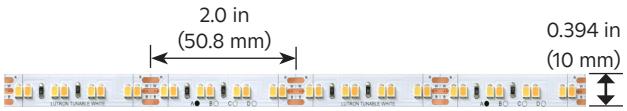
Lumaris Tape Light

PRODUCT DESCRIPTION

Lumaris tape light is the essential solution for offering a simple and seamless way to add accent lighting to virtually any low-profile application. A complete tape light solution consists of field-cuttable LED tape, a wireless controller with integrated LED drivers, high-reliability punch connectors, dedicated wiring, and a power supply or interface. For an added level of quality, install the tape light inside Lutron LED tape extrusions.

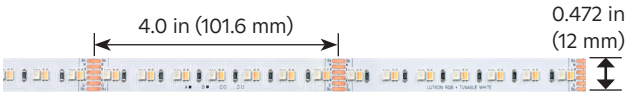
Tape lights are offered in 16.4 ft (5 m) and 98.4 ft (30 m) spools to complete any lighting design project.



TUNABLE WHITE	
Delivered Lumens	**200 lm/ft**
Delivered Output (Light Transmission)	**100 lm/W**
Power Consumption	**1.9 W/ft (6.3 W/m)**
Maximum Tape Length per 96 W Power Interface	**49.2 ft (15 m)**

FEATURES

- 1800 K – 4000 K tunable white light
- Continuous, flicker-free dimming from 100% down to 0.1% of measured light output
- Seamless integration with HomeWorks QSX, RadioRA 3, Athena, and myRoom XC systems
- User-programmable intensity and color temperature presets, including warm dim to mimic the dimming curve of an incandescent lamp
- Ability to automatically change color temperature based on time of day

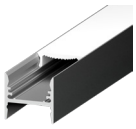


RGB + TUNABLE WHITE	
Delivered Lumens	**200 lm/ft**
Delivered Output (Light Transmission)	**100 lm/W (whites)**
Power Consumption	**2.9 W/ft (9.6 W/m)**
Maximum Tape Length per Power Interface	**32.8 ft (10 m)**

Note: All Lumaris tape lights have a max length of 16.4 ft (5 m) in a single series run, or 32.8 ft (10 m) with dual-ended wiring

LED TAPE EXTRUSIONS

SR1



Luxury diffusion with hidden mounting

SR2



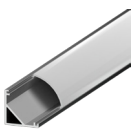
Classic rectangular surface-mount

SR3[1]



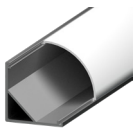
Thin, low profile surface-mount

45S



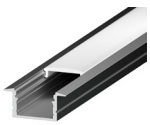
Classic 45° angled surface-mount

45T



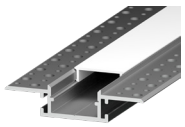
Large 45° with premium diffusion

RR1[1]



Recessed mount with a clean finish

MI1



Mount into drywall for a flush light beam

Notes:

[1] Extrusion will not fit the LU-CK1-6W connector in the extrusion channel (RGB + Tunable White connector). All profiles availables in 8 ft (2.44 m) lengths. See page 10 for the Extrusion Ordering Guide.

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LED TAPE LIGHT SPECIFICATIONS

Optical Performance

CCT Range	**1800 K - 4000 K**
CRI R9	**>90 from 1800 K to 4000 K (1800 K R9>60, 4000 K R9>90)**
Lumen Maintenance	**50,000 hours to L70 at 25 °C**
Dimming Range	**0.1% - 100%**

Environmental

Ambient Temperature	**32 °F to 104 °F (0 °C to 40 °C)**
Humidity	**0% to 95% non-condensing**
Location	**UL Indoor damp/dry location Wardrobe closet rated**
Certification	**cULus listed for USA & Canada, RoHS, FCC Class B, ICES-005, Title 24 [JA8], CE, UKCA**

Warranty

Limited Warranty	**www.lutron.com/warranty or call 1.844.LUTRON1 for a printed copy.** **The warranty will not cover issues caused by use of incompatible devices (including non-Lutron LED tape and/or power supplies).**

Mechanical

Mounting Options	**Strong VHB adhesive backing Lutron LED Tape Extrusions**

Dimensions

Tape Length	**All tapes available in 16.4 ft (5 m) and 98.4 ft (30 m) reels**
Cuttable Section	**Tunable White (TW): 2 in (50.8 mm) RGB + TW: 4 in (101.6 mm)**
Tape Width	**Tunable White: 0.39 in (10 mm) RGB + TW: 0.47 in (12 mm)**
Tape Height	**All: 0.6 in (1.53 mm)**

