

# TWO-WIRE ULTRASONIC LEVEL TRANSMITTER

LVU-201A  
**\$850**



- ✓ **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:** Viton®  
**Conduit Entrance:** Single, ½ NPT  
**Classification:**  
**Intrinsically Safe CSA:** Class I, Groups B, C and D; Class II, Groups E, F and G; Class III  
**T3 EEx:** Class 1, Division 1, Groups A, B, C, D; EExia IIC T3

### Parameters:

**CSA:**  $V_{max} < 32 \text{ V}$ ;  $I_{max} < 130 \text{ mA}$ ;  
 $C_a = 0 \mu\text{F}$ ;  $L_a = 0 \mu\text{H}$   
**EEx:**  $U_i = 32 \text{ V}$ ;  $I_i = 300 \text{ mA}$ ;  
 $P_i = 1.3 \text{ W}$ ;  $C_i = 0 \mu\text{F}$ ;  $L_i = 0 \mu\text{H}$

**Certificates:** CSA-LR 79326

**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



LVU-201A, \$850, shown smaller than actual size.

## APPLICATION VARIABLES

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

## ALL MODELS AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)		
Model No.	Price	Description
LVU-201A	\$850	Ultrasonic 2-wire transmitter, loop powered (4 to 20 mA)
Accessories		
Model No.	Price	Description
ISB-201A	\$780	Intrinsic safety barrier for LVU-201A
LVCN-51	425	Continuous relay controller with LED display
VT-1004-VHS	99	Reference Video: Level

Comes with complete operator's manual.

The above-mentioned prices are based on the general purpose transmitter configuration.

**Ordering Example:** LVU-201A, ultrasonic 2-wire transmitter, loop-powered 4 to 20 mA, \$850. CSA-approved intrinsically safe configuration with ISB-201A.

**Ordering Example:** LVCN-51, continuous relay controller with LED display, \$425.

For CE-approved controller configuration, add "CE" to model number and add \$30 to price. The CE-approved configuration complies with EN50082-2 immunity and EN55011 emission standards.



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### • Heaters

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