



# PSC-WCM-450-BLE-WS

Single channel AC powered 0-10V room controller with inbuilt relay















### **Product Overview**

PSC-WCM-450-BLE-WS is a BLE5.2 controllable, single -channel 0-10V room controller. The device is powered by 100-277VAC voltage, also has a 20A relay to use it as a room controller or as a plug-load controller. It comes with Class-2 single channel 0-10V dimming output and 12V auxiliary output. The high output ratings within the device makes it suitable to control multiple numbers of light fixtures within a room. The device comes with an inbuilt antenna for communication.

The Lumos Controls ecosystem comprises controllers, sensors, switches, modules, drivers, gateways, and analytical dashboards, and can be connected to the Lumos Controls cloud for data analytics and configuration management. The lighting network's configuration, commissioning, and controlling can be done super-quick from any mobile device. The ecosystem is listed by the **Design Lights Consortium** (DLC), qualifying it for energy conservation incentive programs and rebates utility companies in North America.

### **Specifications**

#### **Electrical**

Specifications	Value	Remarks
Input voltage	120-277VAC	
Input current	100mA	
Frequency	50-60Hz	
Load voltage	100-277VAC	
Load current	16A	@120/277VAC E. Ballast, LED, CFL
	20A	@120/277VAC Resistive

#### **Features**

- Class-2 Single channel 0-10V output to control the dimming
- Load control up to 20A @ 120/277VAC
- It acts as a Plug load controller to manage, control and monitor the plug loads efficiently
- Conforms with DLC NLC5 Cybersecurity Standards
- Auxiliary 12V/100mA output to power the sensors
- BLE 5.2 based non-flooding intelligent communication
- Standard ½ inch chase nipple allows easy mounting to a junction box
- Zero downtime Over-the-Air (OTA) firmware updates

#### 0-10V Output

Specifications	Value	Remarks
Number of channels	1	
Voltage range	0-10VDC	
Current	100mA	Max Source current per channel
Dimming range	0-100%	1000 steps resolution
Dimming curve	linear (default) / logarithmic	

#### **Auxiliary Output**

Specifications	Value
Voltage	12VDC
Current	300mA

#### Bluetooth

Specifications	Value	Remarks
Frequency range	2402 - 2480MHz	
Max output power	8dBm	Conductive
Receiver sensitivity	-95dBm	
Connection distance (device to device)	45m(147.6 ft)	Vary depending on the installation enviornment

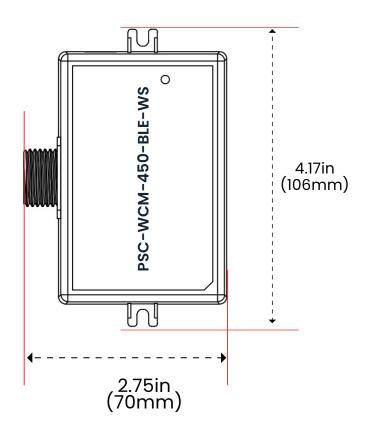
#### Mechanical

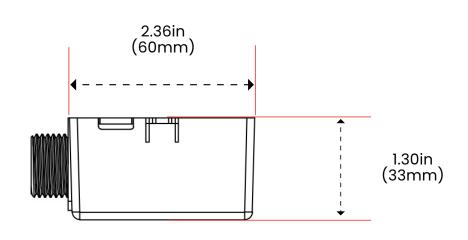
Specifications	Value	Remarks
Dimensions	4.17 x 2.36 x 1.30in (106X 60 X 33mm)	LXWXH
Weight	124g(4.37oz)	
Case material	Plastic	White