Electrical

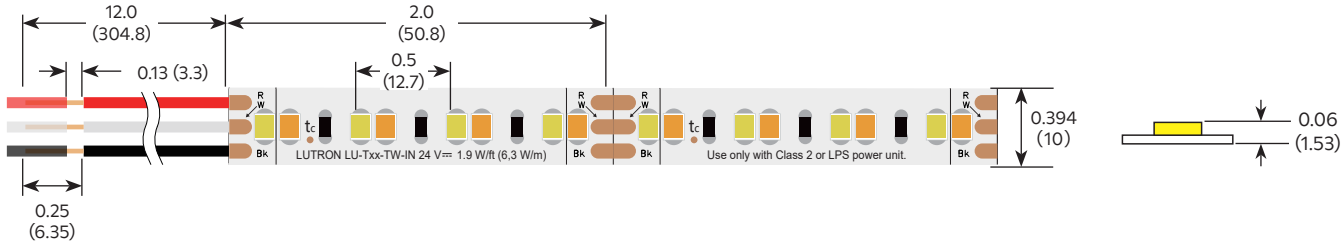
Voltage	**24 V⎓**
Power Consumption	**Tunable White: 1.9 W/ft (6.3 W/m)** **RGB + TW: 2.9 W/ft (9.6 W/m)**
Maximum Tape Length per 96 W Power Interface	**Tunable White: 49.2 ft (15 m)*** **RGB + TW: 32.8 ft (10 m)***

*** Must be split into parallel or dual-ended wiring runs. See the Wiring section for details.**

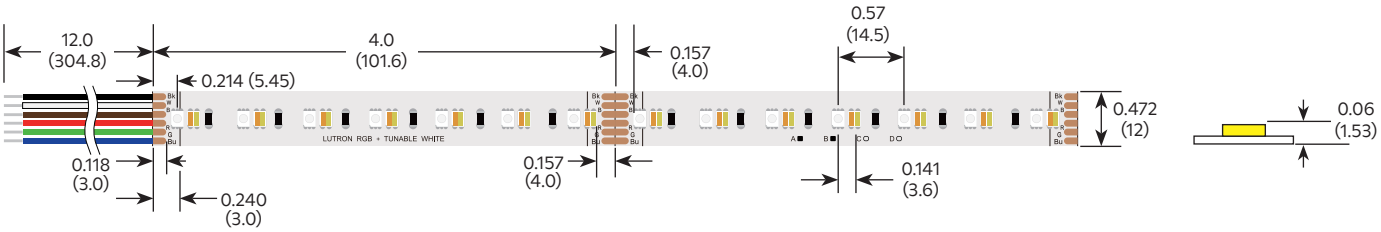
LED TAPE LIGHT DIMENSIONS

All dimensions shown as: in (mm)

Lumaris Tunable White Tape Light: LU-Txx-TW-IN



Lumaris RGB + Tunable White Tape Light: LU-Txx-RT-IN

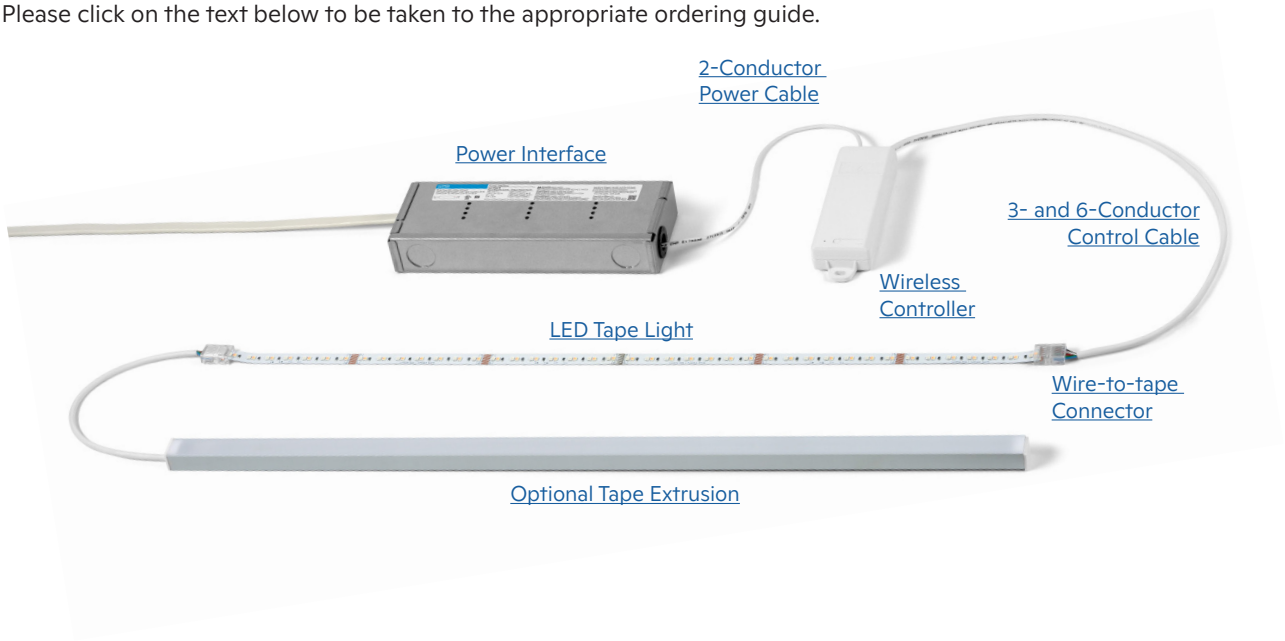


⚠ CAUTION: Overheating Risk. May result in moderate injury or product damage. Do not power the LED tape while coiled, on a spool, or directly to the power/line voltage. Unroll or install before applying power.

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EXAMPLE SOLUTION DIAGRAM

Please click on the text below to be taken to the appropriate ordering guide.



