

Radiar DP5

5 Channel PWM Controller



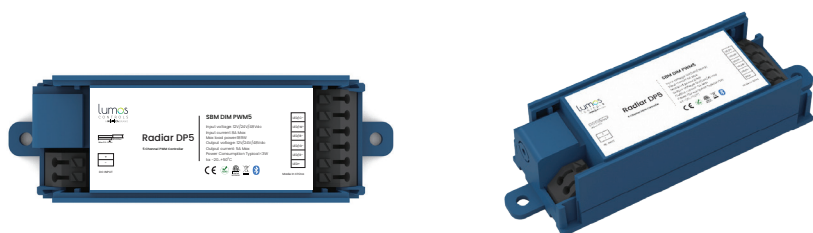
Product Overview

Radiar DP5 is a 5-channel constant voltage dimming module. It provides excellent color adjustment performance and is based on manual input/automated control to adjust LED light color and brightness.

It can be monitored and controlled through mobile devices or cloud platforms and supports up to 11 PWM5 profiles.

The Lumos Controls ecosystem comprises controllers, sensors, switches, modules, drivers, gateways, and analytical dashboards.

It is listed by the Design Lights Consortium (DLC), qualifying it for energy conservation incentive programs and rebates by utility companies



Specifications

Electrical

Specifications	Value
Input voltage	12-48VDC
Input current	<8A
Maximum load power	189W
Power loss	<3W
Output voltage	12-48VDC
Output current	<5A

Features

- Supports 11 channel configurations for different applications
- Flexibility to choose channel configuration on the go
- BLE 5.0 based non-flooding intelligent communication
- Overload protection
- Zero downtime Over-the-Air (OTA) firmware updates

Bluetooth

Specifications	Value
Frequency range	2400-2483MHz
RF transmit power	8dBm
RF receiving power	-85dBm

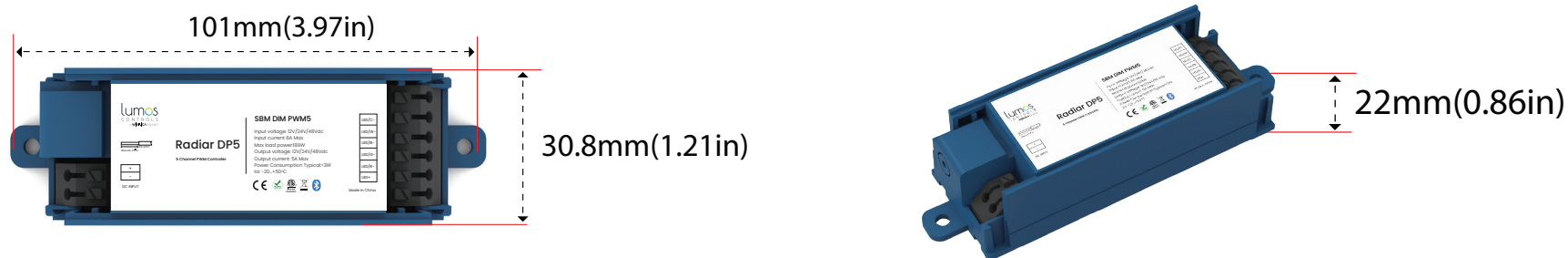
Environmental

Specifications	Value
Ambient temperature	-20 to 50°C (-4 to 122°F)
Storage temperature	-40 to 80°C (-40 to 176°F)
Relative humidity	5% to 85%

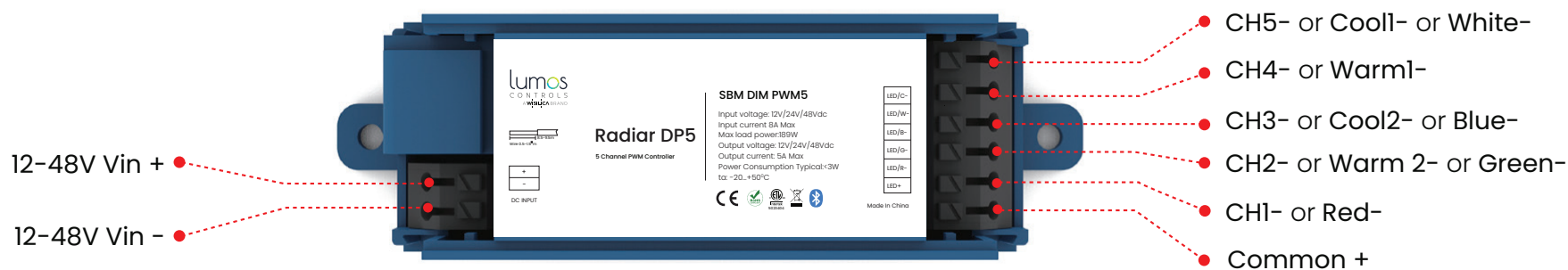
Mechanical

Specifications	Value
Dimension	101 x 30.8 x 22mm (3.97 x 1.21 x 0.86in)

