

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

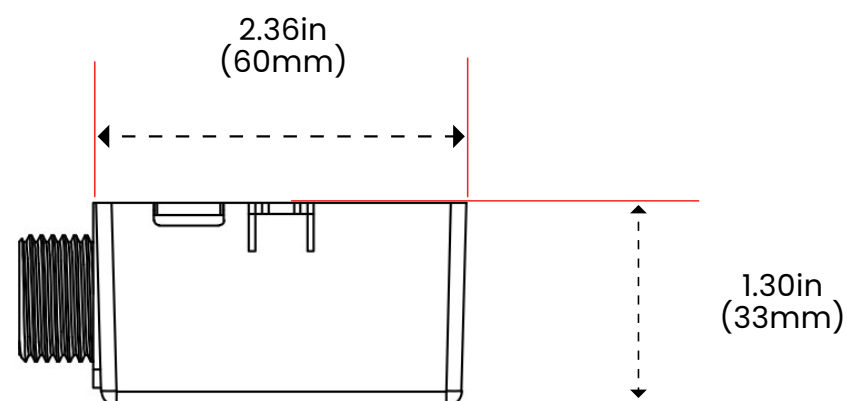
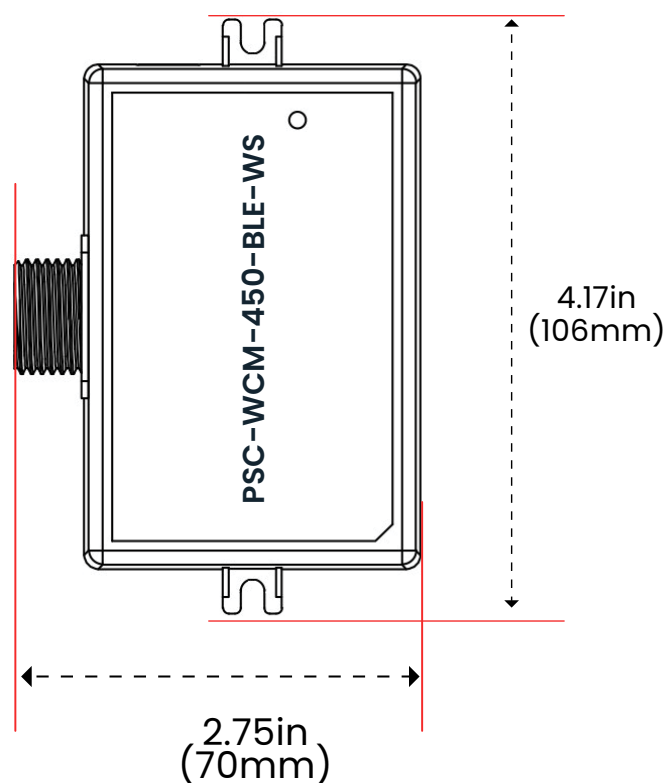
Environmental