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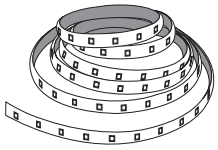
P/N 3663262 Rev A
Specifications are subject to change without notice

LED TAPE LIGHT ORDERING GUIDE

Please download this PDF to use the interactive features of the ordering guide.

LU-	T05-	TW-	IN
Product	Tape Length	Product Line	Location

Order code: LU-T05-TW-IN



LED Tape

Product	Code
Lutron	**LU-**

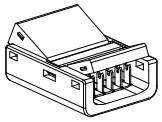
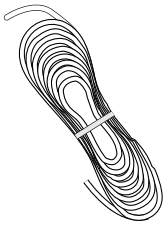
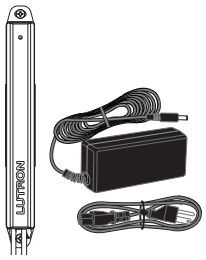
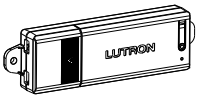
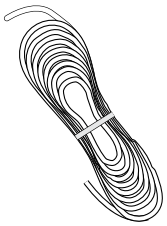
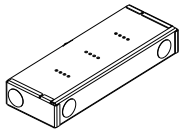
Tape Length	
16.4 ft (5 m)	**T05-**
98.4 ft (30 m)	**T30-**

Product Line	Code
Tunable White	**TW-**
RGB + Tunable White	**RT-**

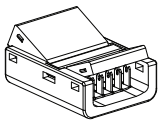
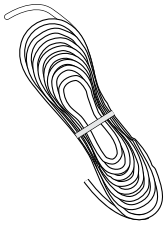
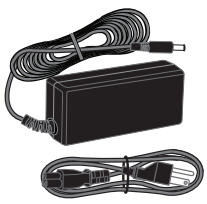
Location	Code
Indoors	**IN**

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RESIDENTIAL Á LA CARTE SOLUTION FOR HWQSX AND RADIORA 3

Tape Light [1]	Wire-to-Tape Connectors [2]	Control Cable [3, 4]	Wireless Controller	Power Cable [4]	Power Interface
Tunable White - LU-T05-TW-IN - LU-T30-TW-IN  RGB + Tunable White - LU-T05-RT-IN - LU-T30-RT-IN  See Tape Light Ordering Guide on page 4	Tunable White - LU-CK1-TW RGB + Tunable White - LU-CK1-6W  See Cable and Conector Ordering Guide on page 9	Tunable White - LU-WK1-TW RGB + Tunable White - LU-WK1-6W  See Cable and Conector Ordering Guide on page 9	Tunable White - HWL-TWCL-WH - RRL-TWCL-WH - HWL-TWC-WH - RRL-TWC-WH  Multi-Channel Wireless Controller - HWL-MWCL-WH - RRL-MWCL-WH  See Controller Ordering Guide on page 8	2-conductor cable, off-the-shelf, not sold by Lutron 	Surface-mounted with flying leads - LU-PH3-B  Panel mounted - LU-PH3-A  See Power Interface Ordering Guide on page 8

RESIDENTIAL Á LA CARTE PLUG-IN OPTION FOR HWQSX AND RADIORA 3

Tunable White Tape Light [1]	Wire-to-Tape Connectors [2]	Control Cable [3, 4]	Lumaris Wireless Controller	Power Cable	Power Interface
- LU-T05-TW-IN - LU-T30-TW-IN  See Tape Light Ordering Guide on page 4	- LU-CK1-TW  See Cable and Conector Ordering Guide on page 9	- LU-WK1-TW  See Cable and Conector Ordering Guide on page 9	- HWL-TWCL-WH - RRL-TWCL-WH  See Controller Ordering Guide on page 8	No additional power cable required for plug in power interface	Power Interface - T120-24DC-15 Power Interface with controller - HWL-TWC-WH - RRL-TWC-WH  See Power Interface Ordering Guide on page 8

Notes:

1 Extrusions are optional, see extrusions ordering guide for details.

2 LU-CK1-TW/LU-CK1-6W **MUST** be used to connect the control wire to cut tape segments.

3 Use LU-WK1-TW/LU-WK1-6W to guarantee proper electrical connection with LU-CK1-TW/LU-CK1-6W.

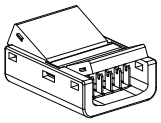
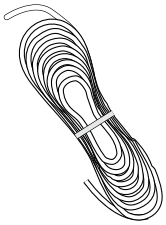
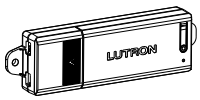
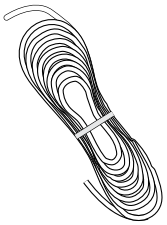
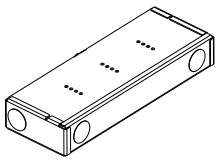
4 For acceptable wire gauges and lengths, see the wiring tables for Power and Control Cable section.

