

Wireless Fixture Controller with Long Range Antenna

Overview

- 1-Channel 0-10VDC Dimming
- Mounts In Fixture
- Antenna Rated For IP65
- Bluetooth® SIG Mesh
- High-End Trim, Zoning, Continuous Dimming
- 10-22 VDC Load Control Output (active high)
- 5dBi & 3dBi Indoor And Outdoor Antennas Available (order separately)
- Conforms With DLC NLC5 Cybersecurity Standards



Controller Suitable For In-Fixture Use Only
(IP65 Extended Range Antenna Outside Of Fixture)



Applications

The PSC-WCM-50-BLE-SR/EXA Wireless Fixture Controller allows for one channel of 0-10VDC dimming, and load control output (active high). This device features an IP65 rated SMA, RP, female antenna connector. Antenna must be ordered separately.

PSC-WCM-50-BLE-SR/EXA is controlled wirelessly via Bluetooth® Mesh technology allowing for wireless dimming of LED lighting. The controller communicates with other devices such as switches and sensors via the wireless mesh network. The device outputs a 0-10VDC dimming signal to compatible drivers (and controls dim-to-off products) as well as a 10-22VDC control signal (active high). This control signal can be used to control other devices such as power packs.

Specifically designed for indoor or outdoor lighting, this controller with long range antenna extends the range of Bluetooth mesh messages. Users can deploy cost-effective, robust Bluetooth mesh control across indoor and outdoor applications of all sizes.

Wireless Control Operation

TruBlu™ Mesh Controls: Qualified for Bluetooth Mesh 1.0.1 (SIG), the unit can pair with an iOS application to allow initial setup and subsequent adjustments. End users can program dimming levels and group multiple controllers into a Bluetooth® Mesh system for simultaneous wireless lighting control.

Advanced functionality such as energy monitoring, and demand response is available with the optional TruBlu Gateway.

1-Channel: allows for one 0-10 dimming channel for driver control.

Relay Control: Load control output (active high) can be used to trigger relays or other control circuitry.

See the TruBlu™ Commissioning User Manual for more information.

Accessories

Power Pack: The PSC-WCM-50-BLE-SR/EXA operates on 12-24 VDC input and requires a separate mwConnect PacWave™ power pack. See mwConnect PacWave™ Power Pack data sheets.

Alternatively, the unit can operate with a dim to off driver that has a (12V-24V) auxiliary output.

Summary

Product Type:
1-Channel Wireless Fixture Controller

Input Voltage | Current Consumption:
12-24 VDC | 40mA

0-10V Output: 30 mA

Load Control Output: Active High
Vin-2.5 V, 30mA source for sensor or relay

Mounting: Controller fixture mount, antenna mounts outside of fixture to maximize range

Max Bluetooth Range¹:
900ft (274.32m)

