

24VDC 5 CHANNEL FULL COLOR LIGHT ENGINE

DESIGNED BY GREGORY KAY | ASSEMBLED IN AMERICA | PATENT PENDING



REV 07.09.24

DESCRIPTION

PureEdge Lighting's new TruColor™ RGBTW technology uses five channels of tunable LEDs, composed of red, blue, green, and Tunable White (1500K-6500K). With our precision-engineered, proprietary color mixing, we produce one of the widest, most accurate spectrums available, giving our customers access to the warm glow of the sunset (1500K-2400K golden hour) to the pure white light of the mid-day sun (5700K) and everything in between, TruColor™ LED's achieve an average CRI-Color Rendering Index of 94+ and a Duv of +-0.002 in relation to the blackbody curve at any point on the spectrum of tunable white CCT. Dynamic Color Changing functionality provides millions of possibilities for intricate customization, rich saturated or secondary colors, and unprecedented ease of installation, making RGBTW the ideal choice for residential and commercial applications. TruColor™ RGBTW adds more than just decorative flexibility; it also helps to support a healthy Circadian Rhythm and well-being. Let TruColor™ transform your space and the people within it. 24VDC Remote Power Supplies required. Includes a 5-year pro-rated warranty. For custom quotes and layout assistance, send your drawings and ideas to our design team: design@PureEdgeLighting.com

FEATURES & BENEFITS

- State-of-the-Art TruColor[™] (1500K-6500K) spectrum offers dynamic effects with RGB and Tunable White
- TruColor™ RGBTW is optimized for use with WiZ Pro Wi-Fi based smart control system.
- Offered with Snap & Light, Pin Connectors, or Pre-soldered leads reducing time and labor during installation
- Dims from full brightness down to 5%, and tuned anywhere from 1500K to 6500K.
- 24VDC
- IP67
- Offered with water-tight barrel connectors and 6" wire leads reducing time and labor during installation
- Developed to meet popular demand for resilient performance without sacrificing output, color rendering and efficacy
- Tolerance: Created to resist damage in rigorous outdoor environments
 Compact LED spacing: Produce uniform light distribution without visible
- diodes or hot spots when used within a diffused lens • 4oz Layer of Copper Busbar: Provides superior heat dissipation and less
- 4oz Layer of Copper Busbar: Provides superior heat dissipation and les voltage drop equivalent to 14AWG wire
- Premium Coating: Optically Clear Silicone prevents fading over time
- Suitable for wet locations
- · Warranty: Includes a 5-year pro-rated warranty

LUMEN PERFORMANCE

- TruColor™ RGBTW Red, Green, and Blue with Tunable White (1500K-6500K)
- S5W5 360Im/ft 5W @3000K

AVERAGE PERFORMANCE 2000K-5500K

- Average CRI: 94+
- Average DUV: +-0.002
- Average R9: 91, RG: 103, RF:93
- Average Life: 50,000 hours

SPECIFICATIONS

- 24VDC
- S5W5: 5W RGB & 5W Tunable White
- One U-Strap included per foot
- Sold in 1' increments
- Field-cuttable in 3" increments
- Operating temperature: -22°F to 140°F (-30°C to 60°C)

REMOTE POWER SUPPLIES*, DIMMING & CONTROLS (SOLD SEPARATELY)

Pure Smart[™] WiZ Pro Power Supplies & Controls

Pure Smart Wi-Fi Power Supplies and Bridgeboxes allow for integration into WiZ Pro wireless control ecosystem.