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

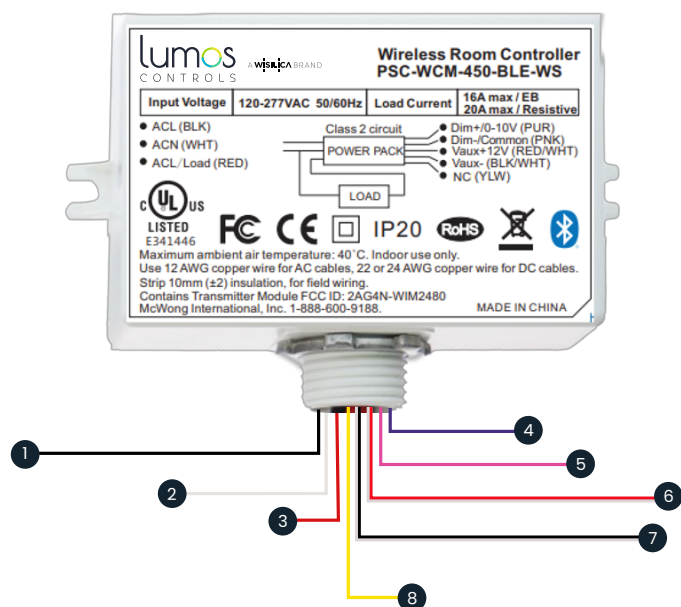
Mechanical

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

Product Dimensions



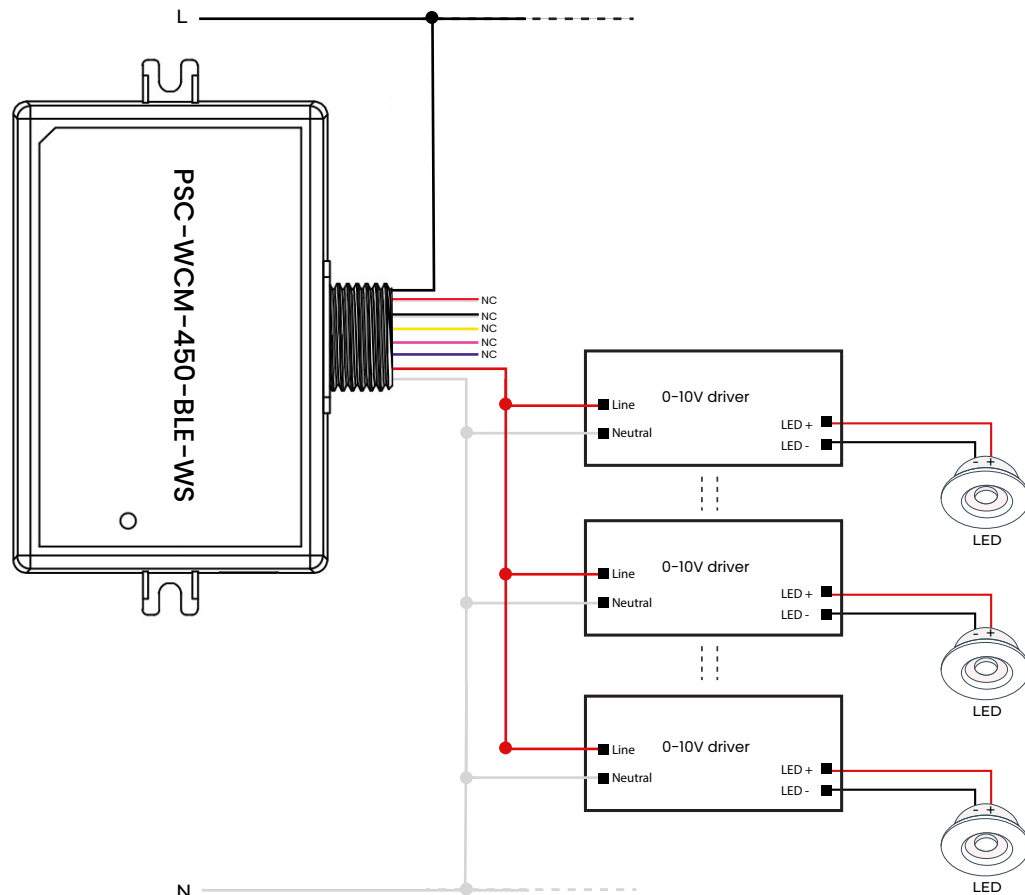
Wire Description



Sl.No	Name	Connector color
1	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

