

BULIT® WIRELESS CONTROL NODE

| NWTL-111 V2

Fixture-mounted
distributed intelligent
outdoor lighting controller
with sensor input capability

Simple retrofit adds on/
off and 0-10 volt dimming
control without rewiring

Ideal for sustainable LED
upgrade projects and Dark
Sky initiatives



Connects to wireless self-healing
IP control network

Compatible with web-enabled
building automation system (BAS)

Delivers real-time power
monitoring data including RMS
voltage and current

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

Description

The NWTL-111 BULIT is a distributed-intelligence wireless control node designed to replace standard photocell modules on outdoor lighting fixtures. It connects to a 7-pin twist-lock receptacle compliant with NEMA standard C136.41 to provide ON/OFF and dimming control. The BULIT also connects to a Legrand Wireless Network Manager via a robust and scalable self-healing wireless IP network.

Operation

The BULIT operates on 120/277/347 or 208/240/480 volt input power supplied by the lighting fixture through the NEMA socket. Dimming is achieved using 0-10 volts on two pins integrated into the socket. Each node has a unique MAC address that can be automatically discovered as an IP address. Following simple configuration, the BULIT can execute self-contained astronomic schedules or provide control and monitoring functionality as part of a centrally managed coordinated network of wireless nodes. Wireless nodes support sensor input by providing Class 2 24VDC to power the sensor while receiving control inputs via the twist-lock 7-pin receptacle.

Features

- Simple plug and play setup with minimal configuration required
- Integral real time clock
- Internal calendar schedule for stand alone operation in case of network interruption
- Supports flexible grouping for zone control, including the ability to make simple post installation changes
- Compliant with NEMA standard ANSI C136.41-2013 for twist-lock connectors with dimming control
- AES 128-bit encrypted payload protection for data delivery
- Simplifies energy code compliance for multi-level lighting requirements
- Supports Wattstopper 24VDC fixture sensors for dimming

Self-Healing Wireless IP Control Network

Legrand's wireless control nodes, including BULITs and WIO Series devices, 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

Legrand's wireless nodes are suitable for traditional HID fixtures as well as induction lighting and LED lighting fixtures. The wireless controls are ideal for both tightly arranged fixtures in parking lots and campus pathway lighting applications. The nodes may also be integrated into warehouses and industrial facilities by connecting a NEMA C136.41-compliant twist-lock socket to the lighting fixtures via a 5-wire flexible whip

PROJECT

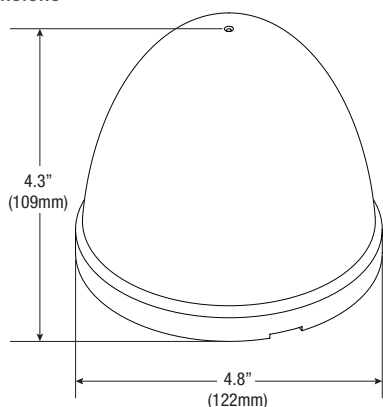
LOCATION/
TYPE

Specifications

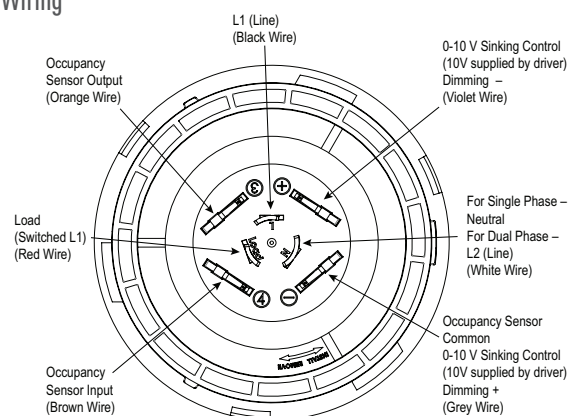
- Operating voltage: 120/277/347VAC, single phase or 208/240/480VAC dual phase; 50/60Hz
- Power consumption: <2 Watts
- Radio: 2.4 GHz IEEE 802.15.4
- Up to 1000' range between nodes
- IPEX connector, internal antenna
- 128-bit AES encryption
- On/Off/Dim (0–10V)
- Power monitoring data from smart meter IC available to Wireless Network Manager
 - RMS voltage
 - RMS current
 - Active power
 - Power factor
 - Frequency
- Sensor Output Current: up to 15mA @ 24VDC
- Operating conditions: -40 to 158°F (-40 to 70°C)
- IP 53 rated [requires vertical mounting, with twist-lock plug at bottom of device]
- FCC part 15 compliant
- UL and cUL listing pending; UL 773 for outdoor use
- 5 year warranty

Dimensions & Connector

Product Dimensions

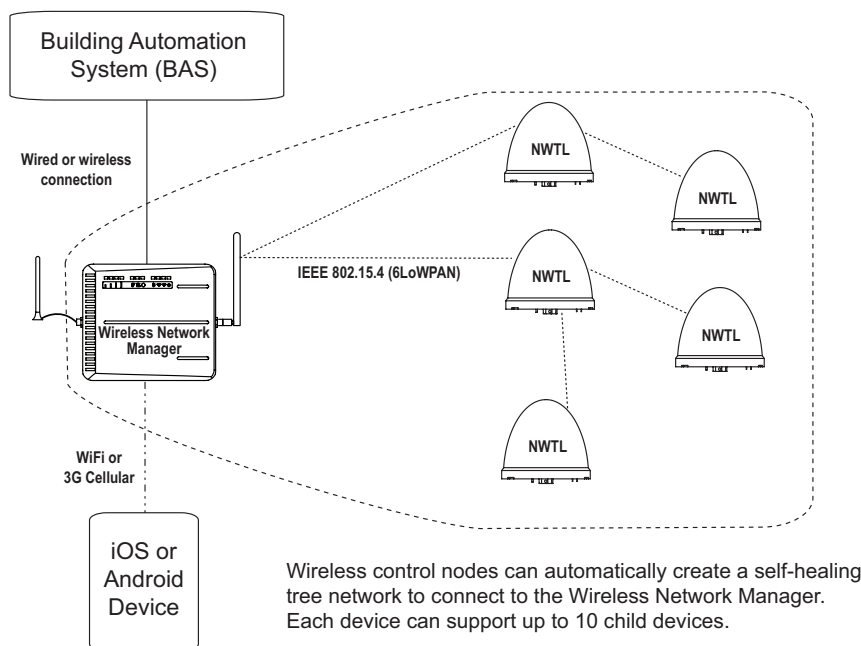


Connector Wiring



Connecting

Typical System Components



Ordering Information

Catalog #	Description	Voltage
<input type="checkbox"/> NWTL-111-1P-V2	BULIT Wireless Control Node, single phase, with sensor input	120/277/347VAC
<input type="checkbox"/> NWTL-111-2P-V2	BULIT Wireless Control Node, dual phase, with sensor input	208/240/480VAC