*In-Wall Mounting and drop ceiling Kits available for select power supplies

MAXIMUM LENGTHS BEFORE RE-FEEDING

S5W5 – Pure Smart[™] WiZ Pro: 20 ft

APPLICATIONS

Outdoor, wet locations. Display, Coves, Toe-Kicks, Pathway, Accent Lighting, Task Lighting, and General Illumination

COMPLIANCE

Class 2 Wiring, Outdoor Wet Location with Water Tight Barrel Connectors, IP67 Rated, ETL listed, RoHS



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24VDC 5 CHANNEL FULL COLOR LIGHT ENGINE



REV 07.09.24



0.6" (1.5cm) (1.5cm) (2.6cm)



CS45 45 Degree Surface Channel for Lens Tubing, 0.9" Height

CS.3 Flat Surface Channel for Lens Tubing, Sits flush within channel. 0.3" Height

NOMINAL LAMP DATA

DESCRIPTION	S5W5 5W RGB & 5W TUNABLE WHITE								
WATTS PER FOOT	5W Maximum								
COLOR TEMPERATURE	20K	22K	24K	27K	30K	35K	40K	57K	65K
LUMENS PER FOOT (Im/ft)	171	256	311	349	360	380	410	288	265
LUMENS PER WATT (Im/w)	63	56	71	82	85	87	98	98	111
CRI	91.8	93.8	94.5	94.9	95.5	96.9	97.2	92.1	89.8
Duv	-0.004	-0.0012	-0.0034	-0.0058	-0.0055	-0.0033	-0.0014	-0.0049	-0.0063
Rf	91	93	94	94	95	94	94	92	90
Rg	105	101	103	105	104	102	100	102	103
R9	90	90	90	94	97	97	91	81	70
R13	92	94	95	95	94	96	99	90	87
R15	99	99	99	98	97	97	97	89	85
WATTS/FOOT	2.7	4.55	4.35	4.25	4.25	4.35	4.2	2.95	2.4

INCLUDED & REQUIRED COMPONENTS (SOLD SEPARATELY)



A. OUTDOOR 24VDC LED SOFT STRIP (INCLUDED)

Sold in 1' increments up to 20', and may be custom ordered in 3", 5", 8", or 10" increments. Wet Location LED Strips may not be cut in the field and are not submersible.

B. SILICONE SLEEVE (INCLUDED)

Wet Location (Outdoor) LED Strips feature a water-resistant, flexible Silicone Sleeve.

C. POWER CONNECTOR (INCLUDED)

Included with Wet Location LED Strips. Comes connected to each end of the LED Strip sealed in water-resistant silicone.

D. MOUNTING STRAPS (INCLUDED)

Allow mounting of the Outdoor LED Strip to most outdoor surfaces. Mounting Straps are included with the Outdoor LED Strip, but can also be ordered separately.

E. OUTDOOR POWER SUPPLY (ORDER SEPARATELY)

Outdoor-rated Power Supplies are required for use with a Outdoor LED Strip, and are sold separately. Outdoor LED Strips have a maximum run length of 20'.

PROJECT

FIXTURE TYPE



24VDC 5 CHANNEL FULL COLOR LIGHT ENGINE



REV 07.09.24

LENGTH CHARTS

S5W5 WATTS PER FOOT				
Length In Feet	RGB Wattage	Tunable White Wattage	WiZ Pro Wattage	
1	5	5	5	
2	10	10	10	
3	15	15	15	
4	20	20	20	
5	25	25	25	
6	30	30	30	
7	35	35	35	
8	40	40	40	
9	45	45	45	
10	50	50	50	
11	55	55	55	
12	60	60	60	
13	65	65	65	
14	70	70	70	
15	75	75	75	
16	80	80	80	
17	85	85	85	
18	90	90	90	
19	95	95	95	
20	100	100	100	

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SAMPLE WIRING DIAGRAM



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A. OUTDOOR 24VDC LED STOMP STRIP

Sold in 1' increments up to 40', and may be custom ordered in finer increments. Wet Location LED Stomp Strip may not be cut in the field and are not submersible.

B. SILICONE SLEEVE (INCLUDED)

Wet Location (Outdoor) LED Stomp Strips feature a water-resistant, flexible Silicone Sleeve.

