



FEATURES

- Bluetooth® to 0–10V signal converter with built-in 20A relay.
- Built-in sensor input, allows using 3rd party sensors in logic signal to control the power pack/0-10V load.
- Supports group control via BlueMesh mobile tools and switches.
- Broadcasts control signals to all 0–10V devices on the line.

PRODUCT DESCRIPTION

The BMPP-R2421-1-AUX-BLE-SR power pack is a versatile Bluetooth® enabled controller that converts wireless signals to 0-10V output while featuring a robust 20A relay. Designed for industrial lighting control, it integrates seamlessly into Bluetooth mesh networks for extended coverage and supports third-party sensor integration.

Reliable Communication

The device forms a Bluetooth mesh network, relaying signals between nodes to enhance coverage and reliability for large-scale control. Supports Bluetooth® Mesh for 0–10V dimming and 20A relay switching.

0-10V & Relay Output

Features a 25mA 0-10V signal output and a high-capacity 20A relay, supporting diverse load types including resistive, capacitive, and motor loads.

General Use: 20A@120-277VAC

Resistive: 20A@120VAC, 20A@277VAC

Capacitive: 8A@120-277VAC

Motor: 0.5 HP@120VAC, 1 HP@240VAC

Easy Installation

Compact design with onboard IPEX antenna, simple wiring, and mobile app-based commissioning.

ORDERING INFORMATION

Description

BLE to 0/1-10V Power Pack with 20A relay & 24V Aux

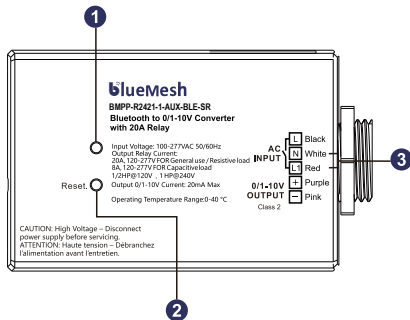
Part Number

BMPP-R2421-1-AUX-BLE-SR

TECHNICAL DATA

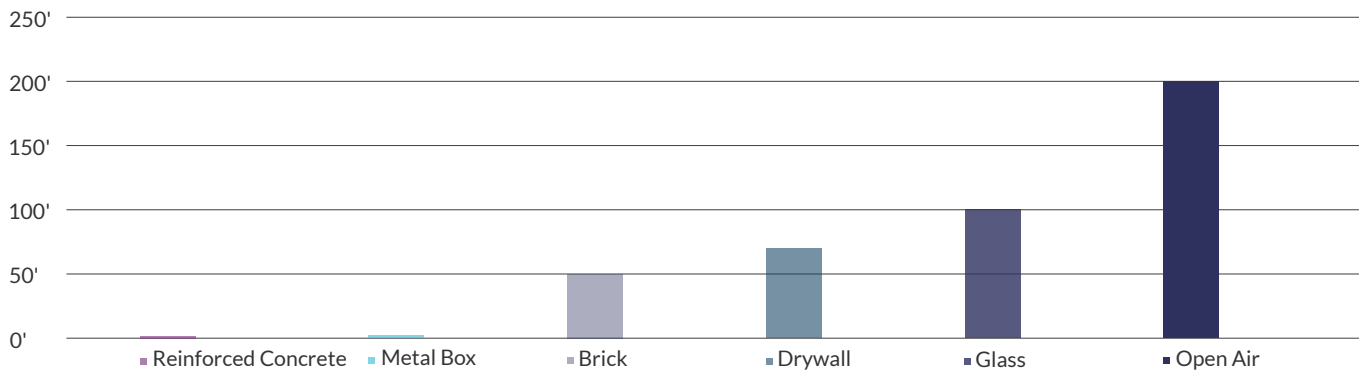
Controller Type	0-10V signal converter
Input Voltage	100–277VAC
Control Output	0/1–10V, max. 25mA
Current	Max. 20A, environment
Operating Temperature	32°F to 104°F(0°C to 40°C)
Relative Humidity	8%–80%
Wireless Protocol	Bluetooth®
Bluetooth Range	213ft(65m), typical
IP Rating	20
Antenna	IPEX antenna
Certifications	UL listed, Category: PAZX .
	UL 2043 Plenum Rated
	FCC certified

