

24VDC 5/8" DRYWALL PLASTER-IN LED SYSTEM, 5 CHANNEL CONTROL



Recesses into 5/8" Dry Wall

DESIGNED BY GREGORY KAY I ASSEMBLED IN AMERICA

REV 11.24.25

### **DESCRIPTION**

Drywall

Verge Ceiling is another innovative design that comes from the family of plaster-in 24VDC systems pioneered by PureEdge that recesses within 5/8" drywall without any framing modification required. Continuing to redefine the relationship between lighting, architecture and interior design, this visionary system elegantly highlights ceiling perimeters while emitting smooth and continuous ambient illumination. Ordered in 1' field-cuttable increments up to 20'. The slim plaster-in aluminum extrusion has a 4" paintable backer plate. Offered in multiple color temperatures and wattage options. Included with the RGBTW Complete Fixture ordering code is a 6 pin connector that will be wired with a 6 conductor cable to the remote power supply (sold separately). Verge brings together a modern and dynamic appearance to residential and commercial environments, offering unlimited creativity and empowering you to design one-of-a-kind spaces every time. Coordinate installation with electrical and drywall contractors. Includes a 5-year prorated warranty. For custom quotes and layout assistance, send drawings to design@PureEdgeLighting.com. Designed by Gregory Kay.

#### **DESIGN NOTE**

Verge Ceiling can be installed on a single surface, such as the perimeter of the ceiling, to accentuate or highlight coves and other architectural elements. Ambient and harmonious, the plaster-in LED system blends into 5/8" thick drywall to enhance the contemporary aesthetic of interior spaces. Verge offers unsurpassed precision and flexibility that transforms spaces into thoughtful and refined works of art.

### **INCLUDED COMPONENTS**

1RE Junction Box, Adjustable Mounting Bars, Backer Plate, Verge Ceiling Channel(s), LED Strip, and Lens(es)

### **SPECIFICATIONS**

- 24VDC
- 5W5: 5W RGB & 5W Tunable White, 5 watts/ft max
- 5W7: 5W RGB & 7W Tunable White, 7 watts/ft max
- Maximum lengths before re-feeding: 5W5 20 ft, 5W7 12 ft

### **APPLICATIONS**

Indoor damp or dry locations only. Ideal for ceiling perimeters and outlining architectural elements in residential, commercial, retail, education, or healthcare institutions and hospitality environments.

### TRUCOLOR™ RGB & TUNABLE WHITE TECHNOLOGY

Drywall with Plaster & Paint

Pure Smart TruColor™ technology uses five channels of tunable LEDs, composed of RGBTW 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 95+ and a Duv of +-0.0015 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 and 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. Click here for all other color temperatures.

### **LUMEN PERFORMANCE**

- TruColor™ RGBTW Red, Green, and Blue with Tunable White (1500K-6500K)
- 5W5 118LM/FT 5W @3000K
- 5W7 172LM/FT 7W @3000K

#### **AVERAGE PERFORMANCE**

- Average CRI (5W7): 95+
- Average Duv (5W7): +-0.0015
- Average R9: 88, RG: 102, RF:93
- Average life: 50,000 hours

# REMOTE POWER SUPPLIES\*, DIMMERS & CONTROLS (SOLD SEPARATELY)

24VDC, Class 2 wiring

- Home Integration Solutions
- Pure Smart™ WiZ Pro Power Supplies & Smart Controls
- DMX & Controls

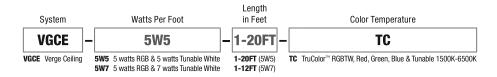
\*In-Wall Mounting and drop ceiling Kits available for select power supplies

### **COMPLIANCE**

ETL, Class 2, Damp Location, Assembled in USA.

For quick & easy reference, plus the most up-to-date pricing, use our <u>Verge Ceiling RGBTW Configurator</u>.

PureEdge is the Original Designer of 5/8" Drywall Products, Backed by Over 30 Years of Precision Manufacturing and Design.



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### **NOMINAL DELIVERED LUMENS**

