount bracket
ULS-ACC-520	2" NPT polypropylene side mount bracket
ULS-ACC-USB	USB adaptor for calibration, PVC

Level Transmitters,
Ultrasonic