SPECIFICATION

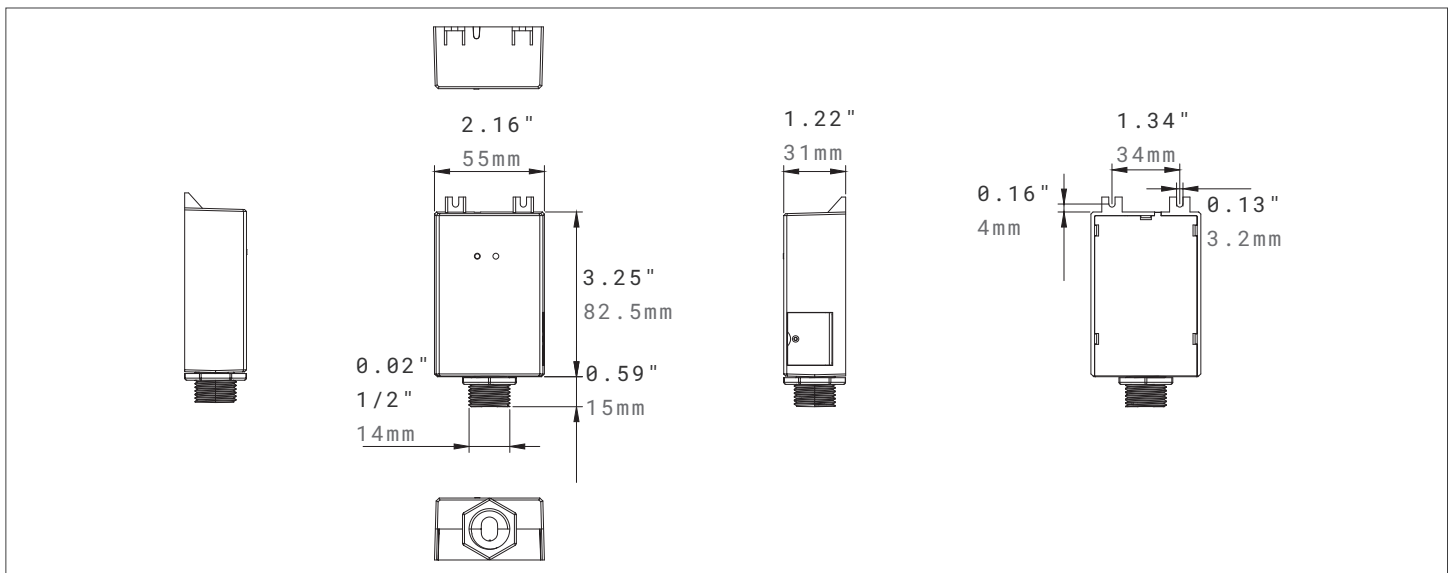


- 1 LED indicator: When controller is added to the network, the indicator light flashes slowly.
- 2 Reset Key: Press it to help withdraw the device from the internet/APP/network. Flashing indicator indicates the device has been reset.
- 3 Relay Note: 12AWG for power line; 22AWG for dimming(signal) line.