DESCRIPTION			5	W5 5W RGI	3 & 5W TUN	ABLE WHIT	E			5W7 5W RGB & 7W TUNABLE WHITE								
COLOR TEMPERATURE	20K	22K	24K	27K	30K	35K	40K	57K	65K	20K	22K	24K	27K	30K	35K	40K	57K	65K
LUMENS PER FOOT (Im/ft)	56	84	102	114	118	124	134	94	87	69	115	148	168	172	181	177	104	94
LUMENS PER WATT (Im/w)	21	18	23	27	28	29	32	32	32	21	30	24	28	28	29	30	30	30
CRI	91.8	93.8	94.5	94.9	95.5	96.9	97.2	92.1	89.8	93	95	96	97	97	98	97	95	93
Duv	-0.004	-0.0012	-0.0034	-0.0058	-0.0055	-0.0033	-0.0014	-0.0049	-0.0063	-0.0030	0.0002	0.0030	0.0030	0.0030	0.0009	0.0000	0.0030	0.0030
Rf	91	93	94	94	95	94	94	92	90	92	93	95	95	95	95	94	92	91
Rg	105	101	103	105	104	102	100	102	103	104	100	102	103	103	101	100	102	103
R9	90	90	90	94	97	97	91	81	70	91	90	90	94	95	93	93	79	67
R13	92	94	95	95	94	96	99	90	87	92	95	96	96	97	99	99	91	88
R15	99	99	99	98	97	97	97	89	85	99	99	99	99	99	98	97	90	85
WATTS/F00T	2.7	4.55	4.35	4.25	4.25	4.35	4.2	2.95	2.75	3.35	3.85	6.15	5.95	6.15	6.15	5.84	3.45	3.2

# **LENGTH LOAD CHARTS:** To determine the necessary wire gauge use our <u>Voltage Drop Calculator</u>.

5W5 WATTS PER FOOT								
Length In Feet	RGB Wattage	Tunable White Wattage	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					

5W7 WATTS PER FOOT								
Length In Feet								
1	5	7	7					
2	10	14	14					
3	15	21	21					
4	20	28	28					
5	25	35	35					
6	30	42	42					
7	35	49	49					
8	40	56	56					
9	45	63	63					
10	50	70	70					
11	55	77	77					
12	60	84	84					

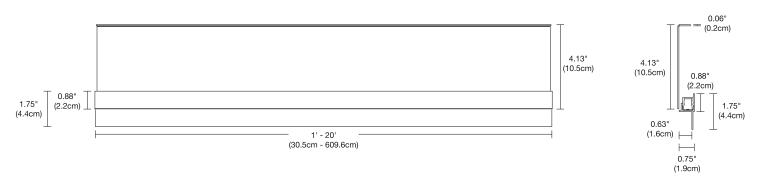
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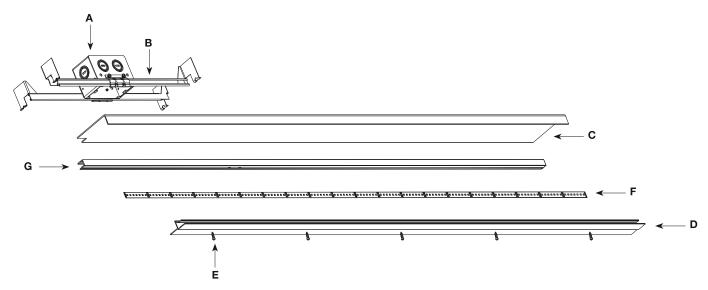
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### **INCLUDED COMPONENTS**



### A. JUNCTION BOX

Mounts behind drywall with Adjustable Mounting Bars. Low Voltage 24VDC wires from Remote Power Supply connect to LED wires inside box. Junction Box opening is covered by the channel, and required at the beginning of each run.

### **B. ADJUSTABLE MOUNTING BARS**

Provide flexibility for mounting in a variety of spaces and orientations. May be secured to stude that are spaced 13"-24" apart.

### C. BACKER PLATE

4" paintable aluminum plate that conceals Junction Box and reflects light.

# D. VERGE CEILING CHANNEL

5/8" deep extrusion houses a single row of LED Strip.

### **E. DRYWALL SCREWS**

Secures channel to drywall and stud.

### F. LED STRIP

Your selection of LED Strip CCT.

#### G. I FNS

0.6" wide diffused white lens projects a clean line of light without pixelation.



### JUNCTION BOX ROUGH-IN COMPONENT

One Junction Box is included with Verge Ceiling. Order additional Junction Box separately to rough-in electrical wiring before drywall installation. Quick shipment available.



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REPLACEMENT PARTS



#### **PURE SMART/WIZ PRO UR BRIDGEBOX**

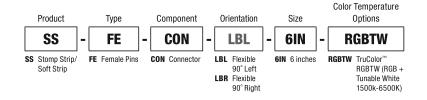
WIZ Pro UR Bridgebox is included in the Pure Smart PSBB Remote Power Supply and allows for integration into the WiZ Pro wireless control ecosystem. The part numbers below are to be used for replacement only. Pure Smart/WiZ Pro UR Bridgeboxes are pre-programmed with Pure Smart app icons, and proprietary color mixing for tunable white and RGBTW.