C. WATER TIGHT BARREL STRIP CONNECTOR (INCLUDED)

Included with Wet Location LED Stomp Strips. Comes connected to each end of the LED Stomp Strip sealed in water-resistant silicone.

2.57

(6.5cm)

Top

1 95

(5cm)

D. MOUNTING STRAPS (INCLUDED)

Allow mounting of the Outdoor LED Stomp Strip to most outdoor surfaces. Mounting Straps are included with the Outdoor LED Stomp Strip, but can also be ordered separately.

E. OUTDOOR POWER SUPPLY

Outdoor-rated Power Supplies are required for use with a Outdoor LED Stomp Strip, and are sold separately. Outdoor LED Stomp Strips have a maximum run length of 40'.

F. WET LOCATION JUNCTION BOX WITH 6" POWER CABLE

Use of Outdoor LED Stomp Strips requires an Outdoor Connection Box to house the wire connection from the LED Stomp Strip to Power Supply. The Outdoor Connection Box is sold separately.

WET LOCATION JUNCTION BOX

2.23"

(5.7cm)

4.2"

(10.7cm) Profile Wet-rated low voltage Splice Box with connectors.





WET LOCATION JUNCTION BOX WITH 6" POWER CABLE

This watertight, multi-fixture Junction Box is especially designed for lighting in wet and damp locations. It is versatile, rugged and simple to install. The Junction Box comes standard with a 6" Flexible Cable providing easy, safe, and reliable connections for 24V low voltage luminaries. This box is approved for indoor and outdoor usage and complies with all the requirements of UL1241 and the National Electric Code.



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ACCESSORIES

PIN & SOLDERING CONNECTORS



ACCESSORIES



U-STRAP

Use every 6-12 inches for extra support (30/package).



TIE STRAP

Use every 6-12 inches for extra support (30/package).







24VDC 5 CHANNEL FULL COLOR LIGHT ENGINE



REV 07.09.24

OUTDOOR WIRING DIAGRAMS



FIXTURE TYPE



24VDC 5 CHANNEL FULL COLOR LIGHT ENGINE



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OUTDOOR EXTRA PARTS



DIRECT BURIAL LOCATION CABLE ORDER PER FOOT

Our Direct Burial, 2 Conductor, 14 Gauge Cable is a durable and adaptable cable suitable for transmitting power, control, and switching in outdoor wet and in ground environments. Keep within 40 ft between fixture and power supply. Cable sold by the foot, simply specify the length needed by the foot.





WET AND DAMP LOCATION CABLE ORDER PER FOOT

Our Wet Location, 6 Conductor, 14 Gauge Cable is a durable and adaptable cable suitable for transmitting power, control, and switching in indoor and outdoor wet and damp environments. Cable sold by the foot, simply specify the length needed by the foot. Keep within 50 ft between fixture and power supply. Cable sold by the foot, simply specify the length needed by the foot.



Type

JBOX

JBOX Junction Box

DATE

Option

W

W Wet Location

WET LOCATION JUNCTION BOX

Wet-rated low voltage Splice Box with connectors.



PURE SMART WET LOCATION JUNCTION BOX WITH 8FT POWER CABLE AND WIZ PRO UR BRIDGEBOX

Product

2RE

2RE 2" Rectangle

This watertight Junction Box is especially designed for lighting in wet and damp locations. The Junction Box comes standard with a 8ft of outdoor cable and both male and female barrel connectors providing easy, safe, and reliable connections for 24V low voltage luminaires. Included with the Junction Box is one WiZ Pro type Bridgebox allowing for 5 Channel wireless control of the TruColor RGBTW luminaire. This box is approved for indoor and outdoor usage and complies with all the requirements of UL1241 and the National Electric Code.



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OUTDOOR EXTRA PARTS



RGBTW 24VDC POWER OUTPUT CABLE 6 PIN CONNECTOR WET LOCATION

The flexible power cable connector is designed to provide a safe and reliable waterproof connection between the output of the Pure Smart/WiZ Pro Bridgebox and the Flex Neon Channel with 6 pin barrel connectors. This Flexible Connector is easy to install and configure, helping you create innovative lighting designs in an outdoor commercial or residential space.



