



Model: **WLV7389-900-SB**

Non-contact Wireless Ultrasonic Level Sensor Transmitter and Analog Output Wireless Receiver



FEATURES & BENEFITS

- Wireless Bridge Between Level Sensor & Instrument
- Non-contact Ultrasonic Sensor with Narrow Beam Pattern
- Up To 6 Miles Line-of-site Transmit/Receive Distance
- 500cm (16') Measurement Range
- Can Be 12-24V DC, Hardwired, Battery or Solar Powered
- Receiver Provides 4-20mA or 1-5V DC Analog Output
- License Free Point-to-point Radio Operation

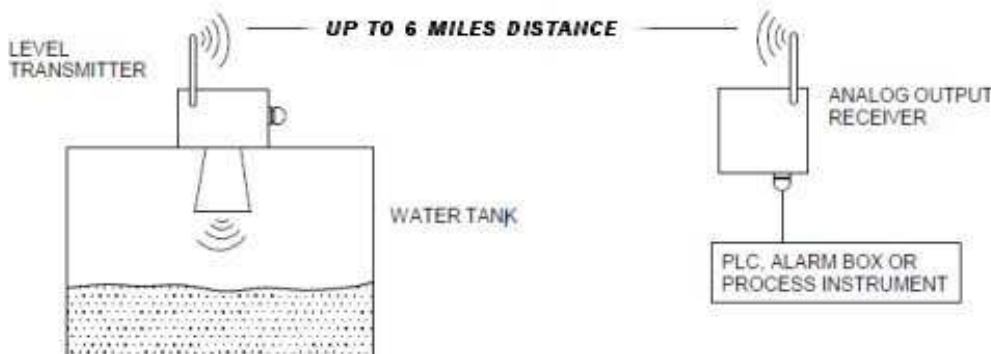
APPLACATIONS

- Bin, Tank or Pool Level Monitoring, Irrigation Systems
- Process Control & Instrumentation
- Snow Level Measurement

DESCRIPTION

Model WLV7389-900-SB Wireless Ultrasonic Tank Level Transmitter provides a license free 900 MHz wireless bridge between level sensor and process instrument at a distance up to 6-miles line-of-site (LOS). The sensor/wireless transmitter combination accomplishes tank level measurement by providing a 4-20mA current or 1-5V DC voltage output on the wireless receiver side that corresponds to distance measured by the sensor. Connect the receiver output to a process instrument or PLC to control a pump, valve or alarm unit.

SAMPLE APPLICATION: ULTRASONIC LEVEL SENSOR SENDING WIRELESS MEASUREMENTS TO REMOTE PLC, ALARM BOX OR PROCESS INSTRUMENT



General Specifications

Radio Frequency: 900 MHz

Wireless Analog Signal Transmission Resolution: 10-bit

RF Output Impedance: 50 Ohm nominal

Transmitter/Receiver Code Matching: Factory set

Wire Connections: Terminal Blocks (14 – 24 AWG)

Transmitter/Receiver Enclosure: Din-rail Plastic or NEMA 4X

Antennas: 7dBi Antenna (Included with system)

Transmit/Receive RF Distance:

Indoor/Urban - 1000ft, Outdoor Line-of-site up to 3 Miles
(With Included 5dbi Antennas)

Indoor/Urban - 1600ft, Outdoor Line-of-site up to 6 Miles.
(With Optional 12dbi Antennas)

Level Sensor Specifications

Sensor Frequency: 42kHz

Sensor Read Rate: 6.66Hz

Measurement Distance/Beam Pattern: 500cm (16') Narrow

Mounting: 3/4"-14 NPT Thread

Wireless Transmitter Specifications

Operating Power: Can be Hardwired, Battery or Solar

Operating Temperature: -10 to 130 °F (-23 to 54 °C)

Hardwired - 12 to 24V DC @ 250mA

Battery – 12V Battery (See Manual for Battery Life Estimates)

Optional Solar – Includes Panel, Battery, Charge Controller

RF Power Output: 100mW

RF Data Rate: 10 Kbps

Wireless Receiver Specifications

Operating Power: 12-24V DC @ 350mA

Operating Temperature: -10 to 130 °F (-23 to 54 °C)

Receive Sensitivity: -100 dBm

RF Input Impedance: 50 Ohm nominal

Analog Output: 4-20mA, 1-5VDC (Field Selectable)

Enclosure: NEMA 4X PCT Plastic, Din-rail or Painted Aluminum
(See model numbers)

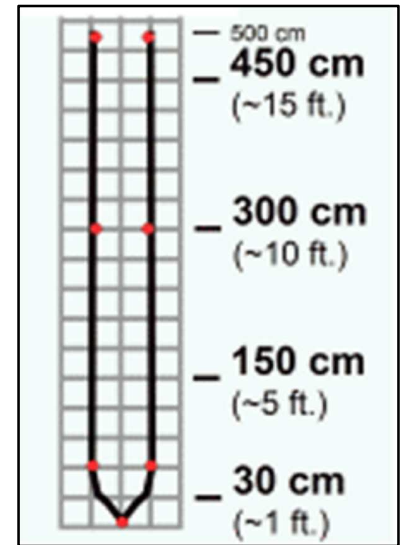
Wireless Regulatory Approvals

Regulatory: FCC Part 15 (No license required)



Optional Antenna Model: AT24-12DBI-YD-RP-SMA

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16' (500cm) Beam Pattern



Solar Kit Includes Panel, Battery, Charger, Enclosure



Includes 9' Antenna Remote Mount Kit

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Wireless Receiver Versions



NEMA 4X Receiver



Din-rail Receiver



Painted Aluminum Receiver

Available Models

Model Number	Description/Measurement Distance
WLV7389-900-SB-NB	16' (500cm) Distance Wireless Level Transmitter with Analog Output Receiver in NEMA Enclosure.
WLV7389-900-SB-DR	16' (500cm) Distance Wireless Level Transmitter with Analog Output Receiver in Din-rail Enclosure.
WLV7389-900-SB-ID	16' (500cm) Distance Wireless Level Transmitter with Analog Output Receiver in Industrial Enclosure.

Available Options

Model Number	Description
AT24-12DBI-YD-RP-SMA	12dBi Yagi Antenna
WLTX-24-SPK	Solar Power Kit for Level Transmitter

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Note: Continued product improvements make specifications subject to change without notice.
Check www.imagineinstruments.com for the latest product information and updates

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