



The High Efficacy (LLHE48) Wet Tube series is a small form factor high performance constant voltage LED strip. Designed to deliver best in class efficacy while operating at low temperature, LLHE48 Wet Tube delivers constant light output, outstanding color consistency and dimming performance without the need of an additional heat sink. Available in 3 different outputs with a tight LED pitch of 0.25", LLHE48 Wet Tube offers a clean dot free illumination in most Luminii profiles when paired with our frosted lenses.



Mounting

LLED strip is equipped with 3M™ adhesive transfer tape (9472LE).

Applications

Applications: outdoor / wet location, above cabinet, cove lighting, counter accent, architectural accents, under banisters, decks, gazebos, barbeque stations and wet bars.

Approvals

IP65, IP67 and IP68 rated.

Operating voltage

24 VDC

Life (L70) 50,000 hours

Warranty

3 years













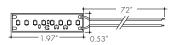
Technical information

TYPE	LLHE48WET-T				
OUTPUT OPTIONS	LO	so	мо		
Lumens Output (3000K)	231 lm/ft	330 lm/ft	441 lm/ft		
Average Power Consumption (for a 4' section)	1.9 W/ft	2.8 W/ft	3.5 W/ft		
Efficacy	122 lm/W	118 lm/W	126 lm/W		
Cutting Increment (in)		1.97"			
Pitch Length		0.25"			
Max Run Length (in series)	48 ft	48 ft 42 ft 33 ft			
Dimensions		0.53"W x 0.24" H			

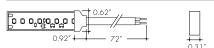
сст	Multiplier	TM-30			
	(reference - 3000K)	CRI	Rf	R_g	R9
2200K	0.73	92	91	97	42
2500K	0.81	93	96	96	62
2700K	0.94	92	90	99	58
3000K	1.00	92	89	99	57
3500K	1.02	92	89	99	60
4100K	1.02	92	86	94	71

Section Start/End Options

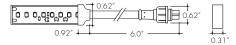
72" Soldered Leads, IP65 rated



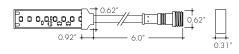
72" Soldered Leads, IP68 rated



Female Quick Connect End, IP67 rated



Male Quick Connect End, IP67 rated



No Connector



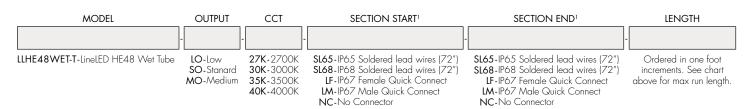
IP65 rated when used with SL65 selection



IP67 rated when used with LM or LF selection

IP68 rated when used with SL68 selection

Ordering code



1- IP rating of strip is equal to the lowest IP rating of section and start end options.



Accessories

LVSP-WET

Splice box: wet rated, low voltage, gray

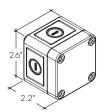


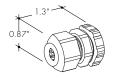
Splice box connector, low voltage, gray

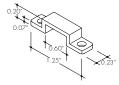
CL2 Mounting clip

LL.ZIP

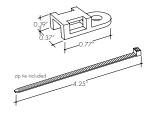
Cable/Wire Strain Relief Clip











Lens Options / Light Transmission



HF Half (50%) Frosted





KXL Channel (KXLC-XX)

0.83

0.50

HF

С









Round Square Frosted



13° Semi-Frosted

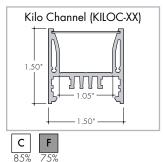


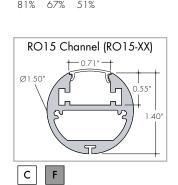


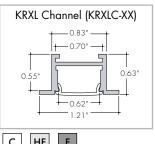




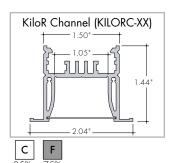
Not compatible with LF, LM, or IP68 selections











Not compatible with LF, LM, or IP68 selections

Led Dotting per Extrusion

using the frosted lens option

Fortunation	LED Model
Extrusion	LLHE48WET
KXLC, KRXLC	ND
KLC, KRLC	SD
CLAC	ND
RO15	ND



CD - Clear Dotting SD - Slight Dotting ND - No Dotting

Installation

All mounting channels are field cuttable using miter saw with circular blade suitable for cutting aluminum.

Ordering

Extrusions are sold separately. View respective specsheets for details on ordering extrusions and their accessories (endcaps, mounting brackets, etc).



Power Consumption

Tested at full power with PDC Series power supplies.