RGBTW 24VDC POWER OUTPUT CABLE 6 PIN T-CONNECTOR WET LOCATION

Our 6 Pin RGBTW Wet Location T-Connector is a robust rugged design especially suited to withstand the channels of damp and wet environments. This unique T-Connector has one Male and two Female Connectors and is suitable for multiple indoor and outdoor uses. Versatile design is easy to use, making installation quick and efficient.



24VDC INPUT POWER 4 PIN CABLE CONNECTOR WET LOCATION

The flexible power cable connector is designed to provide a safe and reliable waterproof connection between the output of the 24V power supply and the input of the Pure Smart/WiZ Pro Bridgebox with 4 pin barrel connectors. This Flexible Connector is easy to install and configure, helping you create innovative lighting designs in an outdoor commercial or residential space.



24VDC INPUT POWER 4 PIN CABLE T-CONNECTOR WET LOCATION

Our Wet Location T-Connector is a robust rugged design especially suited to withstand the challenges of damp and wet environments. This unique T-Connector has one Male and two Female Connectors and is suitable for multiple indoor and outdoor uses. Versatile design is easy to use, making installation quick and efficient.









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24VDC 5 CHANNEL FULL COLOR LIGHT ENGINE



REV 07.09.24



24VDC, 5 CHANNEL, TRUCOLOR[™] RGBTW, WI-FI ENABLED, OUTDOOR RATED

ASSEMBLED IN AMERICA



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DESCRIPTION

This watertight, multi-fixture Junction Box is especially designed for lighting in wet and damp locations. It is versatile, rugged and simple to install. The Junction Box comes standard with a 8ft Flexible Cable providing easy, safe, and reliable connections for 24VDC low voltage luminaires. Included with the Junction Box is one WiZ Pro type UR Bridgebox allowing for 5 channel wireless control of any TruColor RGBTW luminaire. To be used with PSBR-96W-24VDC-W Wet Location Power Supply for Remote Bridgebox (Sold Separately). This box is approved for indoor and outdoor usage and complies with all the requirements of UL1241 and the National Electric Code.

APPLICATIONS

Indoor/Outdoor Wet Location LED strips, Flex Neon, Wet Located Surface Mount products in TruColor[™] RGBTW* *must have a good WiFi signal outside

POWER INPUT

24VDC, 7.5A with 46" input cable and barrel quick connect For use with Wet Rated PSBR Power Supply for Remote Bridgebox. PSBR-96W-24VDC-W

POWER OUTPUT

Class 2; 12V-24VDC, 7.5A, 180 watts maximum with 46" cable and barrel quick connect

EFFICIENCY

90%

AMBIENT OPERATING TEMPERATURE

-20° C to 50° C

BOX DIMENSIONS

4.25" L x 4.25" W x 2.5" H

WiZ APP

The WiZ app allows for control from any mobile device. The app offers CCT and brightness control as well as scene control, dynamic light modes, circadian rhythm, and scheduling. Works with Google Assistant, Amazon Alexa, Siri Shortcuts, IFTTT, and SmartThings. The app and bridgebox are tuned to specific PureEdge dimming curves, and ranges.

REMOTE POWER SUPPLIES, DIMMERS & CONTROLS (SOLD SEPARATELY)

PURF

• Pure Smart[™] WiZ Pro <u>PSBR Power Supplies</u> & <u>Smart Controls</u> Pure Smart[™] PSBR Power Supply for Remote Bridgebox is developed to support Pure Smart TC TruColor RGBTW luminaires connected by WiZ Pro.

PUSH BUTTON COMMISSIONING AND FUNCTIONS

Button is located on the side of the bridgebox. Tap for test mode (blinks the light), hold for 6 seconds to commission light, and hold for 10 seconds to restore factory default.