Operating Temperature:
-30° C to 70° C

Storage Temperature:
-40° C to 85° C

Relative Humidity:
90-95% non-condensing at 30° C

Color: White

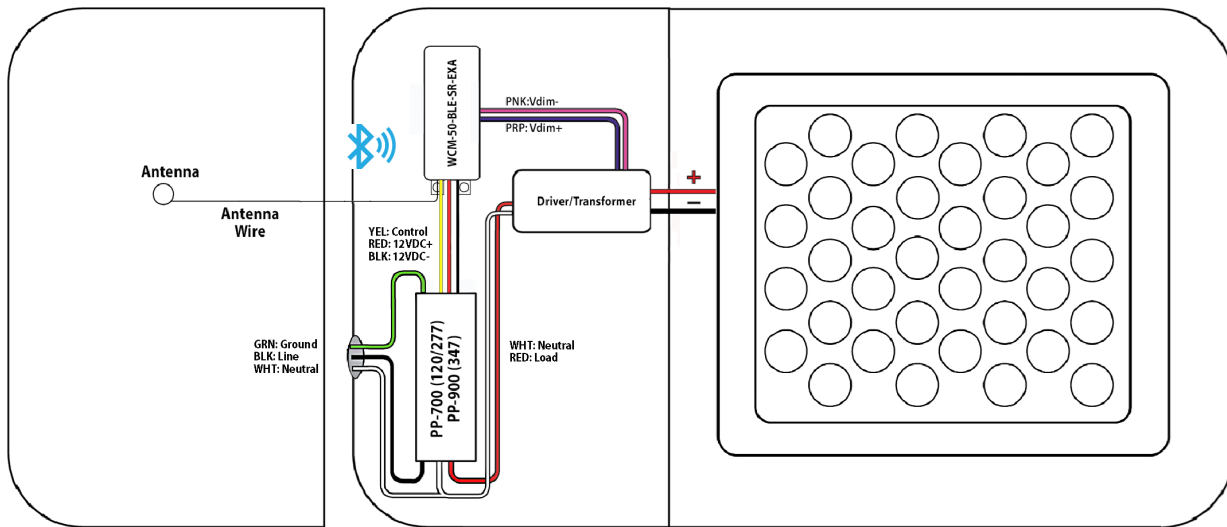
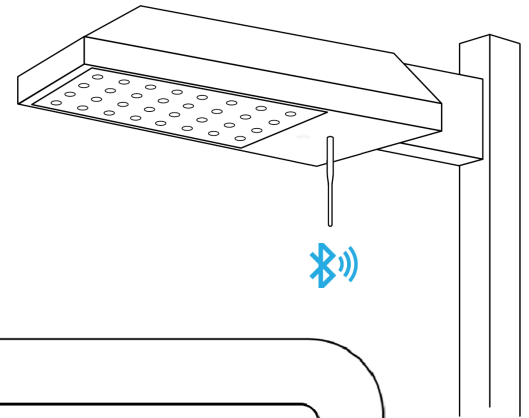
Warranty: 5 years

Note:
1. Bluetooth Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for range accuracy.

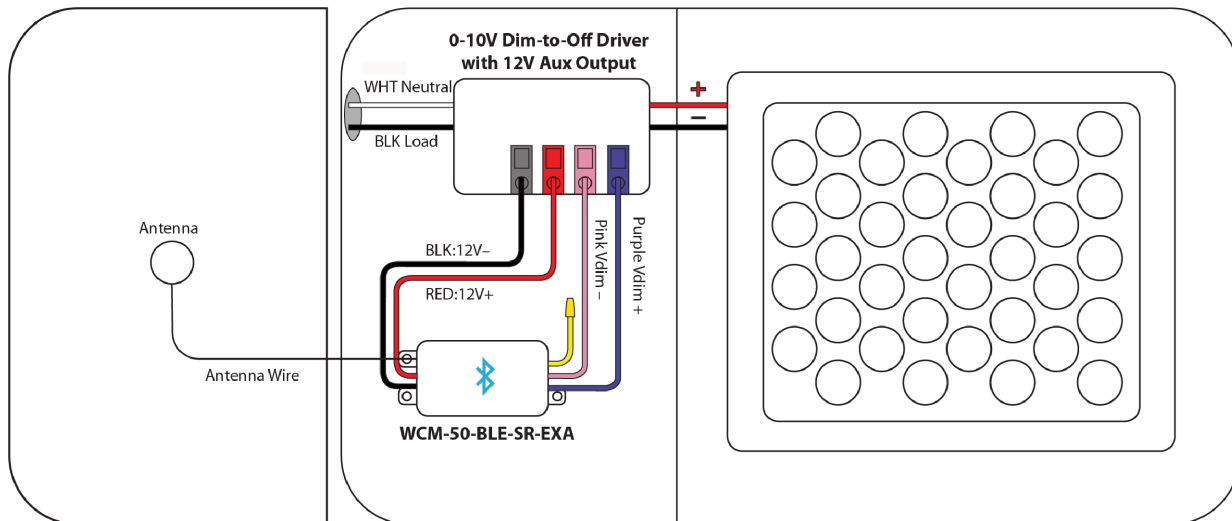
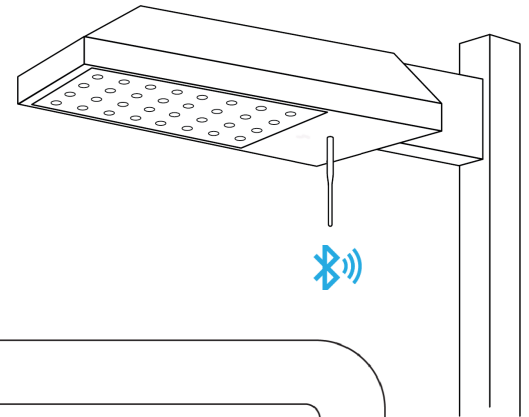
Project

