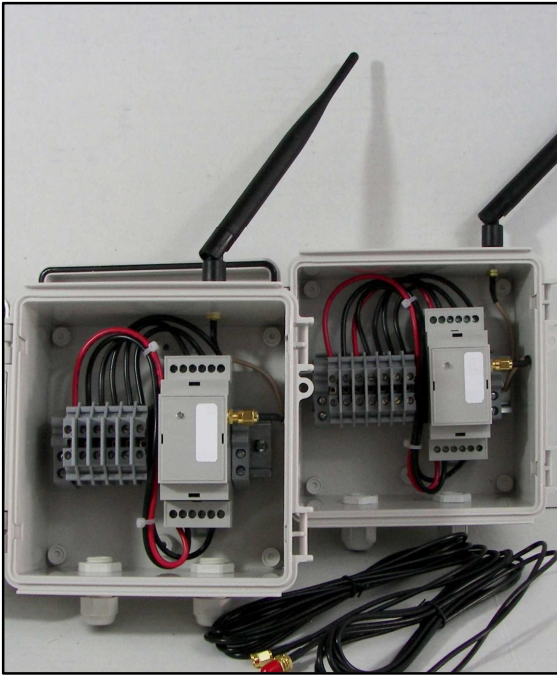




Series: **WACSL-24**

Din-rail Wireless Analog Control System



FEATURES & BENEFITS

- Wireless Bridge Between Analog Signal & Instrument Models with 0-3V DC, 0-5V DC or 4-20mA Input/output
- Built-in Two-way Contact Closure Control Lines
- Sold as Transmitter/Receiver Factory Match Set
- Up To 1 Mile Line-of-site Transmit/Receive Distance
- Adds Wireless Capability to Any Existing Process System
- Powered By 12-24V DC or 120V AC with Optional Modules
- NEMA 4x PCT Plastic Enclosures
- License Free Point-to-point Radio Operation

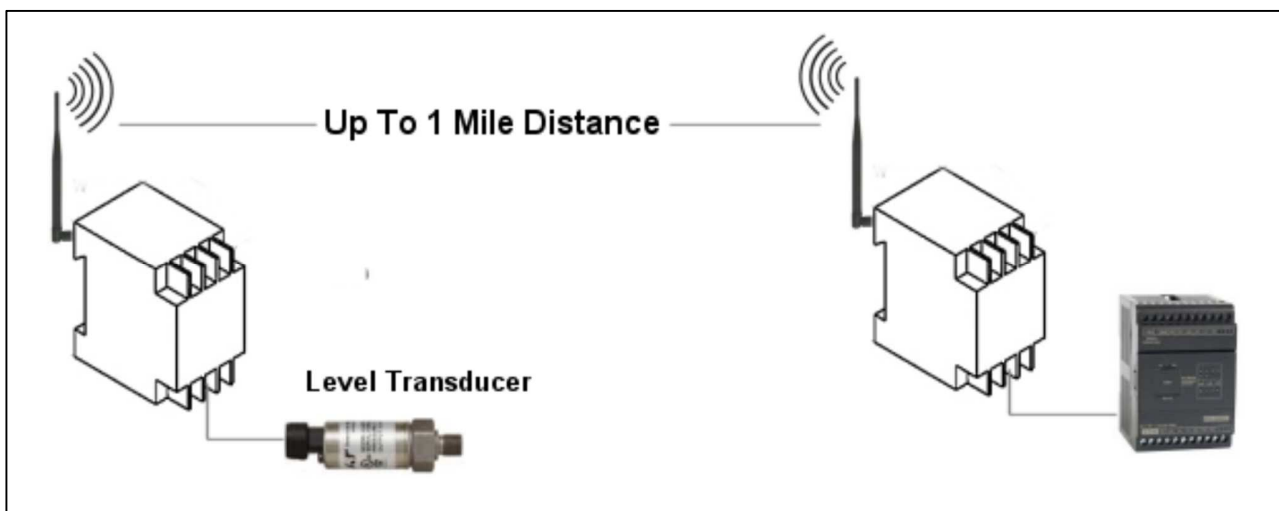
APPLICATIONS

- Tank Level Monitoring, Valve Positioning
- Process Controls & Instrumentation
- Add Wireless Capability to Existing Process Application

DESCRIPTION

The WACSL-24 Series Wireless Analog Control System allows for remotely monitoring or controlling equipment from a distance up to 1 mile away using license free wireless 2.4GHz 802.15.4 communication. Each set features either one or two analog signal inputs and outputs. Both the transmitter and receiver are equipped with one or two contact closure input that is used to control an open-collector output on the opposing unit

