



Model: **WLV7389-900-PA**

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

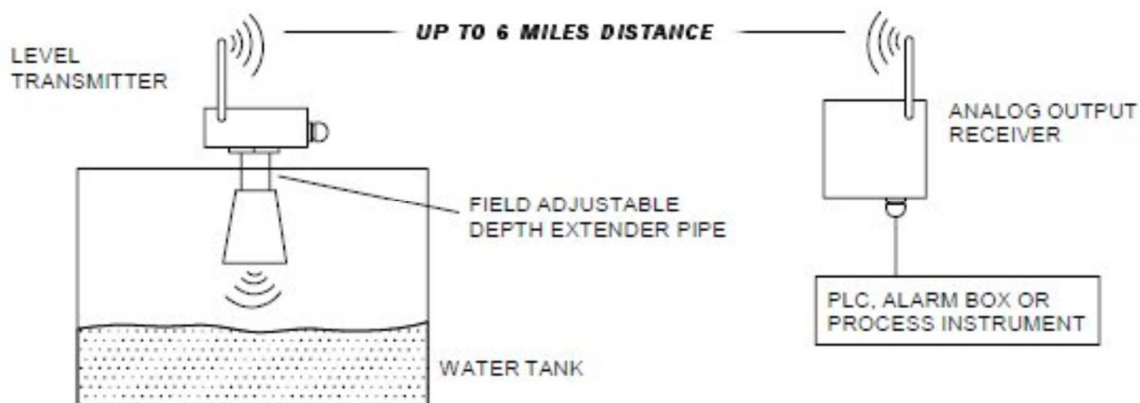
APPLACATIONS

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

DESCRIPTION

Model WLV7389-900-PA 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)

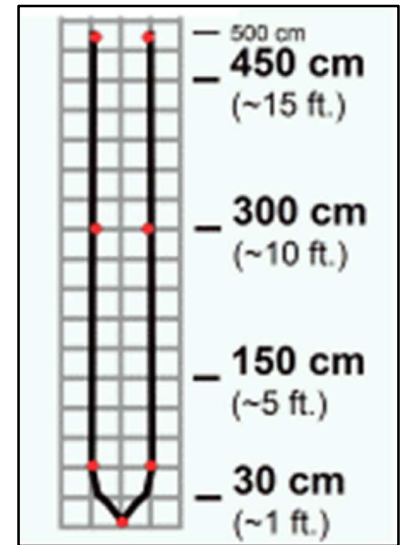
Wireless Regulatory Approvals

Regulatory: FCC Part 15 (No license required)



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

Model: **WLV7389-900-PA**



16' (500cm) Beam Pattern



Solar Kit Includes Panel, Battery, Charger, Enclosure



Includes 9' Antenna Remote Mount Kit

Model: **WLV7389-900-PA**

Wireless Receiver Versions



NEMA 4X Receiver



Din-rail Receiver



Painted Aluminum Receiver

Available Models

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

© 2018 :: Imagine Instruments LLC :: 4500 Williams Drive, Ste 212-318 :: Georgetown, TX 78633 :: p. 512.778.6850
 e-mail: info@imagineinstruments.com :: www.imagineinstruments.com

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

Released: 26 February, 2018 :: Rev: B