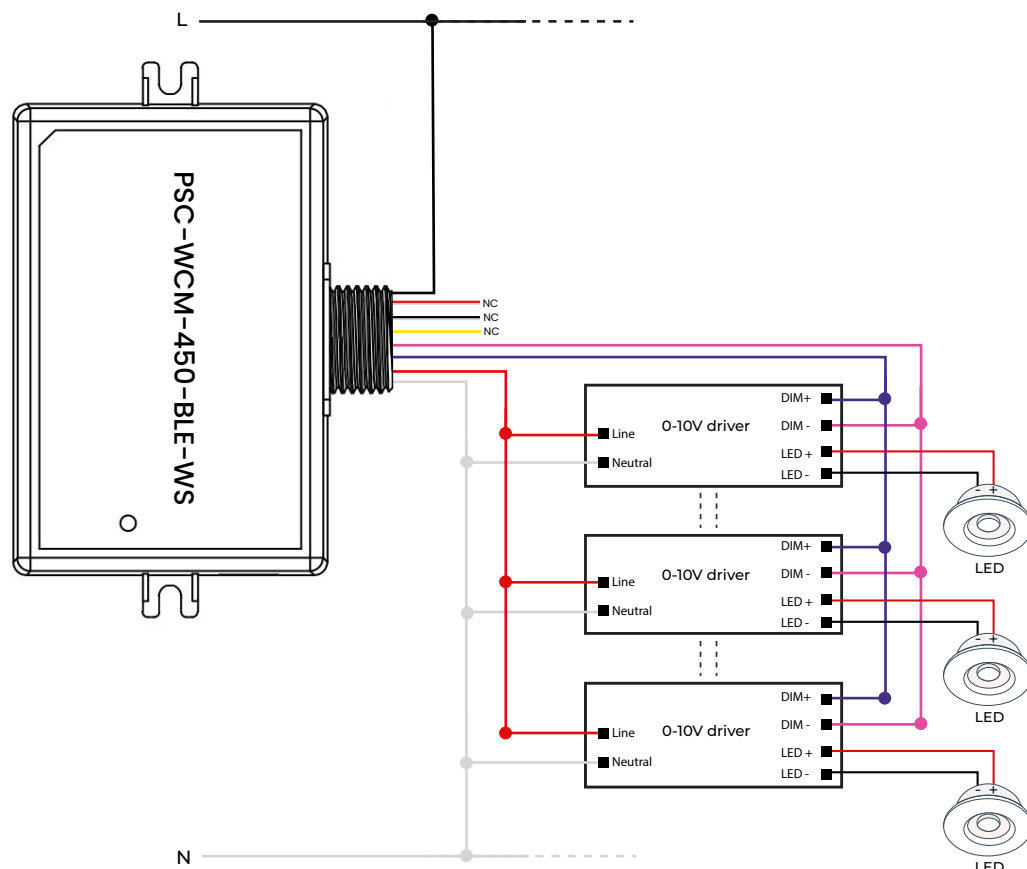
Wiring

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

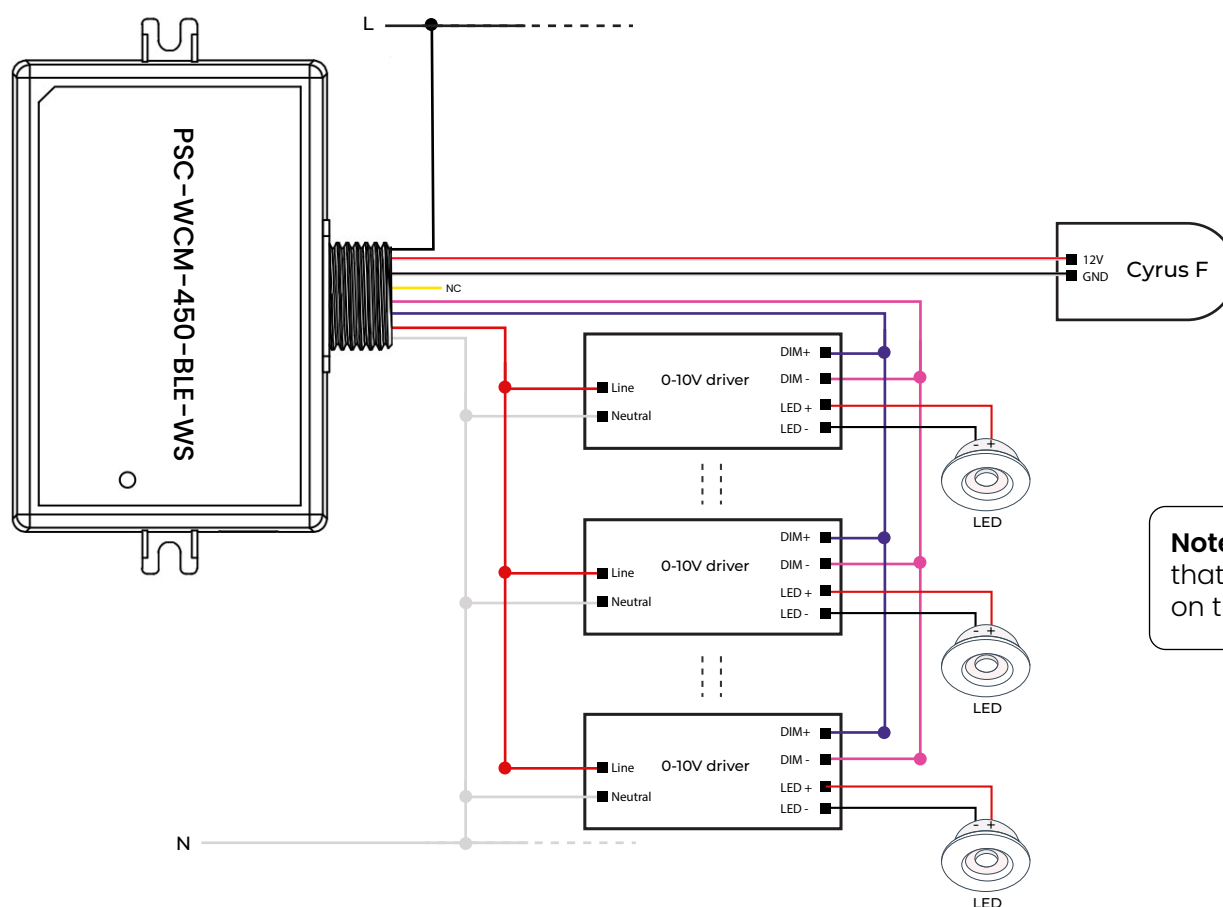


Note: Total number of Drivers that can be used will depend on the input rating of the Driver

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)

