

TRASONIC LEVEL SENSORS

Non-Contact Transmitter, SPST Programmable Relays



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 ±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 ±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 adoptor necessary for calibration	

One adaptor can program multiple units.

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

SPECIFICATIONS

Service: Compatible fluids.

Wetted Materials: Sensor: PVDF; O-ring: FKM.

Ranges: See chart.

Accuracy: ULSS: 0.125" (3 mm); ULSM & ULSL: ±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

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

Programming: Free PC software download (USB adaptor required).

Weight: 1 lb (0.45 kg).
Agency Approvals: CE