

# NON-CONTACT LEVEL TRANSMITTER

LVU91



- ✔ **Non-Contact Level Transmitter with Two-Wire 4 to 20 mA Output**
- ✔ **Accurate and Reliable Measurement from 90 mm to 1.8 m (0.3 to 6')**
- ✔ **Low Cost Solution for OEM and Process Applications**
- ✔ **Compact Size and 3/4" Transducer for Small Tanks**
- ✔ **Automatic Temperature Compensation Over Entire Range**
- ✔ **PP Enclosure Rated NEMA 4X with PVDF Transducer**
- ✔ **Fail-Safe Intelligence Provides Simple Process Safety**
- ✔ **Echo-Safe Filtration Eliminates False Echo Signal Returns**

A high frequency sound wave is pulsed two times per second from the base of the transducer. The sound wave reflects against the process medium below and returns to the transducer. The microprocessor based electronics measure the time of flight between the sound generation and the receipt, and translates this figure into the distance between the transmitter and the process medium below.

The two-wire, small tank non-contact level transmitter is mounted through the top wall of the tank and provides non-contact measurement up to 1.8 m (6'). With non-contact technology, the transmitter is an excellent choice for applications with dirty, coating or scaling type media such as acid waste. The compact design is the perfect size for small tank applications.



LVU91 shown smaller than actual size.

## SPECIFICATIONS

**Range:** 90 mm to 1.8 m (0.3 to 6')

**Accuracy:** ±0.25% of span

**Resolution:** 3 mm (0.125")

**Frequency:** 83 kHz (nominal)

**Pulse Rate:** 2 per second

**Beam Width:** 8° conical

**Dead Band:** 90 mm (0.3')

minimum

**LED Indication:** Power status

**Supply Voltage:** 24 to 36 Vdc

**Loop Resistance:**

600Ω @ 36 Vdc

**Signal Output:** 4 to 20 mA,

24 to 36 Vdc

**Temp. Rating:**

-40 to 60°C (-40 to 140°F)

**Temp. Comp.:**

Automatic over entire range

**Pressure Rating:**

30 psi (2 bar) @ 25°C, derated @

1.667 psi (0.113 bar) per °C

above 25°

**Enclosure Rating:**

NEMA 4X (IP65)

**Enclosure Material:**

Polypropylene, U.L. 94 VO

**Transducer Material:** PVDF

**Mounting Threads:** ¾ NPT (¾ G)

**Mounting Gasket:**

¾ FKM (metric only)

**Conduit Connection:** ½ NPT

**CE Compliance:** EN50082-2

immunity EN55011 emission

## Application Variables

General purpose	Yes	Low pressure	Yes
Conductive	Yes	Medium pressure	No
Non-conductive	Yes	Intrinsically safe	No
Δ Conductivity	Yes	Integral relay	No
Non-contact	Yes	Foam	No
Clean	Yes	Contact	No
Dirty	Yes	Vapors	No
Coating	Yes	Δ Gas density	No
Non-coating	Yes	Vacuum	No
Ambient pressure	Yes		

## To Order

Model No.	Description
LVU91	Two-wire transmitter, loop powered (4 to 20 mA), ¾ NPT
LVU92	Two-wire transmitter, loop powered (4 to 20 mA), ¾ G

Comes complete with operator's manual.

**Ordering Examples:** LVU92, 2-wire transmitter.

LVU91, 2-wire transmitter plus LVCN-51 a controller.

## Accessory

Model No.	Description
LVCN-51	Continuous relay controller with LED display