

Three-Wire Ultrasonic Level Transmitter



Model LVU-301
£695

- ✓ 8° Beam Allows Application in Restricted Environments
- ✓ All Plastic Construction
- ✓ LED Digital Display Indicates Level in Inches or Centimetres
- ✓ Push Button Calibration For All User Set Points
- ✓ Built-in 10A Relay May Be Configured For Alarm or Automatic Fill/Empty Operations
- ✓ Fail-Safe Relay Logic Provides Echo and Power Loss Safety
- ✓ Sanitary Model Available

APPLICATION

The three-wire ultrasonic level transmitter is the compact solution for non-contact continuous level measurement in process vessels, storage tanks and open channels. The transmitter also features a built-in 10A relay which can be configured as an alarm on a single set point or latched on two different set points for automatic fill or empty operations. Industrial and municipal liquid examples include sodium hydroxide, wastewater, resin, wax, liquor and bleach.

An ultrasonic sound wave is pulsed eight 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.

APPLICATION VARIABLES

	Variable	Yes	No
Liquid	Foam		✓
	Conductive	✓	
	Non-conductive	✓	
	△ Conductivity	✓	
	Contact		✓
	Non-contact	✓	
	Clean	✓	
	Dirty	✓	
	Non-coating	✓	
	Vapours		✓
	△ Gas Density		✓
	Vacuum		✓
	Ambient pressure	✓	
	Low Pressure	✓	
Medium pressure		✓	

Option “-S” provides a natural PVDF sensor built to AAA standards with a 4" female connection.



SPECIFICATIONS

Range: 15 to 750cm
Accuracy: ±0.25% of span
Resolution: 3 mm
Frequency: 50 kHz
Pulse rate: 8 pulses/second
Blocking distance: 150mm minimum
Display type: 4 segment LED
Display units: Inch / cm
Supply voltage: 14-36 Vdc
Consumption: 200 mA
Current flow: Source / sink
Signal output: 4-20 mA, 12-36 Vdc
Signal averaging: Fast / slow
Calibration: Push button
Relay current: 10 amp
Relay output: 250 VAC, 10A, SPDT

Relay indication: ON / OFF status
Contact resistance: 30 milliΩ
Fail-safe diagnostic:
 Relay reverts to safe position
Temperature rating:
 -40 to 60°C, (-40 to 140°F)
Temp. compensation:
 Automatic over entire range
Pressure rating: 2bar @ 25 °C., derated @ 115mbar per °C. above 25 °C
Enclosure rating: IP65
Enclosure material: Polypropylene
Transducer material: PVDF
Mounting threads: 2" NPT (4" female with “-S” option)

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)		
Model No.	Price	Description
LVU-303	£695	Ultrasonic Three-Wire Transmitter, Sourcing (4-20 mA)
LVU-301	695	Ultrasonic Three-Wire Transmitter, Sinking (4-20 mA)
Accessories		
Model No.	Price	Description
LVCN-51-CE	£373	Continuous Relay Controller with LED Display

For Sanitary Option add “-S” to model number and add £119 to base price. The above mentioned prices are based on the general purpose transmitter configuration. The sourcing transmitter provides internal 4-20 mA excitation and should be used with a sinking device. The transmitter with sinking output requires external excitation or should be used with a sourcing device, such as the LVCN-51 continuous relay controller. **Ordering example:** LVU-303, Ultrasonic, three-wire transmitter, sourcing (4-20 mA), £695.