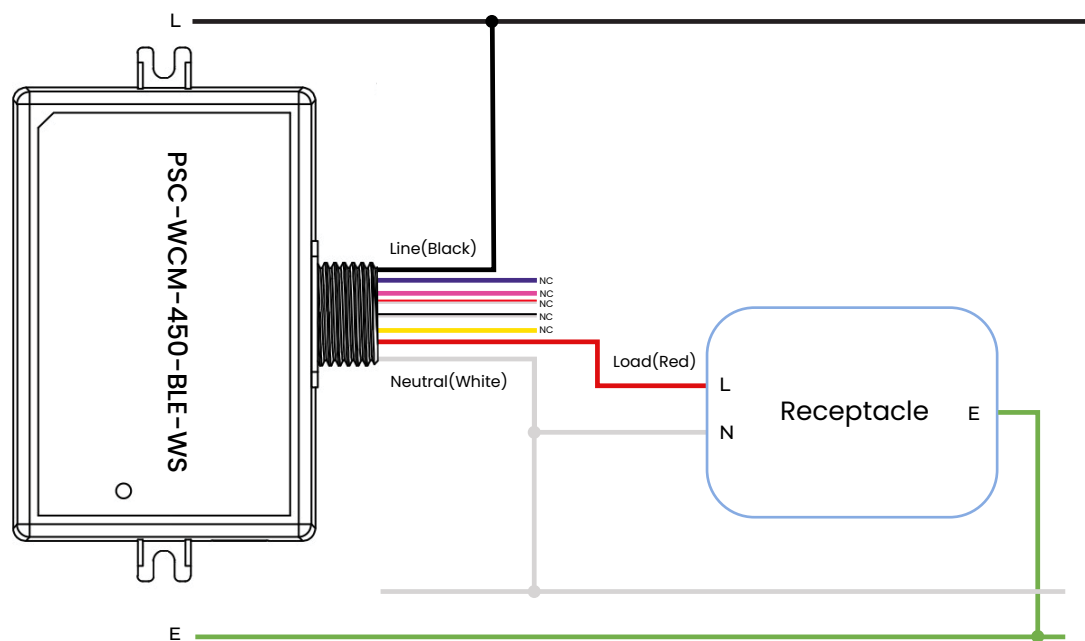
NC: No Connection

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



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

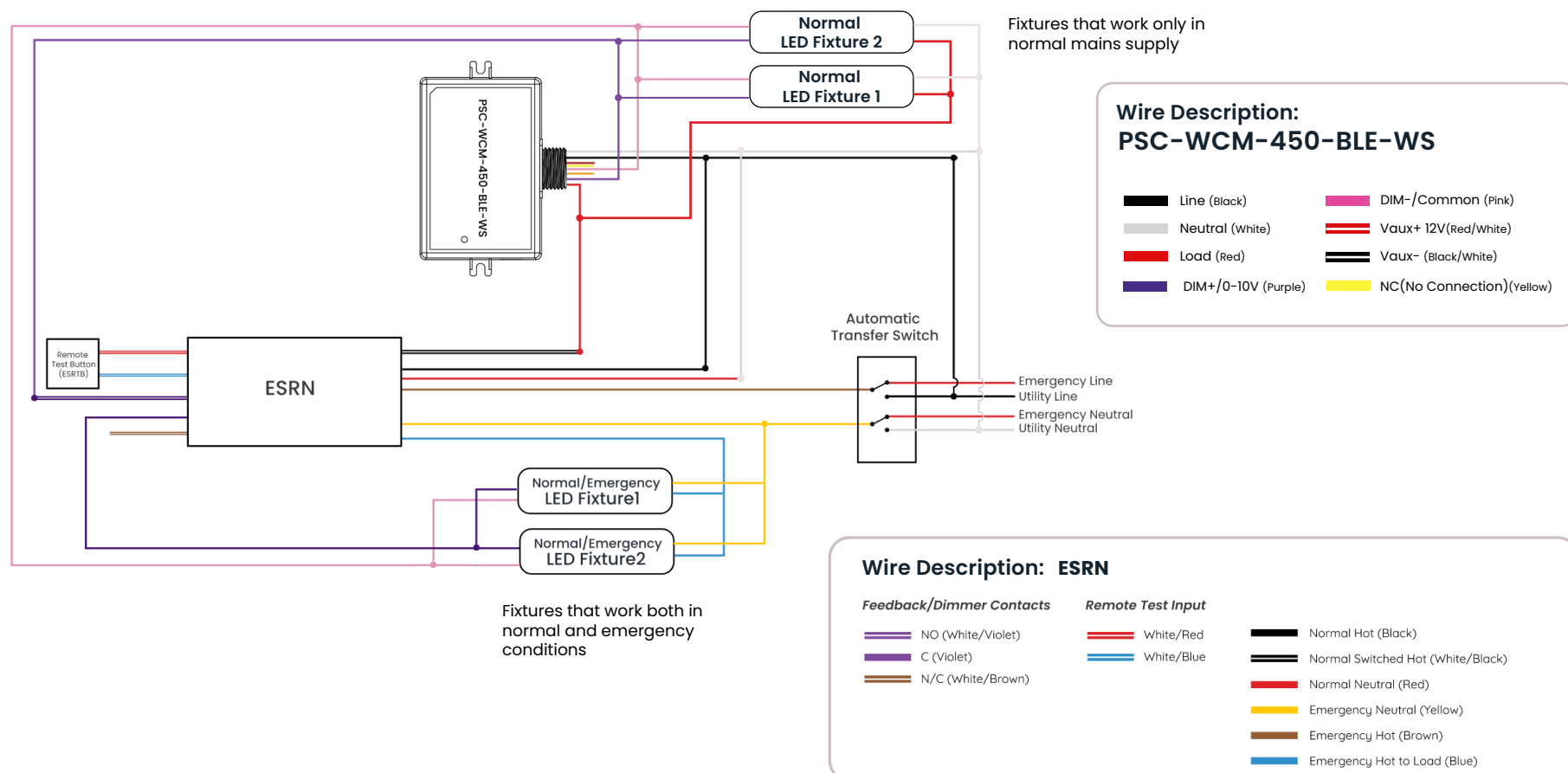
4. Configuring PSC-WCM-450-BLE-WS for plug-load control application