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RESIDENTIAL RGB + TUNABLE WHITE KIT OPTIONS FOR HWQSX AND RADIORA 3

RGB + Tunable White Kit Model Numbers:
- HWL-MTK-RT-IN
- RRL-MTK-RT-IN

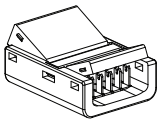
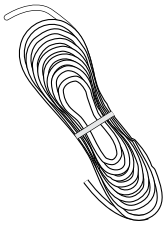
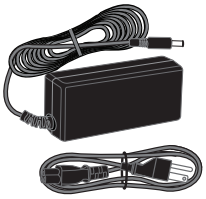
Table shows amount of items included in the kit.

Tape Light [1]	Wire-to-Tape Connectors [2]	Control Cable [3, 4]	Multi-Channel Wireless Controller	Power Cable [4]	Power Interface
Two (2) pieces, 16.4 ft (5 m) reel; 32.8 ft (10 m) total  See Residential Kit Ordering Guide on page 9	Four (4) wire-to-tape connectors (LU-CK1-6W) 	6-conductor cable: Two (2) pieces, 10 ft (3 m); 20 ft (6 m) total 	- HWL-MWCL-WH **OR** - RRL-MWCL-WH 	One (1) 2-conductor cable, 4 ft (1.2 m) 	One (1) LU-PH3-B 

RESIDENTIAL TUANBLE WHITE KIT OPTIONS FOR HWQSX AND RADIORA 3

Tunable White Kit Model Numbers:
- HWL-TLK-TW-IN
- RRL-TLK-TW-IN

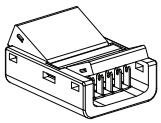
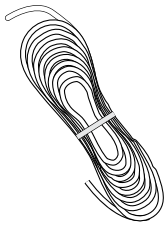
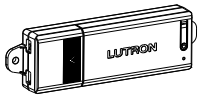
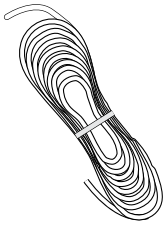
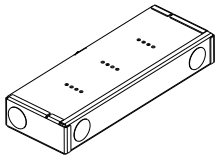
Table shows amount of items included in the kit.

Tunable White Tape Light[1]	Wire-to-Tape Connectors [2]	Control Cable [3, 4]	Lumaris Wireless Controller	Power Cable	Power Interface
One (1) piece, 16.4 ft (5 m) reel total  See Residential Kit Ordering Guide on page 9	Five (5) wire-to-tape connectors (LU-CK1-TW) 	3-conductor cable: One (1) piece, 10 ft (3 m) total 	- HWL-TWCL-WH **OR** - RRL-TWCL-WH 	No additional power cable required for plug in power interface	One (1) T120-24DC-15 

Notes:
1. Extrusions are optional, see extrusions ordering guide for details.
2. LU-CK1-TW/LU-CK1-6W **MUST** be used to connect the control wire to cut tape segments.
3. Use LU-WK1-TW/LU-WK1-6W to guarantee proper electrical connection with LU-CK1-TW/LU-CK1-6W.
4. For acceptable wire lengths, see the Wiring Length Tables for Power and Control Cable section.

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COMMERCIAL Á LA CARTE SOLUTION FOR MYROOM XC AND ATHENA

Tape Light [1]	Wire-to-Tape Connectors [2]	Control Cable [3, 4]	Multi-Channel Wireless Controller	Power Cable [4]	Power Interface
Tunable White - LU-T05-TW-IN - LU-T30-TW-IN  RGB + Tunable White - LU-T05-RT-IN - LU-T30-RT-IN 	Tunable White - LU-CK1-TW RGB + Tunable White - LU-CK1-6W 	Tunable White - LU-WK1-TW RGB + Tunable White - LU-WK1-6W 	- CM-MWCL-WH 	2-conductor cable, off-the-shelf, not sold by Lutron 	Surface-mounted with flying leads - LU-PH3-B  Panel mounted - LU-PH3-A 
See Tape Light Ordering Guide on page 4	See Cable and Conector Ordering Guide on page 9	See Cable and Conector Ordering Guide on page 9	See Controller Ordering Guide on page 8		See Power Interface Ordering Guide on page 8

Notes:

1 Extrusions are optional, see extrusions ordering guide for details.

2 LU-CK1-TW/LU-CK1-6W **MUST** be used to connect the control wire to cut tape segments.

3 Use LU-WK1-TW/LU-WK1-6W to guarantee proper electrical connection with LU-CK1-TW/LU-CK1-6W.

4 For acceptable wire lengths, see the Wiring Length Tables for Power and Control Cable section.

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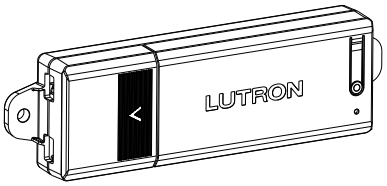
CONTROLLER ORDERING GUIDE

RRL		
Product	Model	Finish

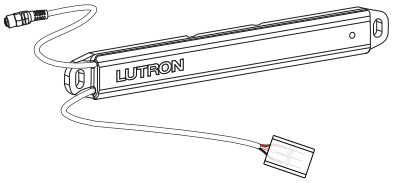
Order code: RRL

Product	Code
Athena/myRoom XC	**CM-**
HomeWorks QSX	**HWL-**
RadioRA 3	**RRL-**
Model	
Multi-Channel Wireless Controller	**MWCL-**
Lumaris Tunable White Wireless Controller [1]	**TWCL-**
Lumaris Tunable White Wireless Controller with Plug-in Power Supply [1]	**TWC-**

