



PRODUCT DESCRIPTION

The BMWC-R1029-DC-BLE-SR is a Bluetooth® mesh constant-voltage LED controller designed for ON/OFF, dimming, and tunable white lighting applications. With support for up to 96W per channel and compatibility with BlueMesh switches and kinetic energy switches, it enables reliable wireless lighting control across mesh-connected spaces. Ideal for indoor LED fixtures, it offers robust protection and mobile app configuration through BlueMesh commissioning tools.

ORDERING INFORMATION

Description

Bluetooth® Mesh Constant Voltage LED Controller with Dimming and Tunable White Support

Part Number

BMWC-R1029-DC-BLE-SR

TECHNICAL DATA

Type	Constant Voltage LED Controller
Input	12-24VDC
Output	48-96W per channel
Max Current	4A/CH
Wireless Protocol	Bluetooth® SIG Mesh
Bluetooth Range	66ft to 82ft(20m to 25m)
Antenna	Onboard
Operating Temperature	-4°F to 120°F (-20°C to 50°C)
Max Case Temperature	167°F (75°C)
Certifications	UL listed, FCC Certified
Dimension	5.71" x 1.83" x 0.63" 145mm x 46.5mm x 16mm
Enclosure Rating	IP20

FEATURES

- Bluetooth® SIG mesh constant-voltage LED controller (48-96W/channel).
- Supports ON/OFF, dimming, and tunable white control of LED fixtures.
- Controlled via BlueMesh app and commissioning tools.
- Works with BlueMesh switches and kinetic energy switches.
- Built-in protections: over-temperature, over-load, over-voltage, short circuit.
- Onboard antenna, compact housing, and reset button.

Smart Wireless Control

Bluetooth® SIG mesh enables wireless ON/OFF, dimming, and tunable white control via mobile app. Signals relay through neighboring devices, expanding coverage up to 82ft(25m).

Range may vary based on environmental conditions.

Flexible Output Performance

Supports up to 96W per channel with 4A constant voltage output for single-color or tunable white LEDs.

Robust Protection

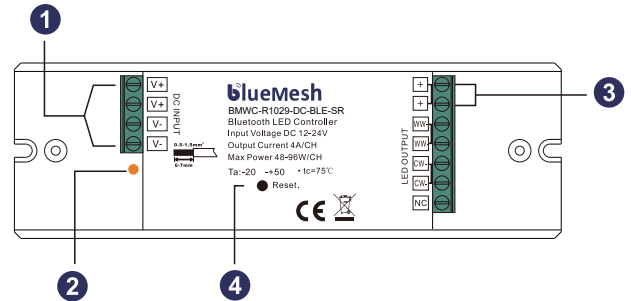
Includes over-temperature, over-voltage, over-load, and short circuit protection for enhanced safety.

Compact & Easy Installation

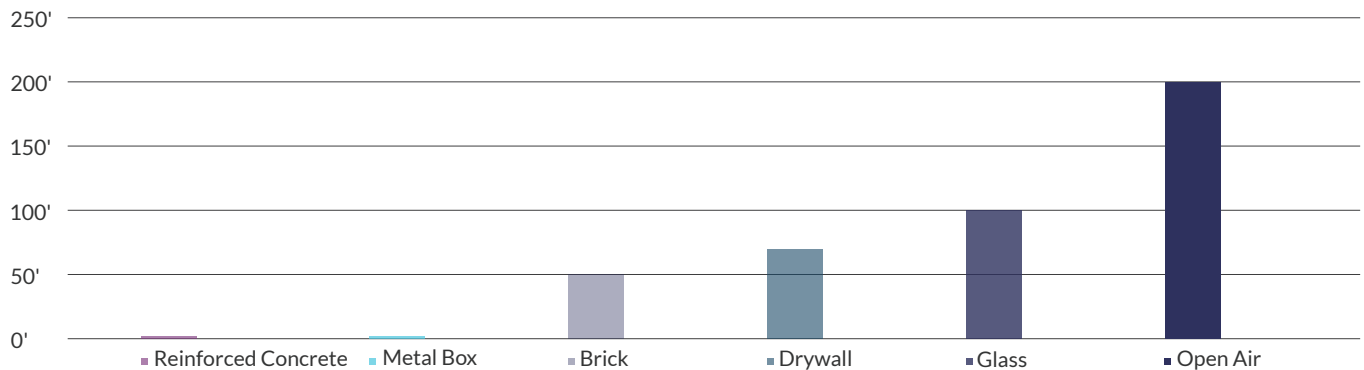
Slim, constant-voltage design with onboard antenna and push-button reset for streamlined setup.

SPECIFICATION

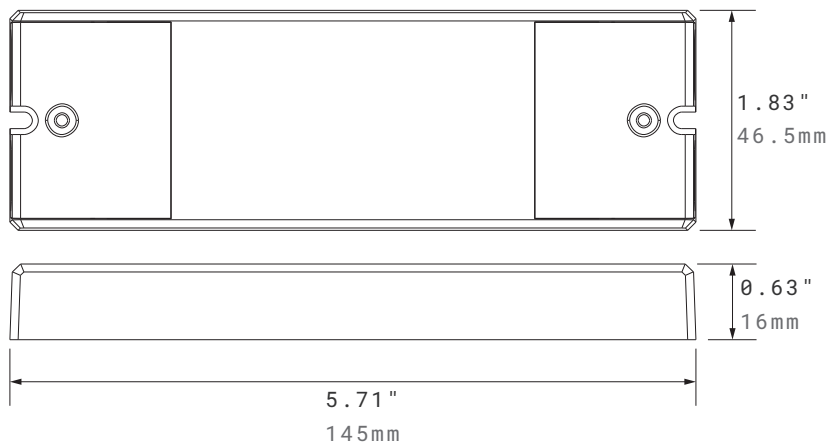
- ❶ 12-24VDC Power input.
- ❷ LED indicator: When the controller is added to the network, the indicator light flashes slowly.
- ❸ Common Anode Output(+).
- ❹ Reset Key: Long press to withdraw the device from internet/APP.
Flashing indicator indicates the device has been reset.
NC=No Connection.



Devices Communication Distance



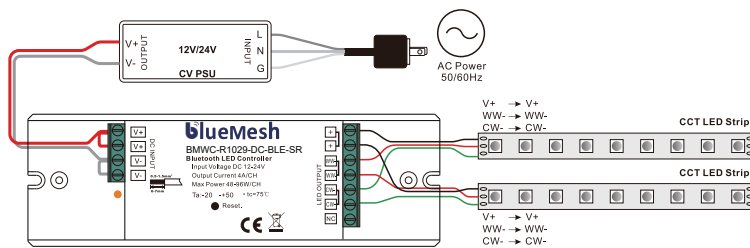
DIMENSIONS



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.

WIRING



- DO NOT expose the device to moisture.
- DO NOT install with power applied to device.

WARRANTY

5 years limited warranty.