	Н	E48LO	HE	4850	HE	48MO
Nominal Length	W/ft	Total Wattage	W/ft	Total Wattage	W/ft	Total Wattage
1	1.7	1.7	2.5	2.5	3.5	3.5
2	1.9	3.7	2.7	5.4	3.5	7.0
3	2.0	5.7	2.8	8.2	3.5	10.2
4	1.8	<i>7</i> .1	2.8	11.2	3.5	13.9
5	1.8	9.0	3.0	14.6	3.6	17.6
6	1.9	11.3	2.9	17.9	3.5	21.4
7	1.8	13.1	2.9	20.8	3.5	25.1
8	1.8	14.7	2.9	23.3	3.6	28.5
9	1.8	16.4	2.9	25.9	3.5	31.9
10	1.8	18.1	2.9	28.6	3.5	35.5
11	1.7	19.1	2.8	31.2	3.5	38.9
12	1.7	20.4	2.9	34.4	3.5	42.3
13	1.7	22.1	2.8	36.8	3.5	45.7
14	1.6	22.8	2.8	39.3	3.5	48.8
15	1.6	23.5	2.8	41.9	3.5	52.1
16	1.6	25.6	2.8	45.3	3.5	56.5
1 <i>7</i>	1. <i>7</i>	28.5	2.8	48.1	3.5	59.4
18	1.7	30.4	2.8	51.0	3.5	62.8
19	1.8	33.6	2.8	53.3	3.5	65.8
20	1.8	35.8	2.8	56.0	3.5	69.0
21	1.8	37.7	2.8	59.4	3.4	71.4
22	1.8	39.5	2.8	61.3	3.3	73.5
23	1.8	41.4	2.8	64.4	3.3	75.4
24	1.8	43.1	2.8	66.0	3.2	77.2
25	1.9	46.2	2.7	68.1	3.2	78.8
26	1.9	48.2	2.7	70.7	3.1	79.8
27	1.9	50.4	2.7	72.0	3.0	81.4
28	1.9	52.2	2.6	73.6	3.0	82.9
29	1.9	53.9	2.6	74.7	2.9	84.2
30	1.9	57.7	2.5	76.1	2.9	86.1
31	1.9	59.6	2.5	77.0	2.8	87.6
32	1.9	61.4	2.4	77.7	2.8	89.2
33	1.9	63.3	2.4	78.9	2.7	90.7
34	1.9	65.0	2.3	78.0		
35	1.9	65.4	2.2	78.1		
36	1.9	67.1	2.2	79.5		
37	1.9	69.3	2.2	80.4		
38	1.9	71.1	2.1	80.9		
39	1.9	73.0	2.1	81.0		
40	1.9	74.7	2.0	81.2		
41	1.9	76.0	2.0	82.6		
42	1.8	77.3	2.0	83.0		
43	1.8	78.6				
44	1.8	79.9				
45	1.8	81.1				
46	1.8	81.8				
47	1.8	82.5				
48	1.7	83.1				



Voltage Drop Calculator

The below chart assumes nominal voltage of 24 Volts and a Voltage Drop Allowance of 3% through the wire

Wattage	Maximum Wire Length From Power Supply to Start of Run [ft]						
[W]	12 AWG	14 AWG	16 AWG	18 AWG	20 AWG	22 AWG	24 AWG
5	1088.2	684.4	430.3	270.6	170.2	107.1	67.3
10	544.1	342.2	215.1	135.3	85.1	53.5	33.7
15	362.7	228.1	143.4	90.2	56.7	35.7	22.4
20	272.0	171.1	107.6	67.7	42.6	26.8	16.8
25	217.6	136.9	86.1	54.1	34.0	21.4	13.5
30	181.4	114.1	71.7	45.1	28.4	17.8	11.2
35	155.5	97.8	61.5	38.7	24.3	15.3	9.6
40	136.0	85.5	53.8	33.8	21.3	13.4	8.4
45	120.9	76.0	47.8	30.1	18.9	11.9	7.5
50	108.8	68.4	43.0	27.1	17.0	10.7	6.7
55	98.9	62.2	39.1	24.6	15.5	9.7	6.1
60	90.7	57.0	35.9	22.6	14.2	8.9	5.6
65	83.7	52.6	33.1	20.8	13.1	8.2	5.2
70	77.7	48.9	30.7	19.3	12.2	7.6	4.8
75	72.5	45.6	28.7	18.0	11.3	7.1	4.5
80	68.0	42.8	26.9	16.9	10.6	6.7	4.2
85	64.0	40.3	25.3	15.9	10.0	6.3	4.0
90	60.5	38.0	23.9	15.0	9.5	5.9	3.7
96	56.7	35.6	22.4	14.1	8.9	5.6	3.5



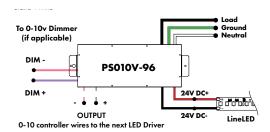
Power Supplies

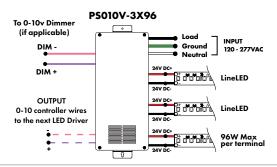
See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.