Finish	Code
White	**WH**



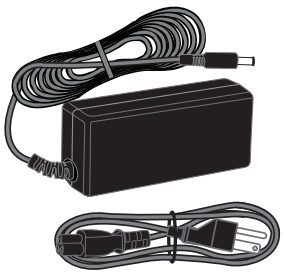
Multi-Channel Wireless Controller



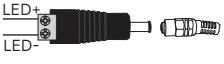
Lumaris Tunable White Wireless Controller

POWER INTERFACE ORDERING GUIDE

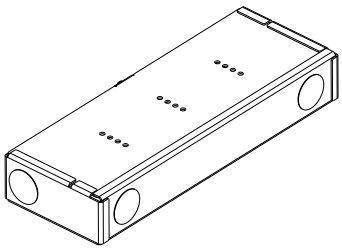
Power Interface	**LU-PH3-A**
Power Interface with Flying Leads	**LU-PH3-B**
Residential Plug-in Power Supply [2]	**T120-24DC-15**
Barrel-to-Terminal Adapter (Qty 3) [3]	**LU-BP1**



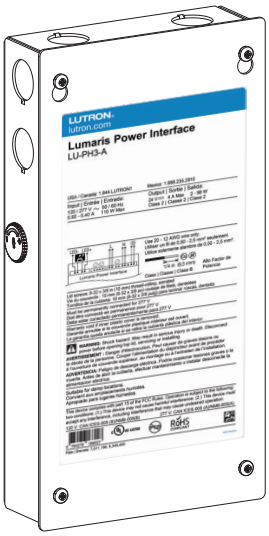
T120-24DC-15



LU-BP1



LU-PH3-B



LU-PH3-A

Notes:
1 This model is available only for residential systems (HomeWorks QSX (HWL) or RadioRA 3 (RRL).
2 The plug-in power supply is available for the Lumaris wireless controller.
3 Barrel-to-terminal adapters are for use with tunable white controller only.

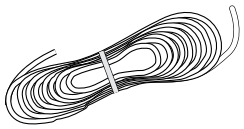
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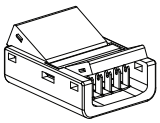
RESIDENTIAL KIT ORDERING GUIDE

Model Number		Description
HomeWorks QSX	RadioRA 3	
HWL-MTK-RT-IN	RRL-MTK-RT-IN	RGB + Tunable White Kit • Wireless controller (with power interface LU-PH3-B) • RGB + Tunable White LED Tape - 2pc. 16.4 (5 m) reel; 32.8 ft (10 m) total • Wire-to-tape connectors (qty. 4) • 2-conductor cable - 4 ft (1.2 m) • 6-conductor cable - 2 pc. 10ft (3 m); 20 ft (6 m) total
HWL-TLK-TW-IN	RRL-TLK-TW-IN	Tunable White Kit • Wireless controller (with plug-in power supply) • Tunable white LED tape (1800 K - 4000 K) - 16.4 ft (5 m) reel • Wire-to-tape connectors (qty. 5) • 3-conductor cable - 10 ft (3 m)

CABLE AND CONNECTOR ACCESSORIES ORDERING GUIDE

Model Number	Description	Compatible LED Tapes	
		Tunable White LU-Txx-TW-IN	RGB + Tunable White LU-Txx-RT-IN
LU-CK1-TW[1]	3-pin wire-to-tape connectors (qty. 10)	X	
LU-CK1-6W[1]	6-pin wire-to-tape connectors (qty. 10)		X
LU-MK1[2]	0.394 in (10 mm) surface mounting clips (qty. 20)	X	
LU-WK1-TW	3 × 22 AWG (0.50 mm^2) cable - 50 ft (15.2 m)	X	
LU-WK1-6W	6 × 22 AWG (0.50 mm^2) cable - 50 ft (15.2 m)		X


Cable


Connectors

Notes:
[1] LU-CK1-6W/LU-CK1-TW MUST be used to connect the wire to the cut tape segments. Use LU-WK1-6W/LU-WK1-TW to guarantee proper electrical connection with LU-CK1-6W/LU-CK1-TW.
[2] The surface mounting clips are compatible with the LU-Txx-TW-IN only.

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EXTRUSIONS ORDERING GUIDE

Please download this PDF to use the interactive features of the ordering guide.

Product	Model	Type

Order code: _____

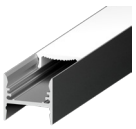
Product	Code
Lutron	**LU-**

Model	Code
SR1 extrusion bundle	**SR1-**
SR2 extrusion bundle	**SR2-**
SR3 extrusion bundle	**SR3-**
45S extrusion bundle	**45S-**
45T extrusion bundle	**45T-**
RR1 extrusion bundle	**RR1-**
MI1 extrusion bundle	**MI1-**

Type	Code
Kit [1]	**K**
Accessory Pack [2]	**ACS**

Notes:
[1] The kit includes (1) 8 ft (2.44 m) aluminum channel and frosted lens and (1) accessory pack that matches the extrusion type.
[2] The accessory pack includes (2) open end caps, (2) closed end caps, (6) mounting clips and (6) mounting screws.