Devices Communication Distance

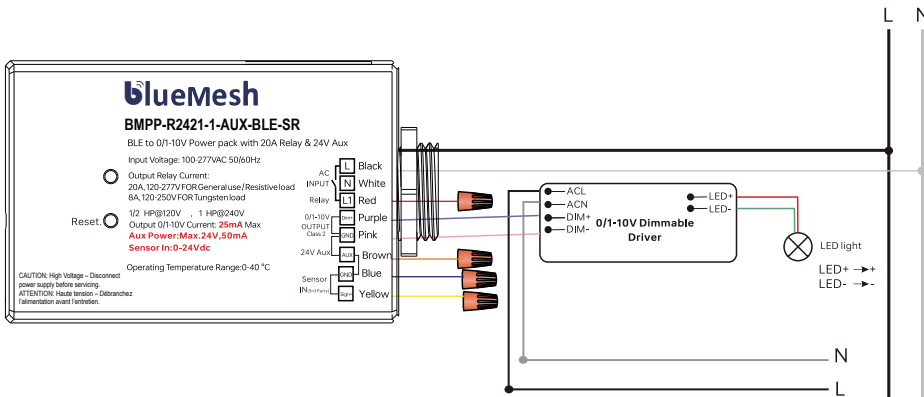


DIMENSIONS

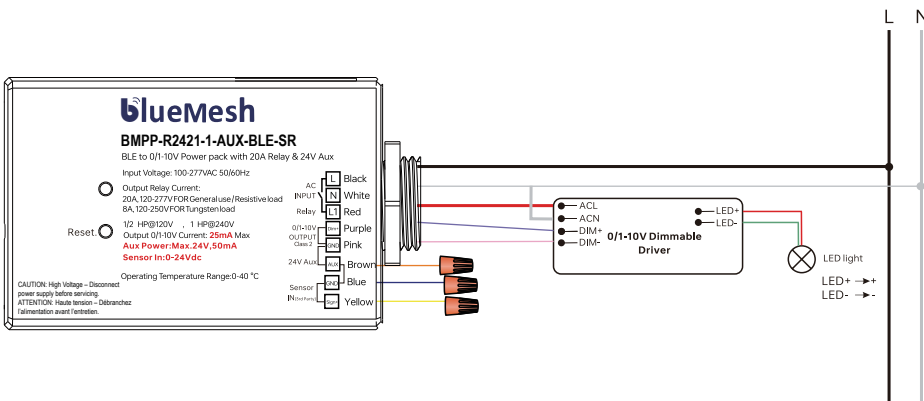


WIRING

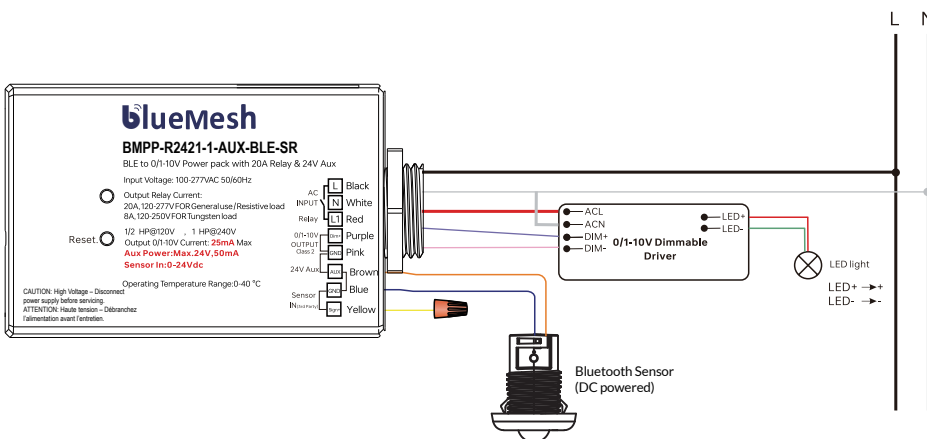
1) 0-10V Dimming Without Relay & Sensors



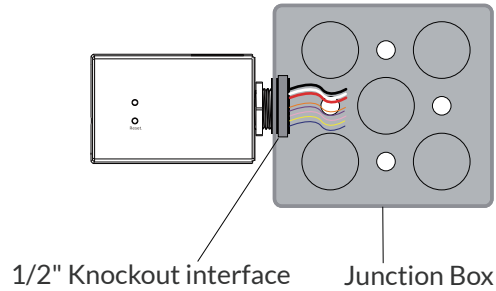
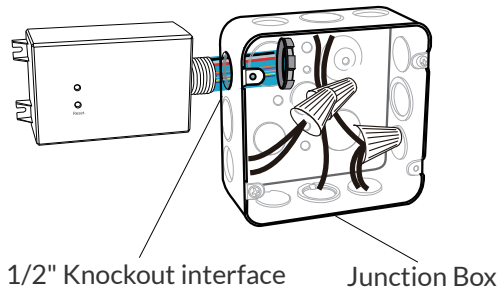
2) 0-10V Dimming With Relay



3) 0-10V Dimming With Relay and BlueMesh Sensors



INSTALLATION



OPERATION

- Wire according to the connection diagram.
- Flashing indicator indicates the device has been reset.
- Refer to the *BlueMesh Commissioning User Manual* for further pairing.
- Press and hold down the “Reset” button on the controller over 5 seconds; Flashing indicator indicates the device has been reset.

WARNING

- DO NOT expose the device to moisture.
- DO NOT install with power applied to device.
- Operating control; Type 1.B; Pollution degree: II; Rated impulse voltage: 4000V; Overcurrent protective device: 25A;
- When connected to 277VAC, the control should be connected to three-phase three-wire unearthed systems, and the rated impulse voltage is 4000V.

WARRANTY

5 years limited warranty.