SAMPLE APPLICATION SHOWING LEVEL SENSOR SENDING WIRELESS 4-20mA SIGNAL TO REMOTE PLC DEVICE



General Specifications

Radio Frequency: 2.4Ghz
RF Input/output Impedance: 50 Ohm nominal
Receive Sensitivity: -100 dBm
Transmitter/Receiver Code Matching: Factory set
RF Power Output: 63mW
RF Data Update Rate: 250 Kbps
Transmit Rate (Factory Set): Continuous
Analog Read/Transmit Accuracy: $\pm 0.1\%$ of range
Wire Connection: Terminal Blocks
Operating Power: 12-24V DC @ 200mA
Operating Temperature: -10 to 130 °F (-23 to 54 °C)
Enclosure: Plastic, PCT NEMA 4X
Antennas: Includes 7dBi Antennas
Transmit/Receive Distance: (With Included Antennas)
Up to 150ft. Indoor/Urban, Up to 600ft. Line-of-sight
Transmit/Receive Distance: (With Optional 12dbi Antennas)
Up to 300 ft. Indoor/Urban, Up to 1 Mile Line-of-sight

Transmitter Specifications

Inputs: 2 Analog, 1 or 2 Dry-contact Closure
Analog Input Signal: Voltage or Current
Analog Outputs: None
Digital Output: 1 or 2 Open Collector, 24V, 100mA Max

Receiver Specifications

Inputs: 1 or 2 Dry-contact Closure
Analog Input Signal: None
Analog Outputs: Voltage or Current
Digital Output: 1 or 2 Open Collector, 24V, 100mA Max

Available Options

Model Number	Description
PSS-12V-450MA	12V DC, 450mA Power Module
AT24-12DBI-YD-RP-SMA*	12dbi Long Range Antenna

Transmitter Operation

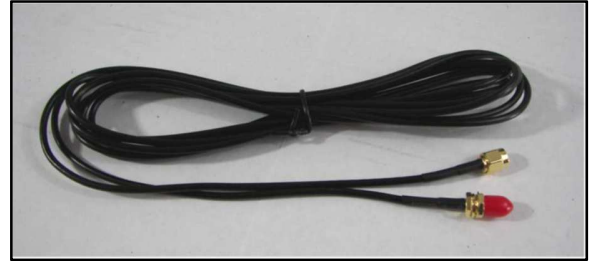
The wireless analog signal transmitter reads analog input data from temperature, pressure, strain, flow, level or RH sensors and then sends the measured data over the air to a remote location. The measured 0-3 or 0-5 voltage, or 4-20mA current signals are converted to digital packets and then transmitted via a license free radio transmission to a waiting control receiver. The transmitter includes one or two dry-contact switch inputs that control one or two open collector outputs on the opposing control receiver.

Receiver Operation

The wireless analog control receiver decodes any incoming radio packets and converts them back into the same voltage or current signal that is being measured by the transmitter in real time. The control receiver includes one or two dry-contact switch inputs that control one or two open collector outputs on the opposing transmitter.

