



PulStar® L-95 Loop-Powered Sensor

Cost Effective | Non-Contact | Reliable | Distance Measurement

Massasonic PulStar Loop-Powered Sensors are ruggedly designed ultrasonic transmitter modules that provide reliable continuous level or distance measurement of fluids, pastes, or solid bulk materials for application ranges from 8 inches (200 mm) to 20 feet (6 meters). Incorporating state-of-the-art ultrasonic technology and processing algorithms, these sensors provide precision non-contact measurement for applications such as factory automation, process control or tank level monitoring.

PulStar L-95 Sensors include advanced diagnostics that will retrieve the ultrasonic waveforms for analysis and display them on a computer to aid users when evaluating complex installations. They are RoHS compliant, CE Certified, and IP67 Rated.

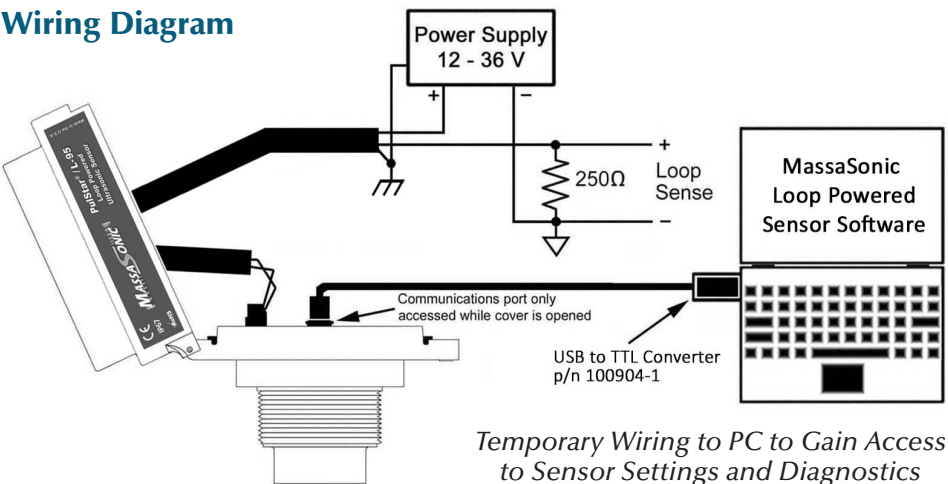
PulStar Loop-Powered Sensors have 2 inch NPS mounting fittings and come in PVDF housings for use in different environments. They are equipped with continuous temperature compensation to achieve precise measurement accuracy. Other user friendly features include: diagnostic and monitoring outputs, along with protection from over voltage, short circuits, and reverse polarity.

Operating from 12 to 36 V DC, PulStar Sensors provide user programmable linear outputs of 4 to 20 mA, which are proportional to the measured distance to the target.

These sensors are adjustable for averaging measurement, analog output slope, loss-of-echo time-out and detection sensitivity adjustment. *Note: these are only used temporarily for custom setup and diagnostics.*

PulStar Series Sensors stand out over other sensors because of their user friendly set up, versatile control options, field proven reliability, and affordable cost of ownership.

Wiring Diagram



FEATURES

- 2 Wire Operation Up to 1,000 ft.
- Plug & Play Setup
- Temperature Compensated
- Narrow Beam and Short Dead Band
- Variety of Easy User Programmable Customization
- Low Cost of Ownership (CoO)
- Tamperproof & Rugged
- IP67 Enclosure Rating
- Accurate Under Demanding Environmental Conditions

APPLICATIONS

- Liquid & Solid Level Control
- Tanks, Totes, Processing
- Bulk Material Management
- Web Loop Monitoring
- Roll Diameter Measurement
- Automatic Packaging Operations
- Position Detection



GENERATIONS AHEAD IN SONAR & ULTRASONIC TECHNOLOGY

For more information, please visit www.massasonic.com, or contact one of our Applications Specialists at: www.massasonic.com/contact





PulStar® L-95 Sensor - Performance Specifications

(Typical 24V DC, 22°C, and 50% RH Air)

Performance	
Target Detection Distances	8 inches (200 mm) to 20 feet (6 m)
Measurement Resolution	0.01 inches (0.25 mm)
Measurement Accuracy	± 0.1% of Target Range
Echo Detection Sensitivity	User Selectable
System Beam Angle	8° Conical
Power Up Start Up Time	7 seconds (nominal)
Temperature Compensation	Internal Probe
Mechanical (See Outline Drawing)	
Housing Material	PVDF
Transducer Surface	PVDF
Electrical Interface	Customer to supply 2 conductor shielded cable, typically 22 or 24 AWG
Environmental	
Operational Temperature	-30°C to 65°C
Storage Temperature	-40°C to 85°C
Relative Humidity	0 to 95%, non-condensing
Enclosure Rating	IP67

User Interface Specifications

Interface	
Power Required	12V DC to 36 V DC
Target Distance Averaging	Rolling Averages: from 1 to 10 samples <i>Factory Default: 4 Samples</i>
Loss of Echo Time-Out	Programmable from 1 to 254 consecutive samples missed before time-out <i>Factory Default: 1</i>
Sampling Rate	~ 1 Hz
Operating System for MassaSonic Software	Windows 10, 8, 7, Vista, and XP SP3

All Specifications Subject to Change Without Notice

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