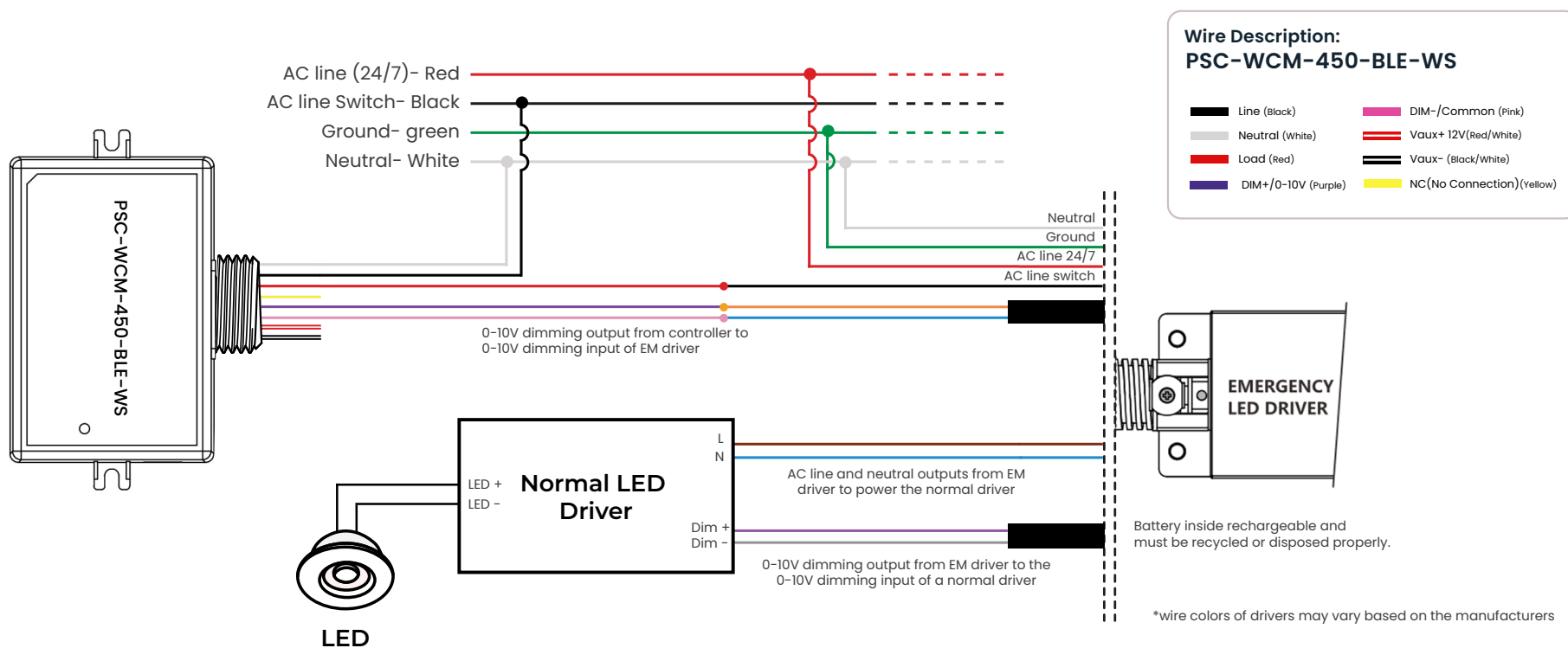
Connector color	Name
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Red/White	Vaux+ 12V
Black/White	Vaux-
Yellow	NC(No Connection)

