

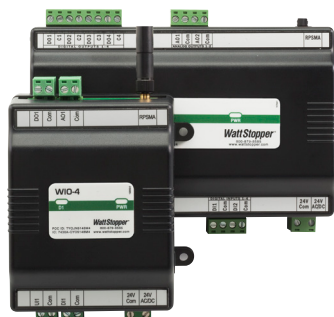
WIRELESS INPUT/OUTPUT CONTROL NODES

| WIO SERIES

Intelligent controllers incorporate sensors and switches in building control network

Easy to locate near control points without communication wiring

Enable group, preset and fade functions



Connect to wireless self-healing IP control network

Compatible with web-enabled building automation system (BAS)

IP-based nodes provide scalable architecture

Not for sale, resale, importation, installation or use in California

Description

WIO Series I/O nodes are programmable distributed-intelligence controllers that connect a wide variety of sensors, switches and other devices to a wireless lighting control network. The control nodes mount on a DIN rail and connect to a Wattstopper Wireless Network Manager via a robust and scalable self-healing wireless IP network.

Operation

WIO control nodes operate on 24 volt AC or DC from a Wattstopper BD-100E-P power-pack or other power supply. Logical behaviors are programmed via the Wireless Network Manager. Nodes are distinguished by a specific number and configuration of input and/or output ports. Ports may be analog, digital or universal (analog and digital). Digital inputs accept binary signals, including those from low voltage switches and motion sensors. Universal inputs accept binary signals as well as signals from variable devices including photocells and temperature sensors. Outputs may be used to control low current loads such as lighting or interface relays. The distributed nodes provide control and monitoring functionality as part of a centrally managed coordinated network of wireless control nodes.

Features

- Six models provide inputs and outputs for a wide variety of applications
- Compatible with Wattstopper stand-alone motion sensors, occupancy sensors, daylighting sensors and low voltage switches (reference application drawings)
- Compatible with third party devices from temperature sensors to building automation systems (BAS)
- AES 128-bit encrypted payload protection for data delivery

Self-Healing Wireless IP Control Network

Wattstopper's wireless control nodes, including WIO Series devices and BULITs, communicate with Wireless Network Managers over self-healing tree networks to ensure the highest quality radio data and throughput. The tree configuration can be managed, or the devices can configure their own network automatically. If the quality of a connection falls below a threshold level for a given node, the device will reroute its communications to the network manager. Control nodes and network managers communicate and connect to other building automation components through open standards.

Applications

Wireless Input/Output Control Nodes are ideal for adding low voltage sensors and control points to an exterior lighting control network. Signals from 24VDC motion sensors using dry contact closures can be used to raise or lower light levels. Photocells may be connected to provide multi zone sensing for daylighting control, and used to activate scenes or presets comprised of selected loads or groups. WIO Series wireless control nodes may also be used in HVAC networks to monitor and control a variety of sensors and actuators.

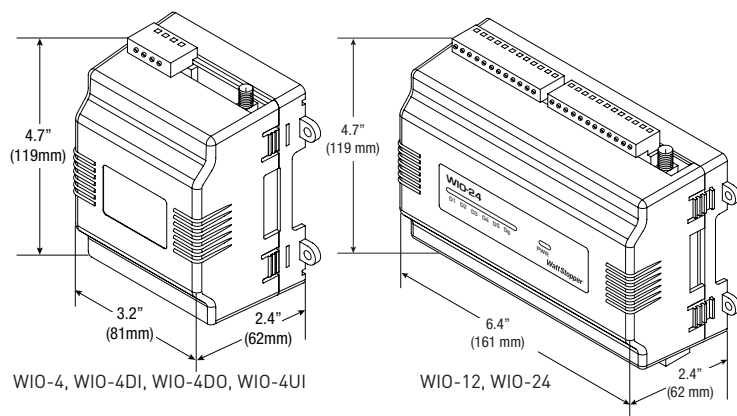
PROJECT		LOCATION/ TYPE	
---------	--	-------------------	--

Specifications

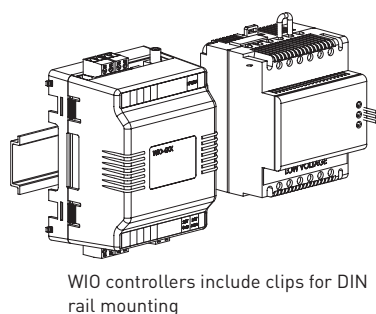
- Operating voltage: 24VAC/VDC
- Power consumption: 190–310 mA @ 24 V
- Radio: 2.4 GHz IEEE 802.15.4
- Up to 1000' range between nodes
- RPSMA connector, external antenna
- 128-bit AES encryption
- Digital outputs: 2 Amps, 277VAC
- Analog outputs: 4–20 mA, 0–10VDC (with 500Ω shunt resistor)
- Digital Inputs: Dry contact closure
- Universal Inputs: Type 2 (10k) thermistor, Type 3 (10k) thermistor, 0–10k ohms, 0–10VDC, 0–20mA (with 500Ω shunt resistor), dry contract closure
- Operating conditions: 32–140°F (0–60°C); 0–95% RH, non-condensing
- FCC part 15 compliant
- 5 year warranty; extended warranty available

Dimensions & Mounting

Product Dimensions

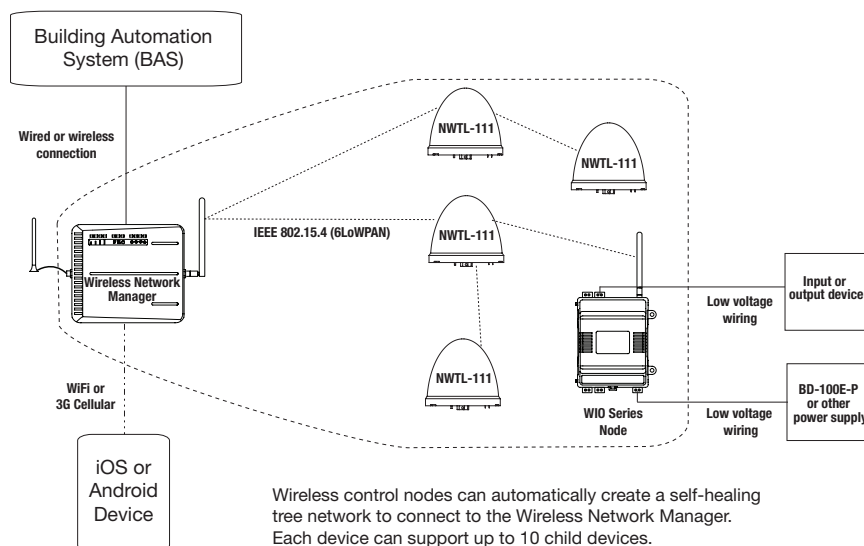


Mounting



Connecting

Typical System Components



Ordering Information

Catalog #	Description	Digital Outputs	Analog Outputs	Digital Inputs	Universal Inputs
☐ WIO-4	I/O Node	1	1	1	1
☐ WIO-4DI	Input Node			4	
☐ WIO-4DO	Output Node	4			
☐ WIO-4UI	Input Node				4
☐ WIO-12	I/O Node	4	2	2	4
☐ WIO-24	I/O Node	6	6	4	8