

WATERPROOF WIRELESS INPUT/OUTPUT CONTROL NODES

| WIO-XWP

Intelligent controllers incorporate building sensors and switches in lighting control network

NEMA 4 enclosure; easy to locate near outdoor 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 WP (waterproof) I/O nodes are programmable distributed-intelligence controllers in NEMA 4 enclosures that connect a wide variety of sensors, switches and other devices to a wireless lighting control network. The nodes connect to a Wattstopper Wireless Network Manager via a robust and scalable self healing wireless IP network.

Operation

WIO WP control nodes operate on 24 volt AC or DC from a Wattstopper BZ-50 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). Universal inputs accept binary signals, including those from low voltage switches and motion sensors, 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 nodes.

Features

- Two 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

Waterproof Input/Output Control Nodes are ideal for controlling multi-head lighting poles or adding low voltage sensors and control points to the lighting 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.

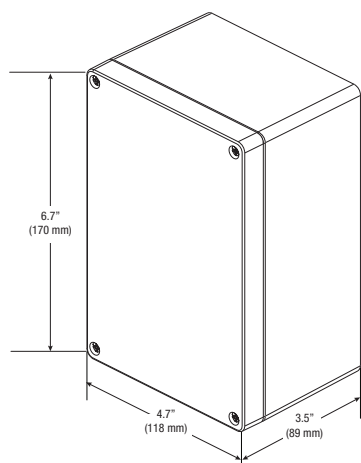
PROJECT	LOCATION/ TYPE

Specifications

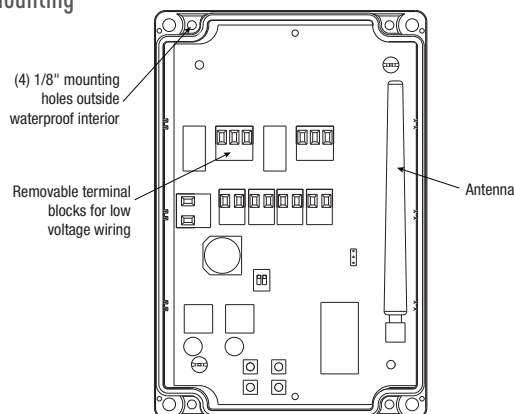
- Operating voltage: 24VAC/VDC
- Power consumption: 90–120 mA @ 24 V
- Radio: 2.4 GHz IEEE 802.15.4
- Up to 1000' range between nodes
- RPSMA connector, internal antenna
- 128-bit AES encryption
- Digital outputs: 2 Amps, 277VAC
- Analog outputs: 4–20 mA, 0–10VDC (with 500Ω shunt resistor)
- Digital 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
- IP-66 rated
- FCC part 15 compliant
- 5 year warranty; extended warranty available

Dimensions & Mounting

Product Dimensions



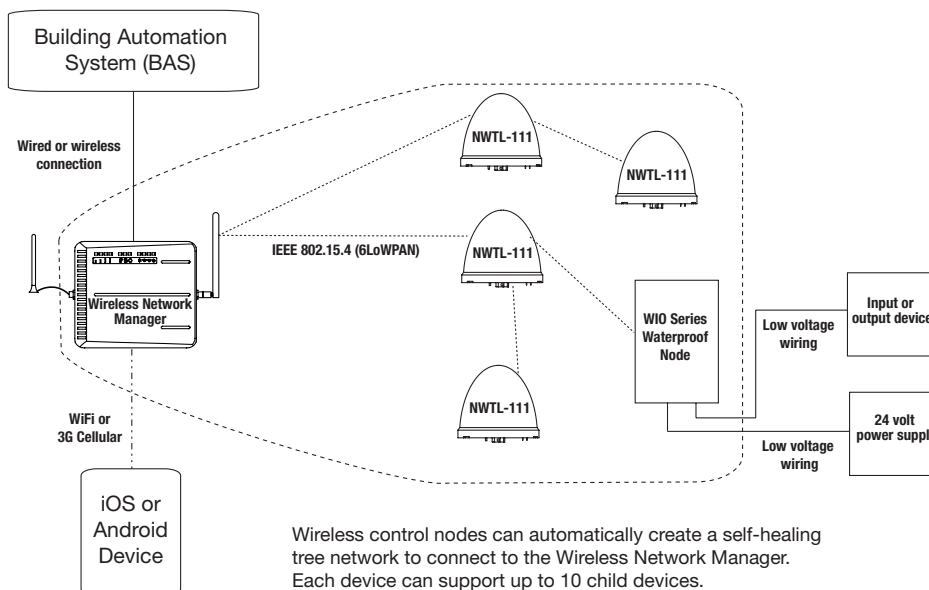
Mounting



Mount the WIO-xWP vertically so that the antenna is in the correct orientation. See installation instructions for more details.

Connecting

Typical System Components



Ordering Information

Catalog #	Description	Digital Outputs	Analog Outputs	Digital Inputs	Universal Inputs
<input type="checkbox"/> WIO-4WP	I/O Node	2			2
<input type="checkbox"/> WIO-6WP	I/O Node	2	2		2