SECURITY

3rd party log-in and cloud security provide a safe and protected connection.

DIMMING CURVE

PWM, 2kHz, 100-5% Dimming

COMPLIANCE

ETL, CE, IP66

CONNECTIVITY

Wi-Fi iEEE802.11b/g, BLE 4.2

	PSBR-96W-24VDC-W	PSBR-2X96W-24VDC-V
MAXIMUM LOAD	96W	2X96W
INPUT VOLTAGE	120-277VAC	120-277VAC
OUTPUT VOLTAGE	24VDC	24VDC
	10" X 7.1" X 3.3"	11.8" X 9.1" X 3.4"
DIMENSIONS	10 X111 X0.0	
DIMENSIONS CLASS 2	•	•
CLASS 2		

WET LOCATION JUNCTION BOX WITH UR BRIDGEBOX

24VDC, 5 CHANNEL, TRUCOLOR™ RGBTW, WI-FI ENABLED, OUTDOOR RATED

ASSEMBLED IN AMERICA

PROGRAM CODE



NETWORK TOPOLOGY & WIRING DIAGRAMS



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11



REV 07.09.24

PURE EDGE

Pure Smart Lighting





SPECIFICATIONS

Approved Location	Dry / Indoor
Input Voltage	120Vac - 60 Hz
Certification	cULus, FCC
Compatible Load(s)	WiZ Connected products only
Maximum Power	600W (Hardwired Loads), No Maximum for Wireless Loads
Output Current	5A
Power Consumption	Relay OFF: 0.07W Soft OFF: 0.79W ON: 0.79W
Dimming	Dims to 3%
Operating Temperature	23°F~113°F (-5°C~45°C)
Wireless Frequency	2.4GHz
Wireless Standard	IEEE 802.11
Warranty	3 Year



DESCRIPTION:

The Pure Smart[™] Wi-Fi Room Controller works with any WiZ Connected Smart fixtures/lamps. The Room Controller grants independent adjustment of both color temperature and intensity, as well as scene selection for Single Channel/Static, Tunable White, and TruColor™ RGBTW Fixtures. Four preset scenes can be associated with the room controller via the WiZ App. Custom scenes can be created using multiple layers of light, colors, and can include Pure Smart Wi-Fi Dimmer and Switch as well. No Hub required. Room Controller communicates with fixtures directly on the Local Area Network allowing for control even if the Wi-Fi goes down. Compatible with WiZ Connected fixtures only. For custom auotes and layout assistance, send your drawings and ideas to our design team: design@ PureEdgeLighting.com.

OPERATION

Features ON/OFF buttons, CCT and brightness control rockers, and 4 preset/ custom scene selections. Maximum output of 600W for hardwired WiZ Connected devices. No load restriction when load wire is not used and devices are connected wirelessly to Room Controller. Communicates with 2.4GHz Wi-Fi only. No Hub Required.

EASY INSTALLATION

The Pure Smart[™] Wi-Fi Room Controller installs just like a traditional dimmer. 120V power is all that is needed. Switch leg is optional for CWW-TW-SCENE-WH. This is also offered in a completely wireless version (See Pure Smart Remote Room Controller CWR-TW-SCENE-WH). Compatible with standard gangable boxes. Requires neutral wire. No Hub Required.

REV 07.09.24

WiZ APP

The Room Controller is added as an accessory in the WiZ app (Available on iOS or Android) and communicates directly to the WiZ enabled light fixture via direct wi-fi signal on Local Area Network (LAN). Voice control enabled when used in conjunction with Google Assistant, Siri, Alexa, IFTTT, and SmartThings. Grouping, zoning, scheduling, and custom scenes can all be programmed with the WiZ app or WiZ Pro Dashboard.

BODY

Durable polycarbonate body, compatible with decorator style wall plate (not included).