#### **Environmental**

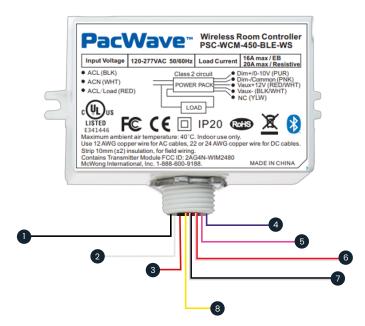
Specifications	Value
Operating temperature	-40 to 40°C(-40 to 104°F)
Storage temperature	-40 to 85°C(-40 to 185°F)
Relative humidity	90-95% non-condensing

### **Product Dimensions**





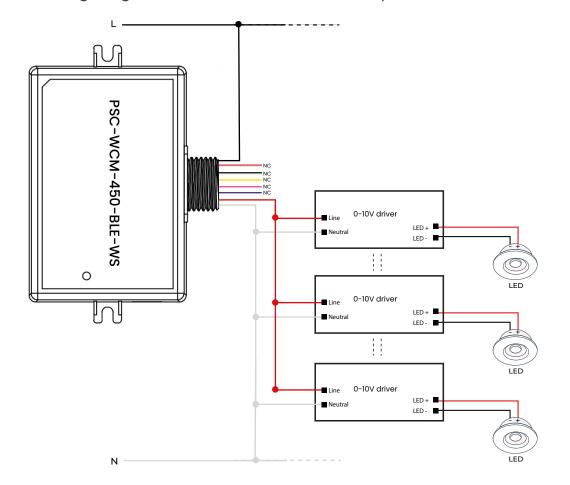
### **Wire Description**



SI.No	Name	Connector color	
•	ACL	Black	
2	ACN	White	
3	ACL/Load	Red	
4	DIM+/0-10V	Purple	
5	DIM-/Common	Pink	
6	Vaux+ 12V	Red/White	
7	Vaux-	Black/White	
8	NC(No Connection)	Yellow	

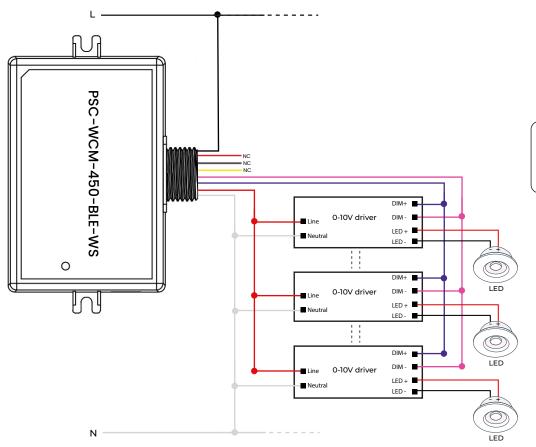
### Wiring

1. Configuring PSC-WCM-450-BLE-WS in relay mode



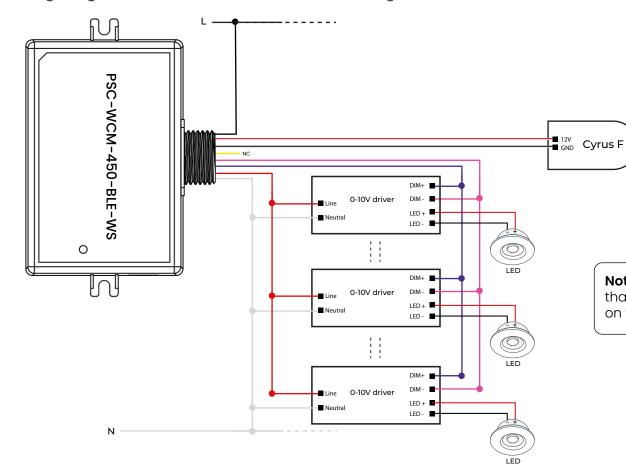
**Note:** Total number of Drivers that can be used will depend on the input rating of the Driver

