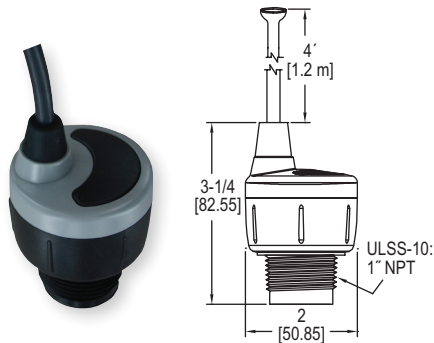
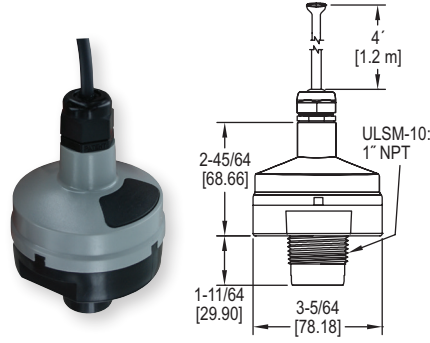


ULTRASONIC LEVEL SENSORS

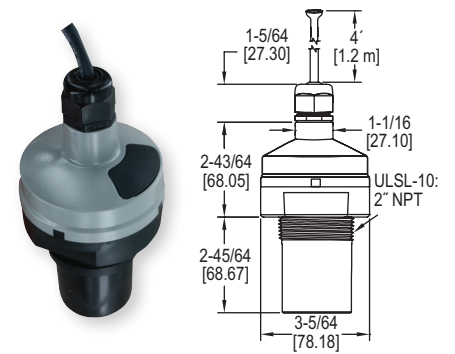
Non-Contact Transmitter, SPST Programmable Relays



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.

FEATURES/BENEFITS

- 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 adapter necessary for calibration. One adapter can program multiple units.

| ACCESSORIES | |
|-------------|---|
| Model | Description |
| ULS-ACC-USB | USB adapter for calibration, PVC |
| 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 |

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 to 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 adapter required).
- Weight:** 1 lb (0.45 kg).
- Agency Approvals:** CE.