SR1



Luxury diffusion with hidden mounting

SR2



Classic rectangular surface-mount

SR3



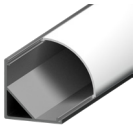
Thin, low profile surface-mount

45S



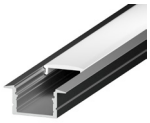
Classic 45° angled surface-mount

45T



Large 45° with premium diffusion

RR1

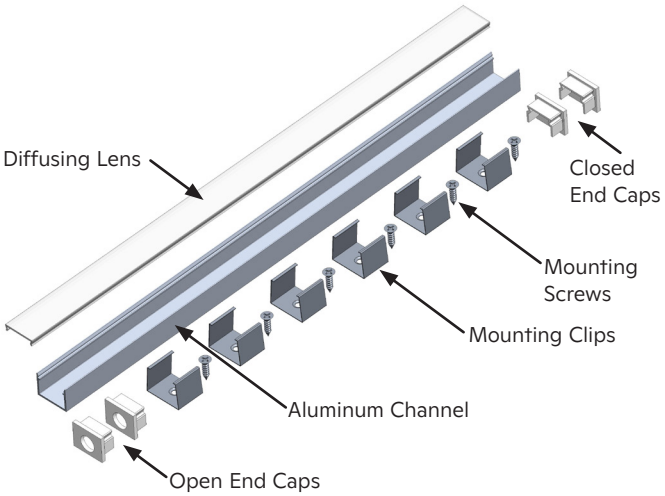


Recessed mount with a clean finish

MI1



Mount into drywall for a flush light beam

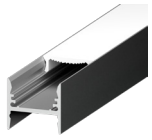
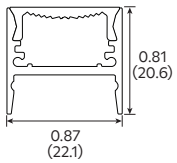
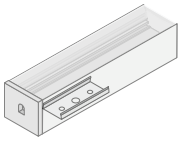
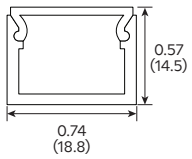
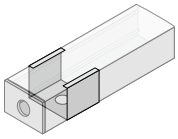
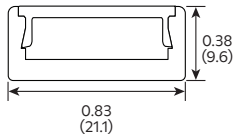
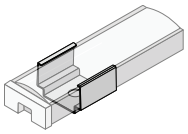
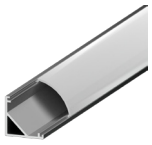
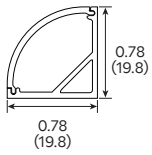
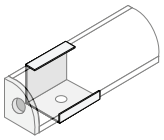
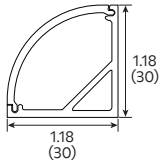
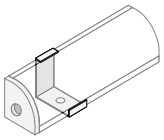
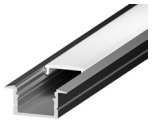
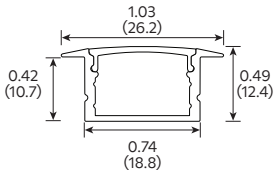
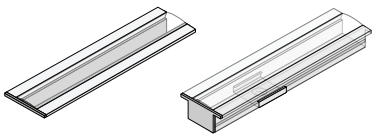
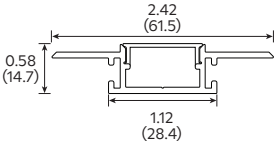
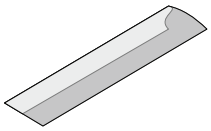


LED Tape Extrusion (SR2 shown)

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EXTRUSION OPTIONS

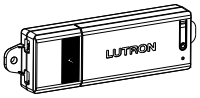
Measurements shown as: in (mm)

Model	Dimensions	Mounting	Lens Rating	Diffusion
SR1 		 Height with mounting clip: 0.81 (20.6)	Light loss: 45% CCT shift: -100K	Semi-diffused 
SR2 		 Height with mounting clip: 0.65 (16.5)	Light loss: 40% CCT shift: -100K	Semi-diffused 
SR3 		 Height with mounting clip: 0.53 (13.5)	Light loss: 10% CCT shift: -100K	Hot-spotted 
45S 		 Height with mounting clip: 0.89 (22.6)	Light loss: 25% CCT shift: -100K	Semi-diffused 
45T 		 Height with mounting clip: 1.25 (31.7)	Light loss: 30% CCT shift: -65K	Uniform 
RR1 		 Height with mounting clip: 0.63 (16)	Light loss: 25% CCT shift: -85K	Semi-diffused 
MI1 		 Height with mounting clip: Not applicable	Light loss: 65% CCT shift: -275K	Uniform 

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COMPONENT SPECIFICATIONS

MULTI-CHANNEL WIRELESS CONTROLLERS (HWL-MWCL-WH, RRL-MWCL-WH, CM-MWCL-WH)



Regulatory Approvals

Certification	**cULus listed for USA & Canada, FCC Part 15 Class B compliant, ICES-005 compliant**