Product Dimensions



Connector Description

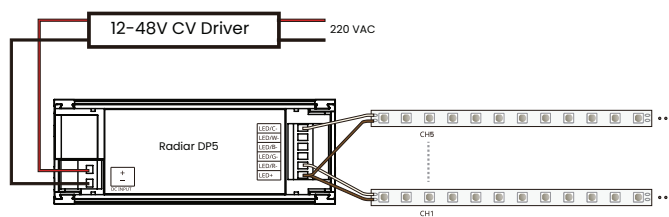


Supported PWM5 profiles

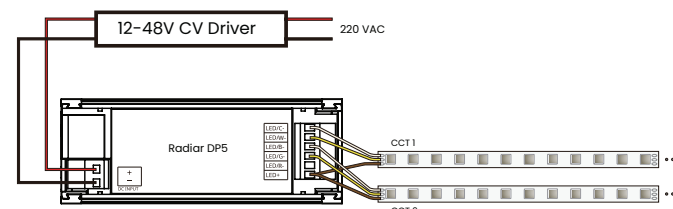
1 dimming channel	5 dimming channels	RGB and W
2 dimming channels	1 CCT channel	RGB and CCT
3 dimming channels	2 CCT channel	RGB or CCT
4 dimming channels	RGB	

Recommended load power table for different flexible light strips

Flexible LED strip	Max Load rating @12VDC	Max Load rating @24VDC	Max Load rating @48VDC
Single channel flex	90W Total	180W Total	300W Total
2 to 5 dimming channels	90W Total(Upto 60W per channel)	180W Total(Upto 120W per channel)	300W Total(Upto 200W per channel)
Single CCT strip	90W Total	180W Total	300W Total
2 CCT strips	90W Total(Upto 60W per channel)	180W Total(Upto 120W per channel)	300W Total(Upto 200W per channel)
RGB flex	90W Total(Upto 60W per channel)	180W Total(Upto 120W per channel)	300W Total(Upto 200W per channel)
RGBW flex	90W Total(Upto 60W per channel)	180W Total(Upto 120W per channel)	300W Total(Upto 200W per channel)
RGB-CCT flex	90W Total(Upto 60W per channel)	180W Total(Upto 120W per channel)	300W Total(Upto 200W per channel)