NC: No Connection

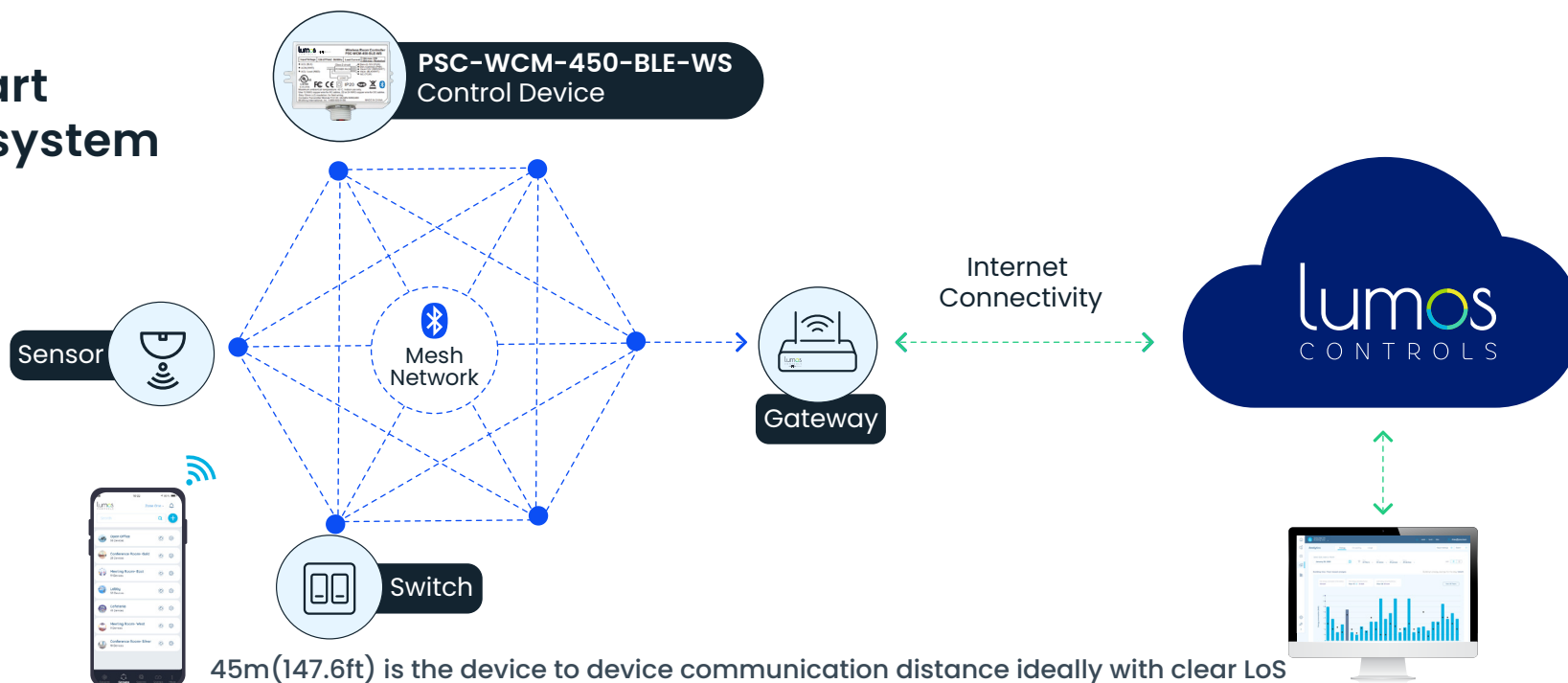
5. Configuring PSC-WCM-450-BLE-WS for Emergency Lighting Control with ESRN