#### 2. Configuring PSC-WCM-450-BLE-WS for dimming



**Note:** Total number of Drivers that can be used will depend on the input rating of the Driver

3. Configuring PSC-WCM-450-BLE-WS for dimming and sensor association

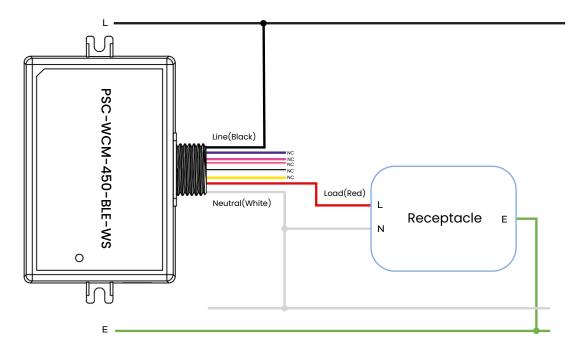


Connector color Name Black ACL White ACN Red ACL/Load Purple DIM+/0-10V Pink DIM-/Common Red/White Vaux+ 12V Black/White Vaux-NC(No Connection) Yellow

NC: No Connection

**Note:** Total number of Drivers that can be used will depend on the input rating of the Driver

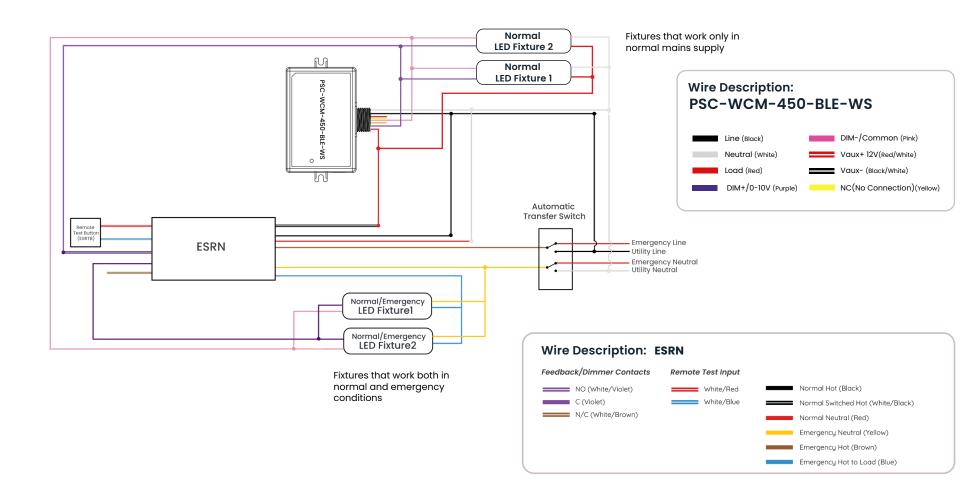
4. Configuring PSC-WCM-450-BLE-WS for plug-load control application