0-10V Dimming Power Supplies 0.1% 120VAC - 277VAC

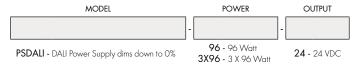


MODELS	96W	3X96
	14.40"	13.00"
Length	14.40	13.00
Width	5.20"	6.62"
Depth	2.60"	4.20"



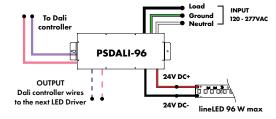


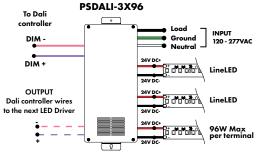
DALI 0% Dimming Power Supplies 120VAC - 277VAC



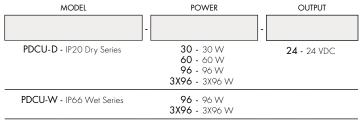
Features eldoLED's LINEARdrive configurable dimmable drivers

Model	96W	3X96
Length	14.40"	13.00"
Width	5.20"	6.62"
Depth	2.60"	4.20"



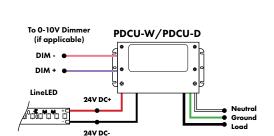


Universal Power Supply 1% 120VAC - 277VAC



	n to 1%, MLV/ELV/TRIA	AC dims down to 1%. ers, see <u>Compatible Dimm</u>	ing Chart on the Resou	rces page.
MODEL	DDCII W 06W	DDCIIW 2V04W	DDCII D 20W	DDCU D 4

MODEL	PDCU-W-96W	PDCU-W-3X96W	PDCU-D-30W	PDCU-D-60W	PDCU-D-96W	PDCU-D-3X96W
Length	8.66"	11.85"	6.10"	7.93"	8.25"	9.57"
Width	3.73"	4.32"	3.35"	3.35"	4.10"	5.94"
Depth	1.61"	1.81"	1.33	1.32"	1.56"	1.13"



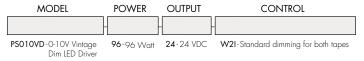


Power Supplies

See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.

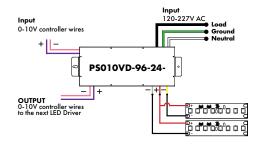
Customizable Dim to Warm or Variable White via 0 - 10V

(for tunable white or warm dimming control of Dynamic option)

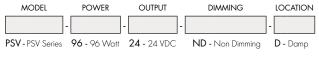


*Zonal control power supplies

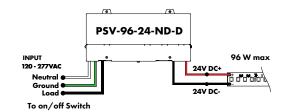
MODELS	96W
Length	14.40"
Width	5.20"
Depth	2.60"



Non-Dimming Power Supply 120VAC - 277VAC



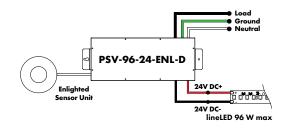
MODELS	96W
Length	8.25"
Width	3.75"
Depth	1.63"



Enlighted Enabled Dimming Power Supplies 120VAC - 277VAC



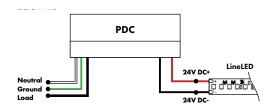
Model	96W
Length	14.40"
Width	5.20"
Depth	2.60"



Triac, MLV, ELV Compatible Dimmers



MODELS	96W
Length	8.25"
Width	4.10"
Depth	1.56"





Power Supplies

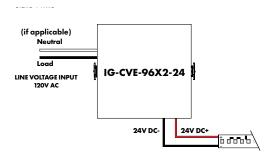
See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.