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



Smart Ecosystem



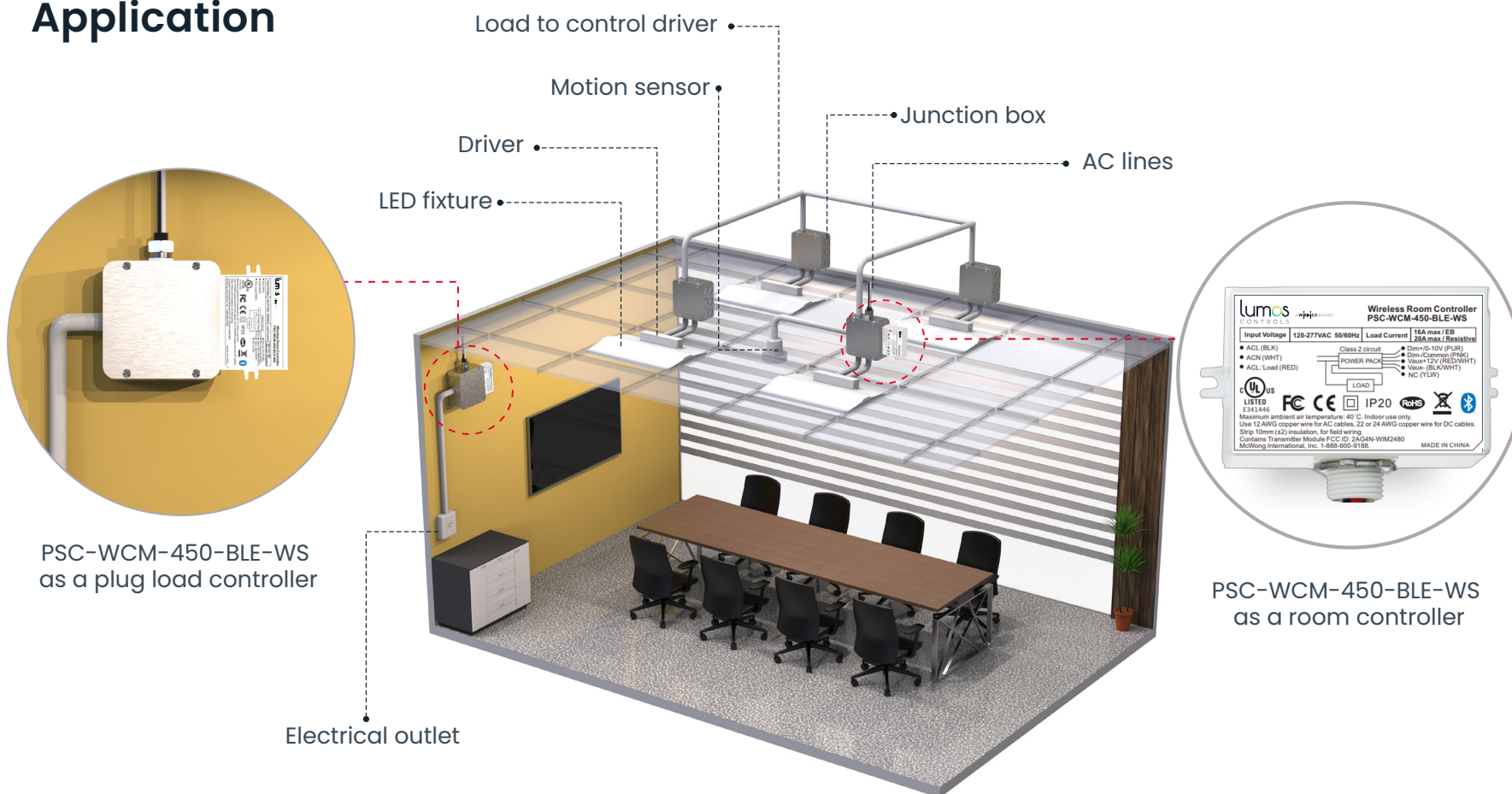
Items included in the package box

- PSC-WCM-450-BLE-WS
- User manual
- Wirenuts
- Screws

Ordering Information

Product Code	Product Name	Product Description	Communication	Voltage Rating	Output Channel	Aux Power	Relay 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

Application



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20321 Lake Forest Dr D6,
Lake Forest, CA 92630

www.lumoscontrols.com

+1 949-397-9330