Series: **WACSL-24**

Includes 9ft Antenna Extension Cables



Optional 12dbi Antenna

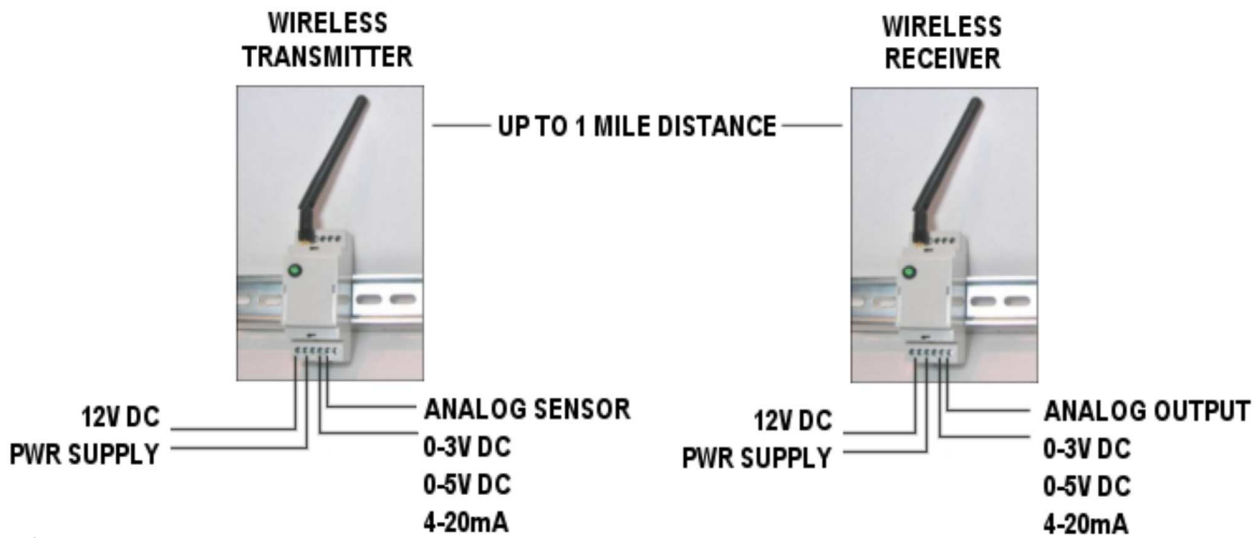


Model AT24-12DBI-YD-RP-SMA Shown

Regulatory Approvals

Regulatory: FCC Part 95 (No license required)
FCC(USA): OUR-XBEEPRO
IC (Canada): 4214A-XBEEPRO

Series: **WACSL-24**



Available Models

Model Number	Transmitter Analog Inputs	Receiver Analog Outputs	Transmitter Dry-Contact Input and Open-Collector Output Lines	Receiver Dry-Contact Input and Open-Collector Output Lines
WACSL-24-1-3V-A	One 0-3V DC	One 0-3V DC	Transmitter with one dry-contact input and one Open-collector Output	Receiver with one dry-contact input and one Open-collector Output
WACSL-24-2-3V-A	Two 0-3V DC	Two 0-3V DC		
WACSL-24-1-5V-A	One 0-5V DC	One 0-5V DC		
WACSL-24-2-5V-A	Two 0-5V DC	Two 0-5V DC		
WACSL-24-1-420-A	One 4-20mA	One 4-20mA		
WACSL-24-2-420-A	Two 4-20mA	Two 4-20mA		
WACSL-24-2-3V-420-A	One 0-3V DC, One 4-20mA	One 0-3V DC, One 4-20mA		
WACSL-24-2-5V-420-A	One 0-5V DC, One 4-20mA	One 0-5V DC, One 4-20mA		
WACSL-24-2-3V-5V-A	One 0-3V DC, One 0-5V DC	One 0-3V DC, One 0-5V DC	Transmitter with two dry-contact inputs and zero Open-collector Outputs	Receiver with zero dry-contact inputs and two Open-collector Outputs
WACSL-24-1-3V-B	One 0-3V DC	One 0-3V DC		
WACSL-24-2-3V-B	Two 0-3V DC	Two 0-3V DC		
WACSL-24-1-5V-B	One 0-5V DC	One 0-5V DC		
WACSL-24-2-5V-B	Two 0-5V DC	Two 0-5V DC		
WACSL-24-1-420-B	One 4-20mA	One 4-20mA		
WACSL-24-2-420-B	Two 4-20mA	Two 4-20mA		
WACSL-24-2-3V-420-B	One 0-3V DC, One 4-20mA	One 0-3V DC, One 4-20mA		
WACSL-24-2-5V-420-B	One 0-5V DC, One 4-20mA	One 0-5V DC, One 4-20mA		
WACSL-24-2-3V-5V-B	One 0-3V DC, One 0-5V DC	One 0-3V DC, One 0-5V DC		

Available Models Cont.

Model Number	Transmitter Analog Inputs	Receiver Analog Outputs	Transmitter Dry-Contact Input / Open-Collector Output Lines	Receiver Dry-Contact Input / Open-Collector Output Lines
WACSL-24-1-3V-C	One 0-3V DC	One 0-3V DC	Transmitter with zero dry-contact inputs and two Open-collector Outputs	Receiver with two dry-contact inputs and zero Open-collector Outputs
WACSL-24-2-3V-C	Two 0-3V DC	Two 0-3V DC		
WACSL-24-1-5V-C	One 0-5V DC	One 0-5V DC		
WACSL-24-2-5V-C	Two 0-5V DC	Two 0-5V DC		
WACSL-24-1-420-C	One 4-20mA	One 4-20mA		
WACSL-24-2-420-C	Two 4-20mA	Two 4-20mA		
WACSL-24-2-3V-420-C	One 0-3V DC, One 4-20mA	One 0-3V DC, One 4-20mA		
WACSL-24-2-5V-420-C	One 0-5V DC, One 4-20mA	One 0-5V DC, One 4-20mA		
WACSL-24-2-3V-5V-C	One 0-3V DC, One 0-5V DC	One 0-3V DC, One 0-5V DC		

*Optional Antenna. Order 2 each when these antennas are needed.

Each Transmitter/Receiver Set includes 7dBi Antennas, 9' Antenna Extension Cables, Antenna Mounting Brackets and User Manual.

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Note: Continued product improvements make specifications subject to change without notice.
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