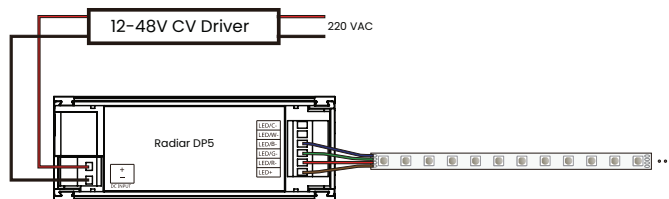


For up to 5 dimming channels

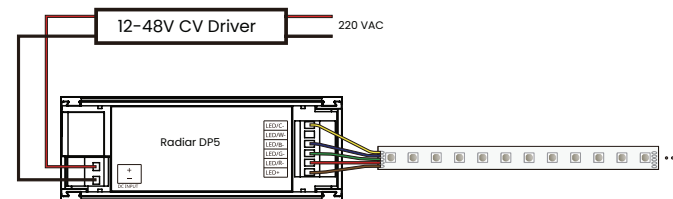


For tunable white control

Wiring

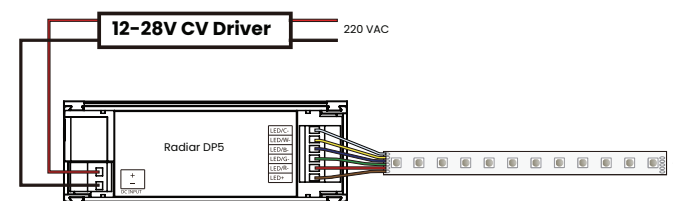


For RGB control



For RGBW control

**For RGB and CCT/
RGB or CCT control**



Wiring type and cross section

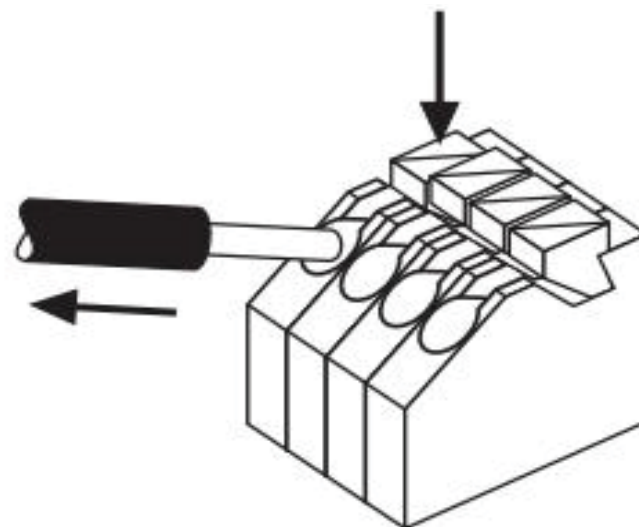
The wire can be a copper stranded wire with a rubber sheath, or a cross-section of 0.75–1.5 mm² the solid line. Stripped from the wire 8.5–9.5mm Insulation layer to ensure perfect contact with the plug-in terminal. Use only one wire per patch terminal.

How to pull out the wire

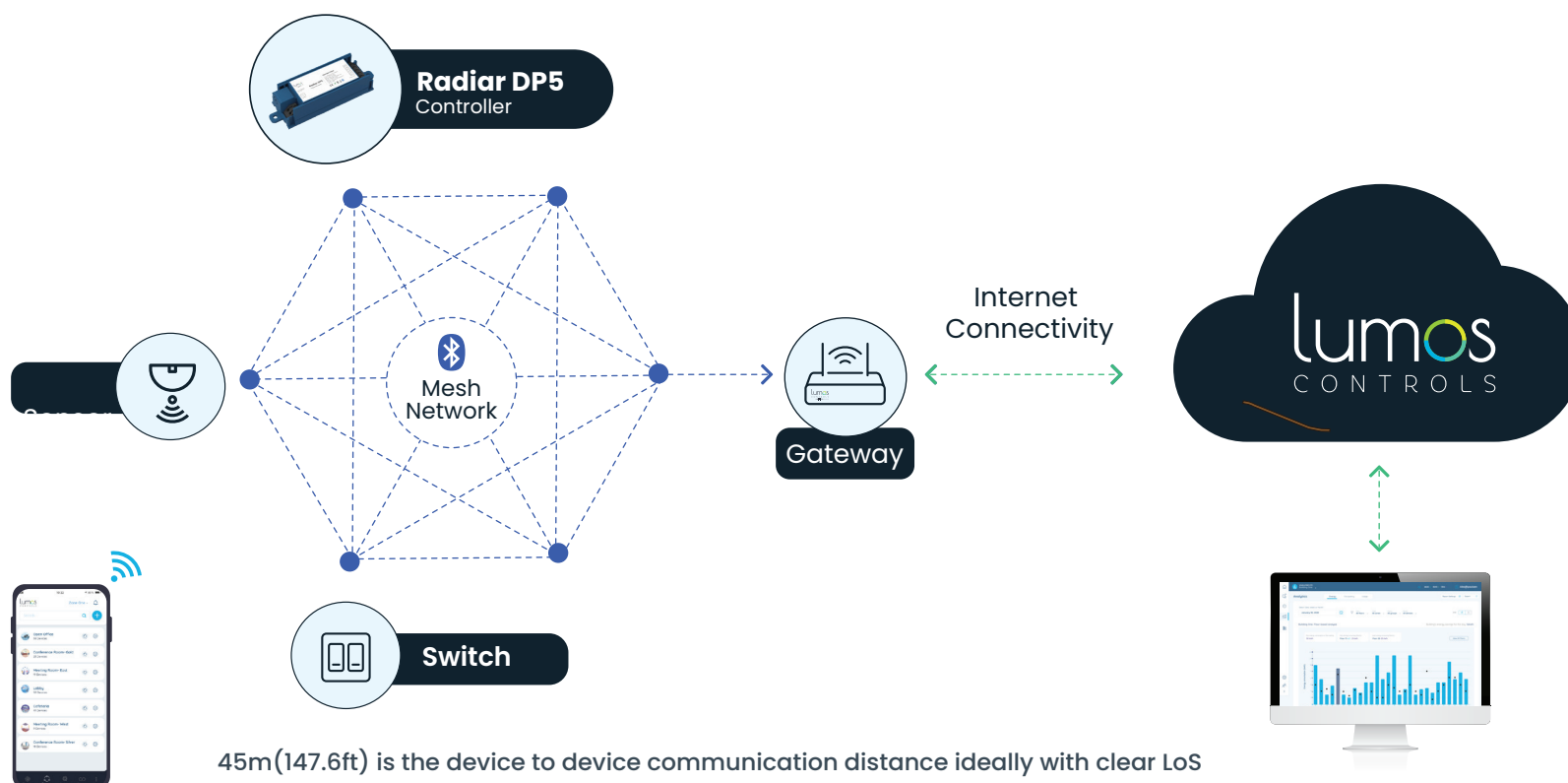
Press down the “push button” and remove the cable from front.