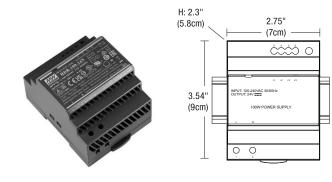




### POWER FEED/FLEXIBLE CONNECTOR

Included with Center Feed Power components. Part numbers listed below to be used for replacements only. For use with Static White, Warm Dim, Tunable White, RGB and Monochromatic color temperatures. Flexible Connectors link two sections of LED Strip end to end. To use as a Power Feed cut off the male end, and connect to the Power Supply.



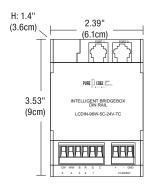


### **DIN RAIL POWER SUPPLY**

The HDR-100-24N is a compact 100W DIN Rail power supply. It's adapted to be installed on TS-35/7.5 or TS-35/15 mounting rails. Adopting the full voltage range of 85VAC-264VAC (operational 277VAC condition). The HDR-100-24N is designed with an insulated housing protecting from electrical shock hazards. Can be remote located up to 100' away using WR 14 CL2 BR.

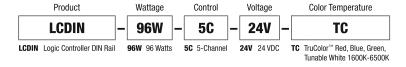






### INTELLIGENT LOGIC CONTROLLER DIN RAIL

The Intelligent Logic Controller is a networkable solution for constant voltage 5-channel luminaires, offering precise CCT and vibrant color control through PureEdge's TruColor™ technology—surpassing traditional LED drivers and DMX controllers in performance and flexibility.



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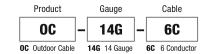


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### WET AND DAMP LOCATION CABLE ORDER PER FOOT

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.

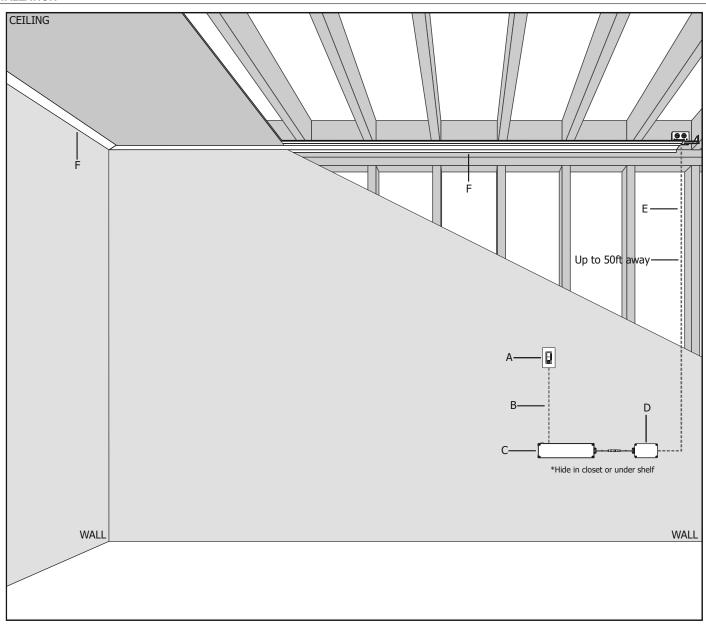




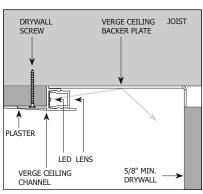
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- A. PURE SMART WALL CONTROLLER 120 OR BATTERY
- **B. 120V OPTIONAL**
- C. 120-277VAC CLASS 2 POWER SUPPLY\*
- D. PURE SMART WIZ CONTROLLED BRIDGEBOX\*
- **E. 6 CONDUCTOR CABLE TO JUNCTION BOX**
- F. VERGE CEILING



Direction of Light

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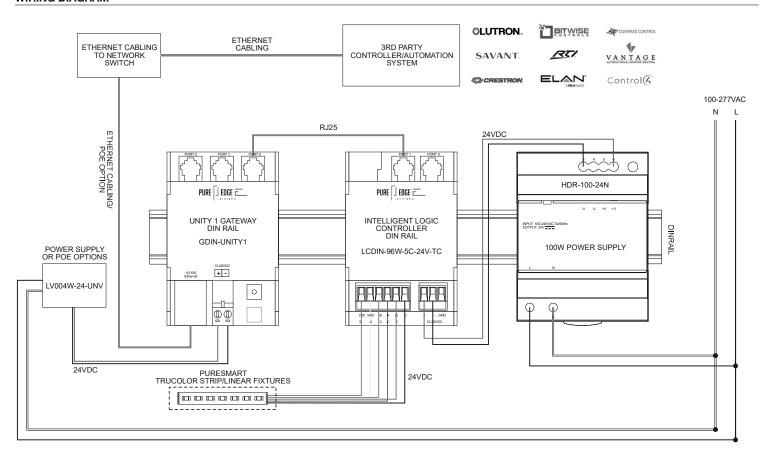