Location/Type

**Wiring Example Application:
Controller With PP-700 Power Pack And Long Range Antenna**

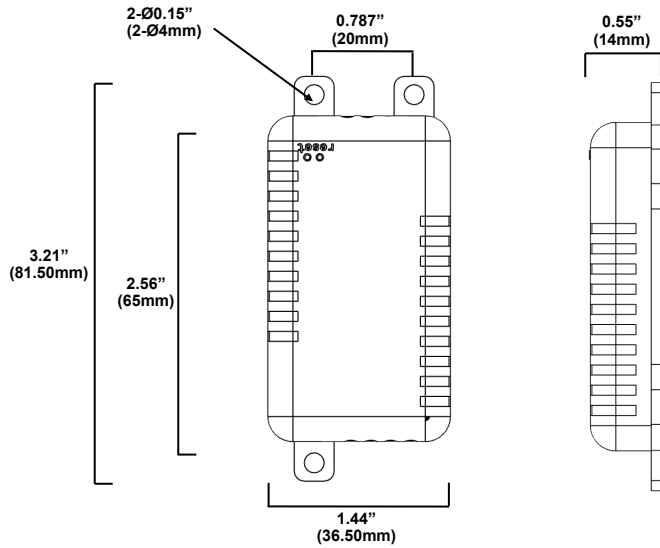


**Wiring Example Application:
Controller With Dim To Off Driver—12VDC Auxiliary Power,
Long Range Antenna**



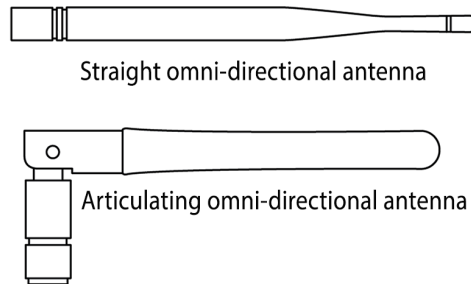
Physical Dimensions

Enclosure, Indoor Only:



Drawings Are Not To Scale

Antenna Options



Straight omni-directional antenna

Articulating omni-directional antenna

Wiring Table

Wire	Designation	Notes	Size
Black	12VDC- Power Output	Power Input	#18 AWG, 180+/-20mm, Strip 10mm Tin Plated
Red	12VDC+ Power Output	Power Input	
Purple (Violet)	0-10V+ Dim Output	Luminaire Control Output	#22 AWG, 180+/-20mm, Strip 10mm Tin Plated
Pink/Gray	0-10V- Dim Output	Luminaire Control Output	
Yellow	10-22VDC Control Output	Output for Controlling Power Pack or Similar Devices (Active High)	

How to Order

Model No.	Description	Input Voltage	Output
PSC-WCM-50-BLE-SR/EXA	Fixture Controller, Single Channel, (requires antenna select one from below) TruBlu™ Bluetooth Mesh, Silvair technology partner	12-24VDC	0-10V,30mA & Control Output
SRM-24SW20C-G5-IP-BK	Straight, 7.87 inch (200mm) long by 0.51 inch (13mm) diameter, 5dBi omni-directional, outdoor rated (IP65) antenna with Black finish		
SRM-24FW11C-G3-WT	Articulating (up to 90deg), 4.33 inch (110mm) long by 0.51 inch (13mm) diameter, 3dBi omni-directional, indoor rated antenna with White finish		

For Line to Low Voltage Power Supply/Controller, please see mwConnect PacWave™ Power Pack data sheets. Design and specifications are subject to change without notice.