SECURITY

3rd party log-in and cloud security provide a safe and protected connection. WiZ does not store nor share any personal information.

Product	Туре	Finish
CWW -	TW-SCENE	– WH
CWW Controller, Wall Mount, WiZ Pro connected	TW-SCENE Tunable White + Scenes	WH White

1.7 (4.3cm) 0 \bigcirc 4.15" (10.5cm) **ON** CCT Up Hold to Dim Up CCT Rocker 0FF Hold to CCT Down Dim Down MINESWAF Indicator Light Scenes **Previous Scene** Next Scene Air Gap Switch



PROJECT

FIXTURE TYPE





REV 07.09.24

URESMART

DESCRIPTION:

The Pure Smart[™] Wi-Fi Remote Room Controller works with any WiZ Connected Smart fixtures/lamps. The Remote Room Controller is powered by four AAA batteries and grants independent adjustment of color temperature and intensity, as well as scene selection for four favorite scenes which are selected and assigned to the room controller in the WiZ App. The four favorited scenes, as with any scene in the WiZ ecosystem, can consist of any combination of products including bulbs, luminaires, or smart controls and can support any combination of color ranges including static white or dimmable white, Tunable White, and Trucolor RGBTW allowing for intricate customization and control. No Hub required. Room Controller communicates with fixtures directly on the Local Area Network allowing for control even if the Wi-Fi goes down. Compatible with WiZ Connected fixtures only. For custom quotes and layout assistance, send your drawings and ideas to our design team: design@ PureEdgeLighting.com.

OPERATION

Dimming, CCT control rocker, and a scene control toggle. No load maximum. Communicates with 2.4GHz Wi-Fi only. No Hub Required.

EASY INSTALLATION

The Pure Smart[™] Wi-Fi Remote Room Controller is powered by 4 AAA batteries and is therefore completely wireless. Multiple mounting methods available including to a standard switch box, on the wall with the included drywall anchors or adhesive strip, or kept on a tabletop with the rubber pads that help to keep it stationary. Single Pole or 3-way compatible with Pure Smart Dimmer (SWW-DIM-WH), Pure Smart Switch (SWW-SWT-WH), 120V Room Controller (CWW-TW-SCENE-WH) and another Remote Room Controller. No wires. No hub. Total control.

WiZ APP

The Room Controller is added as an accessory in the WiZ app (Available on iOS or Android) and communicates directly to the WiZ enabled light fixture via direct wi-fi signal on Local Area Network (LAN). Voice control enabled when used in conjunction with Google Assistant, Siri, Alexa, IFTTT, and SmartThings. Grouping, zoning, scheduling, and custom scenes can all be programmed with the WiZ app or WiZ Pro Dashboard.

BODY

Durable polycarbonate body.

SECURITY

3rd party log-in and cloud security provide a safe and protected connection. WiZ does not store nor share any personal information.



Dry / Indoor
4 AAA batteries
cULus, FCC
WiZ Connected products only
No Load Maximum
5A
Relay OFF: 0.07W Soft OFF: 0.79W ON: 0.79W
Dims to 3%
23°F~113°F (-5°C~45°C)
2.4GHz
IEEE 802.11
3 Year
ks alexa th Google Home



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13

PURE EDGE PureSmart Lighting

REV 07.09.24

TM-30-15 DATA: The data below is for TruColor[™] RGBTW (S5W7) bare LED Strips. Consistent color temperatures throughout a single strip and among multiple strips is possible through a 3 phase binning process in which each order is inspected with a color meter to ensure uniformity.

2000K (TruColor[™] RGBTW)



2700K (TruColor[™] RGBTW)



4000K (TruColor[™] RGBTW)

View Angle:2 Deg





3000K (TruColor[™] RGBTW)



5700K (TruColor[™] RGBTW)



2400K (TruColor[™] RGBTW)



3500K (TruColor[™] RGBTW)



6500K (TruColor[™] RGBTW)



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