Electrical

Input	**24 V⎓ 4 A**
Output	**24 V⎓ 96 W max**
Electrical Protection	**Output short-circuit and overload protection**
Wiring	**Clear Connect - Type X (CCX) devices require continuous power for optimal mesh performance, and must be wired such that their power cannot be inadvertently or frequently interrupted. Bypass any dimmer or switch in between the breaker and the CCX device**
Emergency Lighting	**Evaluated by UL® for emergency lighting systems in accordance with standard UL® 924 and CSA C22.2 No. 141 when paired with LVS™ model LUT-SHUNT-A-TD (UL® file E206507)**

Environmental

Ambient Temperature	**32 °F to 104 °F (0 °C to 40 °C)**
Humidity	**0% to 95% non-condensing**
Location	**Indoor use only**
Air Handling Spaces	**UL® 2043 Plenum Rated**

Communication

Radio Frequency for Wireless Communication	**2.4 GHz Wireless RF, Lutron Clear Connect-Type X (CCX)**
Range	**- All CCX devices must be within 75 ft. (22.9 m) of their assigned processor or gateway** **- Each CCX device must have at least two (2) other non-battery powered CCX devices within 25 ft (7.5 m)** **- Groups or clusters of CCX devices assigned to the same processor or gateway must not be separated by more than 25 ft (7.5 m)** **- It is recommended that the wireless processor or gateway and the CCX devices assigned to it are located on the same floor** **- CCX devices must be placed a minimum of 3 ft (1.0 m) from 2.4 GHz interference sources such as wireless access points, microwave ovens, Vive hubs** **- Radio Power Savr occupancy/vacancy sensors (LRFx) must be mounted at least 2 ft (0.6 m) away from CCX devices**

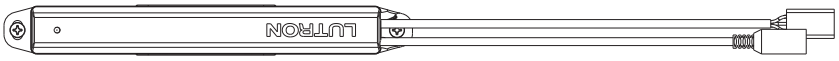
Warranty

Limited Warranty	**www.lutron.com/warranty or call 1.844.LUTRON1 for a printed copy.** **The warranty will not cover issues caused by use of incompatible devices (including non-Lutron LED tape and/or power supplies).**

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COMPONENT SPECIFICATIONS (cont.)

LUMARIS TUNABLE WHITE WIRELESS CONTROLLER (HWL-TWCL-WH, RRL-TWCL-WH)



Regulatory Approvals

Certification	**cULus listed for USA & Canada, FCC Part 15 Class B compliant, ICES-005 compliant**

Electrical

Input	**24 V⎓ 1.5 A**
Output	**24 V⎓ 32 W max**
Electrical Protection	**Output short-circuit and overload protection**
Wiring	**Clear Connect - Type X (CCX) devices require continuous power for optimal mesh performance, and must be wired such that their power cannot be inadvertently or frequently interrupted. Bypass any dimmer or switch in between the breaker and the CCX device**

Environmental

Ambient Temperature	**32 °F to 104 °F (0 °C to 40 °C)**
Humidity	**0% to 95% non-condensing**
Location	**Indoor use only**

Communication

Radio Frequency for Wireless Communication	**2.4 GHz Wireless RF, Lutron Clear Connect-Type X (CCX)**
Range	**- All CCX devices must be within 75 ft. (22.9 m) of their assigned processor or gateway** **- Each CCX device must have at least two (2) other non-battery powered CCX devices within 25 ft (7.5 m)** **- Groups or clusters of CCX devices assigned to the same processor or gateway must not be separated by more than 25 ft (7.5 m)** **- It is recommended that the wireless processor or gateway and the CCX devices assigned to it are located on the same floor** **- CCX devices must be placed a minimum of 3 ft (1.0 m) from 2.4 GHz interference sources such as wireless access points, microwave ovens, Vive hubs** **- Radio Power Savr occupancy/vacancy sensors (LRFx) must be mounted at least 2 ft (0.6 m) away from CCX devices**

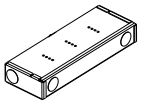
Warranty

Limited Warranty	**www.lutron.com/warranty or call 1.844.LUTRON1 for a printed copy.** **The warranty will not cover issues caused by use of incompatible devices (including non-Lutron LED tape and/or power supplies).**

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COMPONENT SPECIFICATIONS (cont.)

POWER INTERFACES (LU-PH3-A, LU-PH3-B)





Regulatory Approvals

Certification	**cULus Listed for USA and Canada** **FCC Part 15** **– Class A compliant (277 V~)** **– Class B compliant (120 V~)** **Meets UL® 8750/CSA C22.2 No. 250.13-14, "Light Emitting Diode (LED) Equipment For Use in Lighting Products"** **Class 2 output; meets UL® 1310/CSA C22.2 No. 223-M91**

Electrical

Input	**120 V~ / 277 V~ 50/60 Hz**
Output	**24 V⎓ constant voltage**
Electrical Protection	**Output open-circut, short-circuit and overload protection**

Environmental

Ambient Temperature	**32 °F to 104 °F (0 °C to 40 °C)**
Humidity	**LU-PH3-A: 0% to 90% non-condensing** **LU-PH3-B: 5% to 95% non-condensing**
Location	**Indoor use only**

Warranty

Limited Warranty	**www.lutron.com/warranty or call 1.844.LUTRON1 for a printed copy.** **The warranty will not cover issues caused by use of incompatible devices (including non-Lutron LED tape and/or power supplies).**

Features

- Powers up to three wireless controllers and a total of 96 W of tape
- Class 2 separation
  - LU-PH3-A: Barrier provided for installation in the wiring compartment
  - LU-PH3-B: Barrier pre-installed
- LU-PH3-B: 96 W power interface with flying lead connections. Best for surface mouting
- LU-PH3-A: 96 W power interface with terminal connections. Best for recess mounting.

