

# Wireless 4-20mA Transmitter/Receiver System



#### **FEATURES & BENEFITS**

Provides Wireless Bridge for 4-20mA Loop Signal
Receiver Output Mirrors Transmitter Input
Receiver Provides 4-20mA or 1-5V DC Output
Includes One Bi-directional Control Line
Up To 6 Miles Line-of-site Transmit/Receive Distance
12-24V DC Operation
Standard Plastic Din-rail Enclosures
Pre-configured, Ready-To-Operate
Sold As Transmitter/Receiver Matched Set
License Free Radio Operation

#### **APPLACATIONS**

Process Transmitter Signals

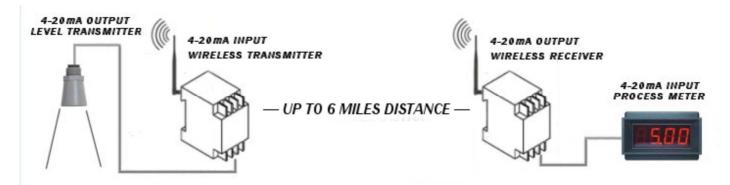
Valve Positioning & Control

Remote Sensor Monitoring

#### **DESCRIPTION**

The WDRXL-900-420MA Wireless Analog Transmitter/Receiver System allows for remotely monitoring or controlling equipment from a distance up to 6 miles away using license free wireless 900 MHz communication. Each set features one 4-20mA analog signal input and output. Both the transmitter and receiver are also equipped with one contact closure input that is used to control an open-collector output on the opposing unit for additional control or alarm functionality

**Example Application:** Level Transmitter Sending Readings to a Remote Process Meter



# General Specifications

Radio Frequency: 900 MHz

Regulatory: FCC Part 15 (No license required)

Process Input Lines: One 4-20mA

Signal Transmit/Receive Accuracy: +/- 0.5% of range

Open Input or Lost Signal Condition: Output goes below 4mA

Reading Update Rate: 250ms Control Lines: 1 Bi-directional Antenna Connection: RP-SMA

Antennas: 5dbi, Omni-directional (Included)

Transmit/Receive Distance:

with included antennas: Urban 1000ft, Line-of-site 3 Miles. with optional antennas: Urban 1600ft, Line-of-site 6 Miles

Transmitter/Receiver Code Matching: Factory set

Wire Connection: Terminal Blocks

Operating Temperature: -22 to 113 °F (-30 to 45 °C)

**Enclosures:** Plastic Din-rail

### Transmitter Specifications

RF Power Output: 100mW

RF Output Impedance: 50 Ohm nominal

RF Data Rate: 10 kbps

Operating Power 12 - 24V DC @ 3W max Control Line Input: One Dry-contact Switch

Control Output: One Open-collector, 12-24V DC, 1.2W Max

Process Input: Analog 4-20mA

#### Receiver Specifications

Receive Sensitivity: -100 dBm

Operating Power: 12 - 24V DC @ 3W max Control Line Input: One Dry-contact Switch

Control Output: One Open-collector, 12-24V DC, 1.2W Max

Process Output: Analog 4-20mA or 1-5V DC

Max Output Load @ 24V: 600 Ohms

# Series: WDRXL-900-420MA



Includes 5dbi Antennas and 9' Antenna Extension Cables



Optional Long Distance Antenna Set

# Regulatory Approvals

FCC(USA) - MCQ-XBEEXSC IC (Canada) - 1846A-XBEEXSC

Model Number	Description
WDRXL-900-420MA	Wireless Din-rail Mount 4-20mA Transmitter/Receiver Set (USA/CANADA)

# **Available Options**

Model Number	Description
DRWC-900-LRANT	Optional Long Range Directional Antenna (up to 6 Miles line-of-site)

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

Level Sensor and Process Meter shown are not included and are shown for reference only.

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Released: 18 December, 2018:: Rev: A