Wiring guide

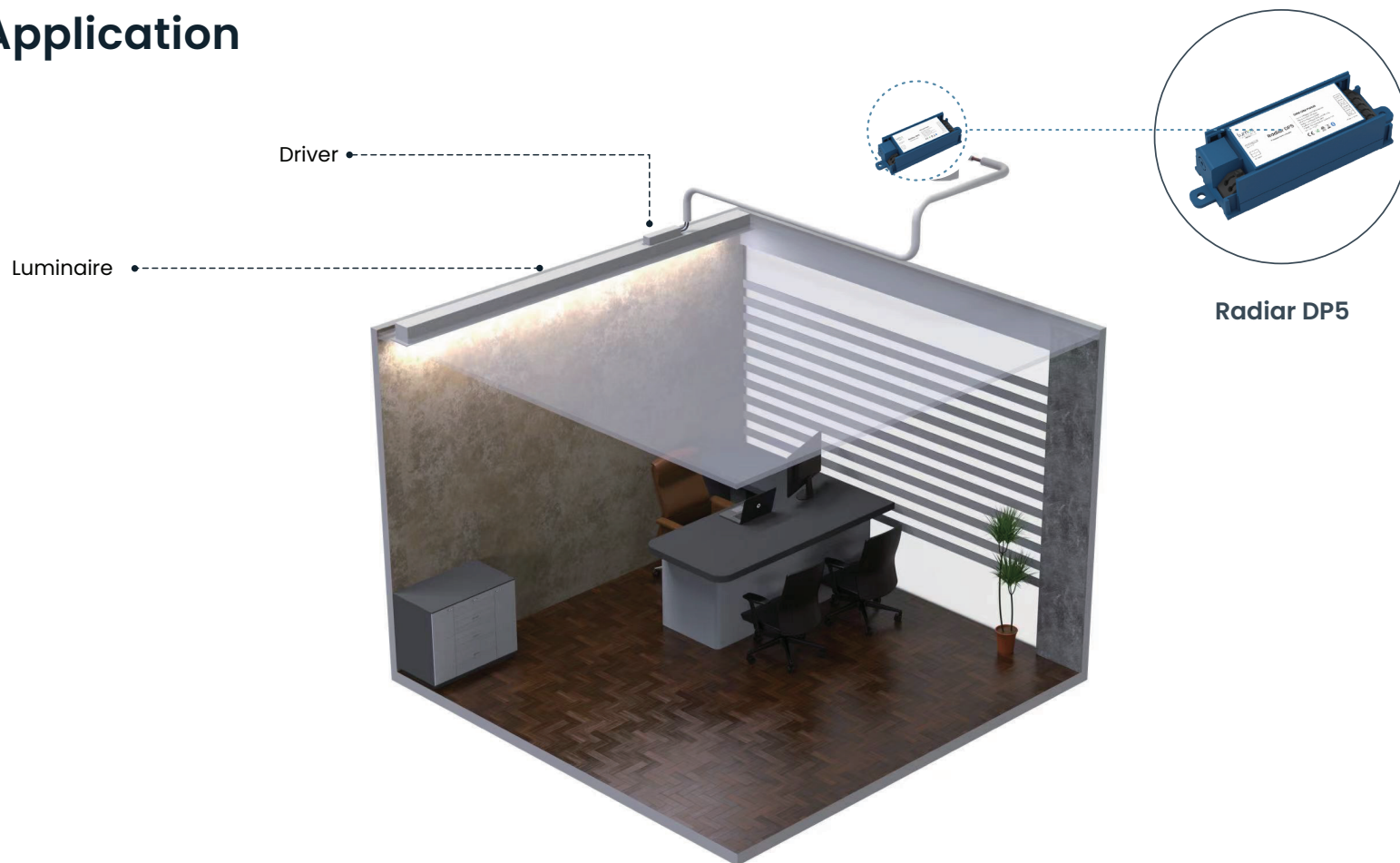
- › All wiring must be as short as possible to ensure good EMI
- › Secondary switching is not allowed
- › Incorrect wiring can destroy LED module



Smart Ecosystem



Application



Ordering Information

Product Code	Product Name	Product Description	Communication	Voltage Rating
SBM DIM PWM5	Radiar DP5	5 Channel PWM Controller	BLE 5.0	12-48VDC

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