













PRODUCT DESCRIPTION

The BMPP-R2421-1-BLE-SR is a Bluetooth® to 0-10V signal converter with a built-in 20A relay for reliable wireless lighting control. It supports group broadcasting, BlueMesh switches, and mobile app commissioning, ideal for high-load industrial applications.

ORDERING INFORMATION

Description

Bluetooth® to 0-10V Signal Converter with 20A Relay

Part Number

BMPP-R2421-1-BLE-SR

TECHNICAL DATA

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

FEATURES

- Bluetooth® to 0-10V signal converter with built-in 20A relay.
- Supports group control via BlueMesh mobile tools and switches.
- Broadcasts control signals to all 0-10V devices on the

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 20mA 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

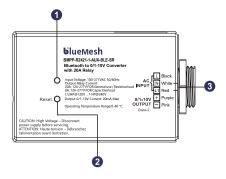
Resistive: 20A@120VAC. 20A@277VAC

Capacitive: 8A@120-277VAC

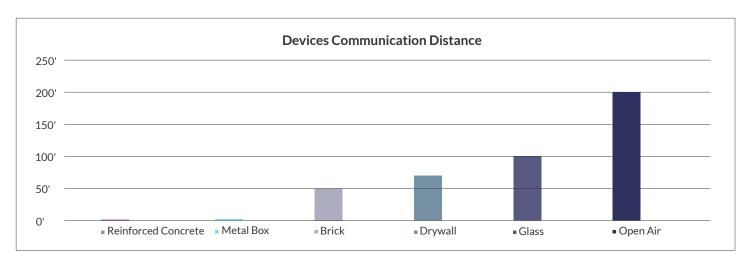
Motor: 0.5 HP@120VAC, 1 HP@240VAC



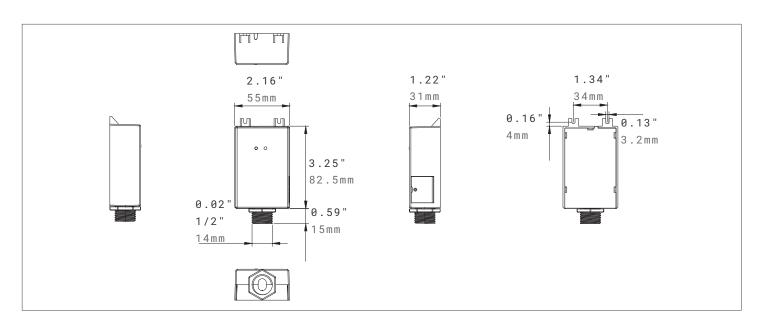
SPECIFICATION



- 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.



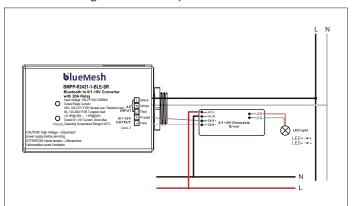
DIMENSIONS



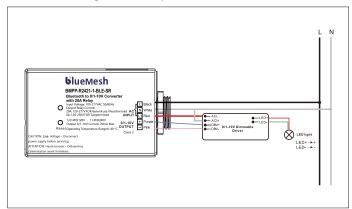


WIRING

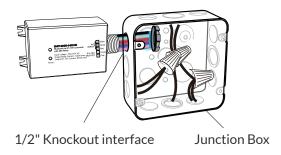
0-10V Dimming Without Relay

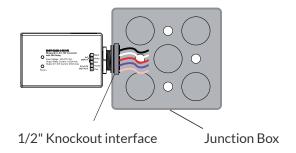


0-10V Dimming With Relay



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.