

ULTRASONIC NON-CONTACT LEVEL TRANSMITTER

For 0.3 to 18.3 m (1 to 60')

LVU41
Starts at
\$941



- ✓ RS232 or RS485 Communications Available
- ✓ Programmable
- ✓ Pushbutton Calibration
- ✓ Elimination of Unwanted Echoes
- ✓ Temperature Compensated
- ✓ Field/Bench Calibration
- ✓ Self-Cleaning Sensor Face
- ✓ Non-Volatile Memory (Batteries Not Required)

The LVU40 Series consists of advanced ultrasonic level measurement sensors for liquids. These products continue to prove useful in demanding applications.

The microprocessor-based circuits provide a temperature-compensated signal for improved accuracy. All models have the ability to filter false echoes produced by peripheral obstructions.

These transmitters can perform continuous level measurement in a range of 0.3 to 18.3 m (1.0 to 60'), with several power and programmability options. Point level can also be obtained by using a PLC (programmable logic controller) or one of OMEGA's CNI Series process controllers.

SPECIFICATIONS

Accuracy: ±0.25% of max range (in air)

Range: 0.3 to 18.3 m (1 to 60')

Resolution: 6.9 mm (0.270")

Frequency: 45 kHz

Dead Zone Range: 0.3 m (1')

Operating Temperature Range: -40 to 60°C (-40 to 140°F)

Pressure: 1 bar (15 psig max)

Mounting: 3 NPT

Beam Angle: 6 to 12° at -3 dB (model dependent)

Loss of Echo Hold:

30 seconds, 22 mA output

CNi833, \$310, shown smaller than actual size (see page M-41).



Power Options:

AC: 115 Vac, 60 Hz or 230 Vac, 50 Hz (±20%) 1.7 VA

DC: 12 to 30 Vdc @ 0.07 A, @ 24 Vdc R load = (Vs - 6)/24 mA

Output: 4 to 20 mA or 20 to 4 mA, 6.1 µA resolution; 750 Ω (isolated on 4-wire models only)

Optional: RS232 or RS485 communications port

Fuse: 0.125 A/250 V type



LVU41-RS232, \$941, shown smaller than actual size.

Temperature Compensation:

Onboard the sensor

Calibration: Pushbutton or optional programmable

Diagnostics (Echo Profile):

Via optional programmable port

Approval: Entela, CE

Conduit Entry: ½ NPT hole (PVC only)

Enclosure: Aluminum with PVC antenna ingress protection [NEMA 4X (IP66)]

Housing Dimensions:

101.6 x 226.1 m (4 x 8.9")

Sensor Diameter: 76.2 mm (3")

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

| Model No. | Price | Description |
|-------------|-------|---|
| LVU41-RS232 | \$941 | 3-wire 12 to 30 Vdc ultrasonic level transmitter with RS232 communications and Windows software |
| LVU41-RS485 | 941 | 3-wire 12 to 30 Vdc ultrasonic level transmitter with RS485 communications and Windows software |
| LVU42-RS232 | 966 | 4-wire 115 Vac ultrasonic level transmitter with RS232 communications and Windows software |
| LVU42-RS485 | 966 | 4-wire 115 Vac ultrasonic level transmitter with RS485 communications and Windows software |

Accessories

| Model No. | Price | Description |
|-------------|-------|--|
| CNI3233 | \$195 | ½ DIN controller with relays, see page M-41 for details |
| DPI32 | 150 | ½ DIN panel meter, see page M-37 for details |
| PSR-24S | 60 | Regulated power supply, 90 to 264 Vac input, 24 Vdc output, 400 mA, screw terminals, UL |
| PSR-24L | 60 | Regulated power supply, 90 to 264 Vac input, 24 Vdc output, 400 mA, stripped leads, UL |
| PSR-24L-230 | 60 | Regulated power supply, 230 Vac input, 24 Vdc output, 400 mA, stripped leads, CE |
| FW-205 | 250 | Reference Book: The Consumer Guide to Non-Contact Level Gauges  |

Comes complete with software and operator's manual.

Ordering Examples: LVU42-RS485, 4-wire ultrasonic transmitter with RS485, \$966.

LVU41-RS232, 3-wire ultrasonic level transmitter with RS232, \$941.

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