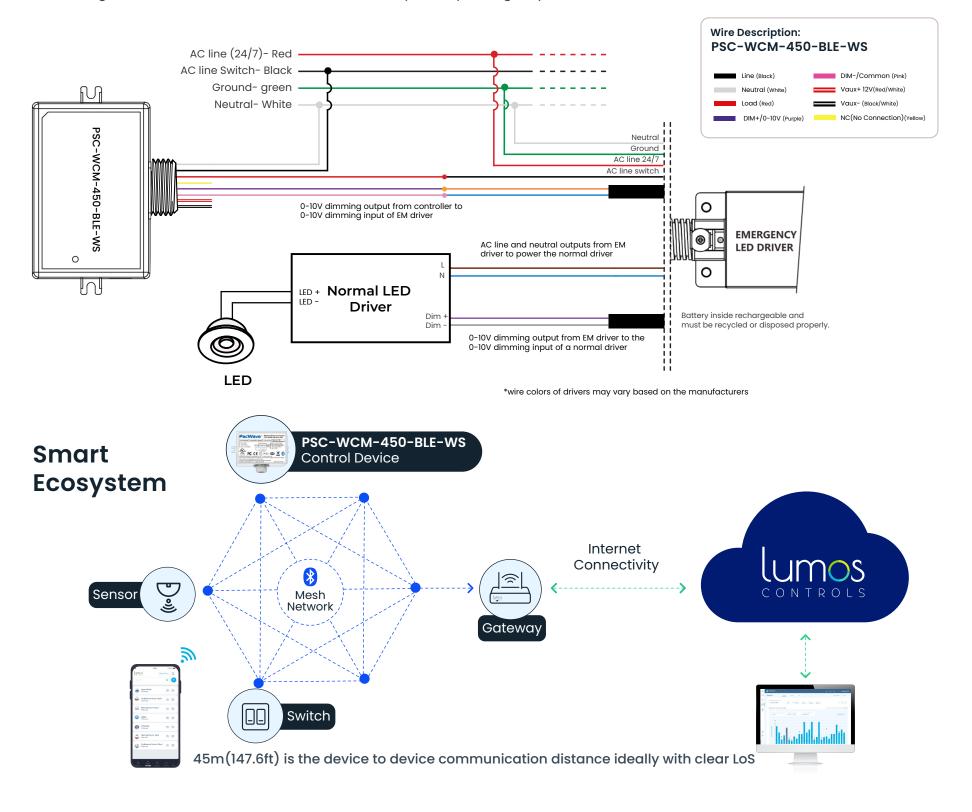
Connector color	Name
Black	ACL
White	ACN
Red	ACL/Load
Purple	DIM+/0-10V
Pink	DIM-/Common
Red/White	Vaux+ 12V
Black/White	Vaux-
Yellow	NC(No Connection)

NC: No Connection

5. Configuring PSC-WCM-450-BLE-WS for Emergency Lighting Control with ESRN



6. Wiring PSC-WCM-450-BLE-WS with a 0-10V battery backup Emergency Driver



## Items included in the package box

■ PSC-WCM-450-BLE-WS

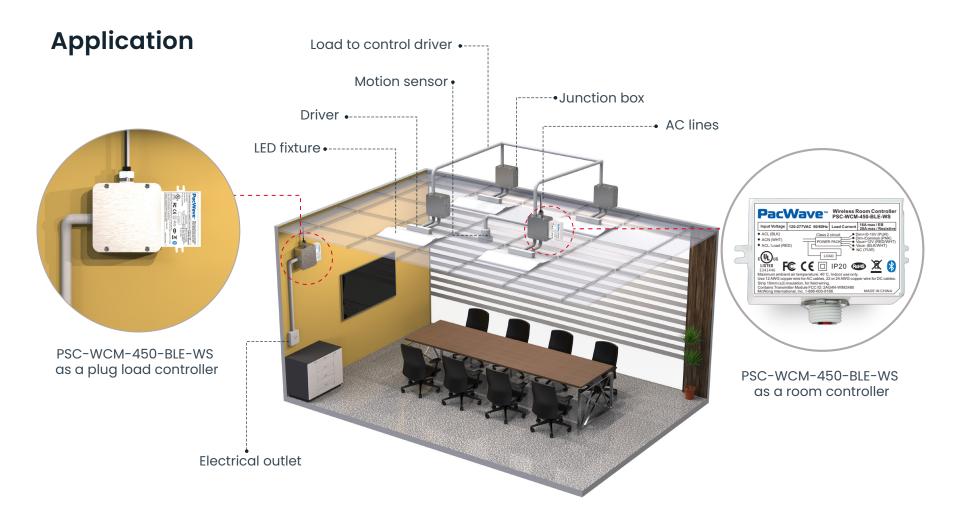
User manual

Wirenuts

Screws

### **Ordering Information**

Product	Product	Product	Communication	Voltage	Output	Aux	Relay
Code	Name	Description		Rating	Channel	Power	Control
PSC-WCM-450-BLE-WS	Wisilica enabled room controller	Wireless 0-10V single channel dimming AC powered room controller	BLE5.2	120-277VAC	0-10V Single Channel	12VDC	20A Max



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