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### **WIRING DIAGRAM**



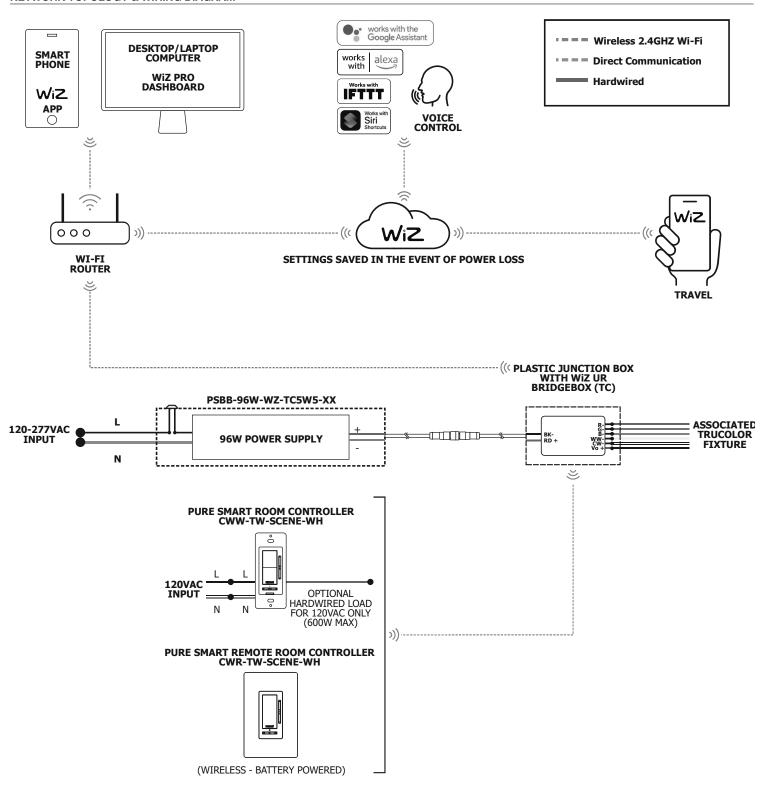


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### **NETWORK TOPOLOGY & WIRING DIAGRAM**



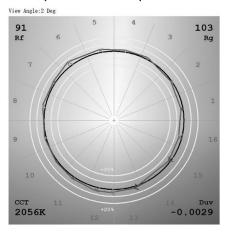
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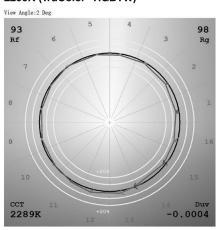
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**TM-30-15 DATA:** The data below is for TruColor™ RGBTW (S5W7) bare LED Strips. Consistent color temperatures throughout a single strip and among multiple strips is possible through a 3 phase binning process in which each order is inspected with a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

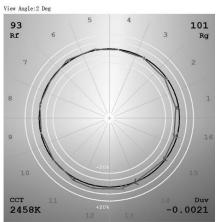
### 2000K (TruColor™ RGBTW)



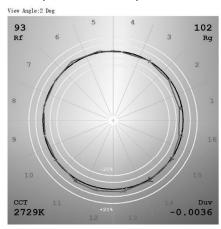
### 2200K (TruColor™ RGBTW)



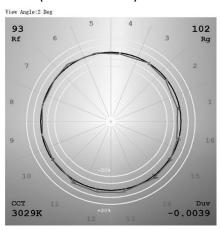
### 2400K (TruColor™ RGBTW)



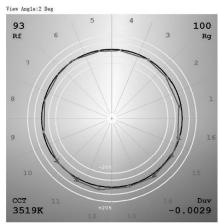
### 2700K (TruColor™RGBTW)



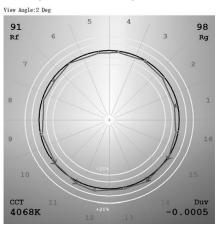
### 3000K (TruColor™ RGBTW)



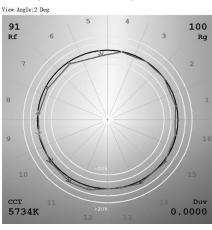
# 3500K (TruColor™ RGBTW)



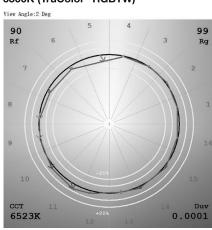
# 4000K (TruColor™RGBTW)



# 5700K (TruColor™ RGBTW)



# 6500K (TruColor™ RGBTW)



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