In-Ground Power Supplies



Both dims down to 0%

MODEL	Dual Circuit
Length	8.40"
Width	8.30"
Depth	8.10"



\$LUTRON

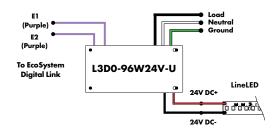
Luminii is a Lutron OEM Advantage Partner

Lutron Power Supplies 0.1%

MODEL

L3D0-96W24V-U	J
Hi-lume™ 0.1% EcoSystem Voltage LED Driver wi	th Soft-On, Fade-to-Black™

MODELS	L3D0
Length	10.50"
Width	5.50"
Depth	2.00"



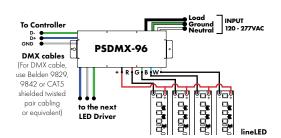
DMX Dimming Power Supplies 120VAC - 277VAC

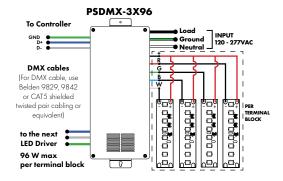


Features eldoLED's LINEARdrive configurable dimmable drivers

*Zonal control power supplies. Control multiple tapes/zones using DMX channels.

96W	3X96
14.40"	13.00"
5.20"	6.60"
2.60"	4.20"
	14.40"







Decoders



DMX512 decoder with RDM functionality features 5 PWM output channels with common anode. High PWM output frequency range allows the product to be used in HD video conferencing spaces. All DMX products to be installed per DMX512 Standard.

Power 96 Watt

DMX Channels

1 to 5 settable

Inputs RI45, XLR-5Pin, Terminal Block

MODEL

DDMX-5CH-RDM-PRO

DDMX-5CH-RDM-PRO-DMX512 Decoder

PWM Output Resolution Ratio 8 or 16 bit

PWM Output Frequency 500Hz - 30KHz

Output Dimming Curve Gamma Value

 $0.1 \sim 9.9$



MODEL

DDMX-RGBW

DDMX-RGBW - DMX512 Decoder

Translates controller DMX512 programs for RGB and white LED strips.

Unique DMX address for the decoder can be set easily and displayed by the numeric display on the case. Changing and resetting the DMX address requires manual input.

Use power repeater to expand output (Luminii part# RGBW-SR).

Operating Voltage 12-36 VDC

Power Capacity up to 96W at 24V **Operating Temperature Range** from $-4^{\circ}F$ to $+122^{\circ}F$ in case

PWM Output Frequency 200Hz or 1500Hz



MODEL

RGBW-RC-R

RGBW-RC-R - RGBW receiver

The RGBW receiver is easily paired with controller by the click of a button. Receiver can be reset to factory settings at any time.

Each receiver can store one static RGB color, one color sequence, and one brightness setting for the white LED strip. Receivers assigned to the same scene within the same zone will have the same LED static color and color sequence.

Operating Voltage 12-36 VDC

Power Capacity up to 96W at 24V **Operating Temperature Range** from $-4^{\circ}F$ to $+122^{\circ}F$ in case



Decoders



MODEL

RGBW-SR

RGBW-SR - RGBW signal repeater

Extends identical signal when connected in series to an RGBW LED control system. The RGBW signal repeater works with Luminii RGB and RGBW controllers, receivers, and decoders.

RGBW signal can be extended indefinitely when adequate power supply (not included) is connected to the system.

Operating Voltage

Power Capacity up to 96W at 24V

Operating Temperature Range from -4°F to +122°F in case



MODEL

RGBW-WI-R

RGBW-WI-R - WIFI generator

RGBW-WI-R creates a local network that enables any electronic device (phone, tablet, etc.) to control the RGB/W strip connected to a RGBW-RC-R receiver.

The control functions are achieved through a free application download for Android and iOS devices called REALCOLOR.

Operating Voltage

Power Supply Pl-130-24 (included) **Operating Temperature Range** from -4°F to +122°F in case



MODEL

TSDMX-E

TSDMX-E - Touchscreen DMX controller

Programmable advanced DMX512 lighting controller featuring a touch-screen interface. Operates as stand alone controller or integrated with most architectural lighting control systems. Can controller endless DMX512 enabled devices.

Mounts to standard single or dual gang wall box with the included power supply inside the junction box. Terminal block design for power and data connections.

Features

- Sleek glass design which sits 0.43" from the wall
- Graphical color display to show selected environment
- Color/dimmer/speed palette
- Color temperature mixing
- Touch sensitive buttons. No mechanical parts
- Touch sensitive wheel allows for accurate color selection
- Multi-zone microSD memory
- Multi-room control with 500 scenes, 10 zones
- 1024 DMX channels. Control 340 RGB fixtures
- USB & Ethernet connectivity for programming and control

Power Supply

7 VDC (included)

Programmability

PC, Mac, Tablet, Smartphone

Output Signal

DMX512 (1024 channels)

Color Parameters

- Brightness
- Saturation
- Speed of color changing sequence
- Fading / dimming / brightness