

TWO-WIRE ULTRASONIC LEVEL TRANSMITTER

LVU-201A



- ✓ **Non-Contact Level Transmitter with 4 to 20 mA Output**
- ✓ **Accurate and Reliable Level Measurement from 0.2 to 5.5 m (0.5 to 18')**
- ✓ **Automatic Temperature Compensation**
- ✓ **8° Beam Allows Application in Restricted Environments**
- ✓ **All-Plastic Construction**
- ✓ **Pushbutton Calibration with Display**
- ✓ **Microprocessor Logic Filtration Eliminates False Echo Signal Returns**
- ✓ **Failsafe Intelligence Provides Echo Signal Loss Safety**

The LVU-201A 2-wire ultrasonic level transmitter is the compact solution for non-contact continuous level measurement in process vessels, storage tanks, and open channels. This loop-powered device provides accurate level measurement up to 5.5 m (18') and is the ideal choice for more challenging coating or scaling liquids, including sodium hydroxide, wastewater, resin, wax, liquor, and bleach.

An ultrasonic sound wave is pulsed 2 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 receipt, and translates this figure into the distance between the transmitter and process medium below.

SPECIFICATIONS

Range: 0.2 to 5.5 m (0.5 to 18')
Accuracy: ±0.25% of span
Resolution: 3 mm (0.125")
Frequency: 50 kHz
Pulse Rate: 2 pulses/second
Beam Width: 8° conical
Blocking Distance: 15.2 m (6") minimum
Display Type: 4-segment LCD
Display Units: In/cm
Supply Voltage: 12 to 32 Vdc
Max Loop Resistance: 600 Ω @ 24 Vdc
Signal Output: 4 to 20 mA
Signal Invert: 4 to 20 mA/20 to 4 mA
Calibration: Pushbutton
Mountable Gasket: FKM
Conduit Entrance: Single, ½ NPT
CE Compliance: EN61326 EMC
Failsafe Diagnostic: Reverts to 4 mA or 22 mA
Temperature Rating: -20 to 60°C (-4 to 140°F)
Temperature Compensation: Automatic over entire range
Pressure Rating: 30 psi @ 25°C, derated @ 1.667 psi per °C above 25°C
Enclosure Rating: NEMA 4X (IP66)
Enclosure Material: Polypropylene
Transducer Material: Polyvinylidene fluoride
Mounting Threads: 2 NPT
Dimensions: 71 D x 159 mm H (2.8 x 6.3")

LVU-201A, shown smaller than actual size.



APPLICATION VARIABLES

	Variable	Yes	No
Liquid	Foam		✓
	Conductive	✓	
	Non-Conductive	✓	
	Δ Conductivity	✓	
	Contact		✓
	Non-Contact	✓	
	Clean	✓	
	Dirty	✓	
	Non-Coating	✓	
	Vapors		✓
	Δ Gas Density		✓
	Vacuum		✓
	Ambient pressure	✓	
Low Pressure	✓		
Medium pressure		✓	

To Order

Model No.	Description
LVU-201A	Ultrasonic 2-wire transmitter, loop powered (4 to 20 mA)

Accessories

Model No.	Description
SBG111956	Single channel zener barrier
LVCN-51	Continuozus relay controller with LED display

Comes complete with operator's manual.

Ordering Example: LVU-201A, ultrasonic 2-wire transmitter, loop-powered 4 to 20 mA, intrinsically safe configuration when used with SBG111956.