PLUG-IN POWER SUPPLY (T120-24DC-15)



Regulatory Approvals

Certification	**cULus listed for USA & Canada, FCC Part 15 Class B compliant, ICES-003 compliant** **US DOE Level VI compliant**

Electrical

Operating Voltage	**100-240 V~ 50/60 Hz 1 A max**
Output	**24 V⎓ 1.5 A**
Output Load Range	**2 W to 36 W**
Electrical Protection	**Output open-circuit, short-circuit and overload protection**

Environmental

Ambient Temperature	**32 °F to 104 °F (0 °C to 40 °C)**
Humidity	**20% to 80% non-condensing**
Location	**Indoor use only**

Warranty

Limited Warranty	**www.lutron.com/warranty or call 1.844.LUTRON1 for a printed copy.** **The warranty will not cover issues caused by use of incompatible devices (including non-Lutron LED tape and/or power supplies).**

Features

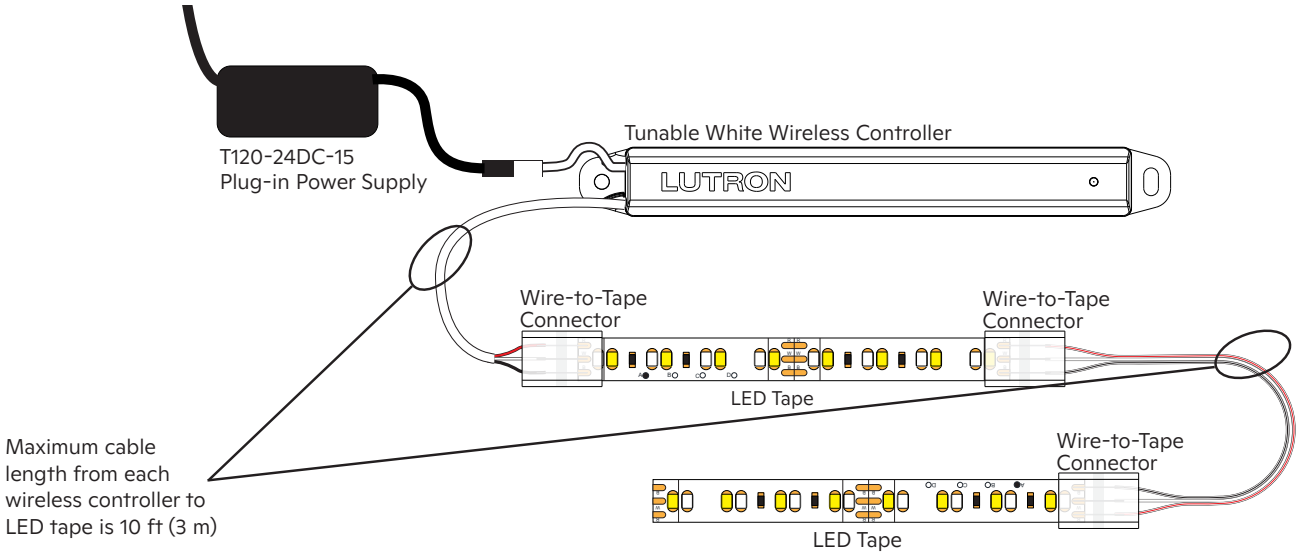
- Powers up to one (1) Lumaris tunable white wireless controller and a total of 32 W of tape
- Maximum amount of 3 × 22 AWG (0.50 mm^2) stranded cable allowed on the output of wireless controller is 10 ft (3.0 m).
- Maximum length of LED tape light when using the plug-in power supply, (T120-24DC-15) is 16.4 ft (5 m) total, regardless of whether LED tape is in a single segment or broken up by cables.

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WIRING

PLUG-IN POWER SUPPLY (T120-24DC-15)

- Compatible with xxL-TWCL-WH wireless controller only. Not for use with xxL-MWCL-WH.
- The wireless controller (xxL-TWCL-WH) and power supply (T120-24DC-15) have 5.5 mm x 2.1 mm barrel connectors.
- Maximum amount of 3 × 22 AWG (0.50 mm²) stranded cable allowed on the output of wireless controller is 10 ft (3.0 m). The cable can be added to the beginning or can be used to break up segments of LED tape.
  - 3 × 22 AWG (0.50 mm²) stranded cable is provided with the tape light kit or it can be ordered as Lutron P/N LU-WK1-TW.
  - Up to 6 wire-to-tape connectors can be used with 10 ft (3.0 m) of cable. For every additional wire-to-tape connector used, the maximum length of cable allowed is reduced by 6 in (152.4 mm).
- Maximum length of LED tape light when using the plug-in power supply, (T120-24DC-15) is 16.4 ft (5 m) total, regardless of whether LED tape is in a single segment or broken up by cables.



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WIRING (cont.)

POWER INTERFACES (LU-PH3-A; LU-PH3-B)

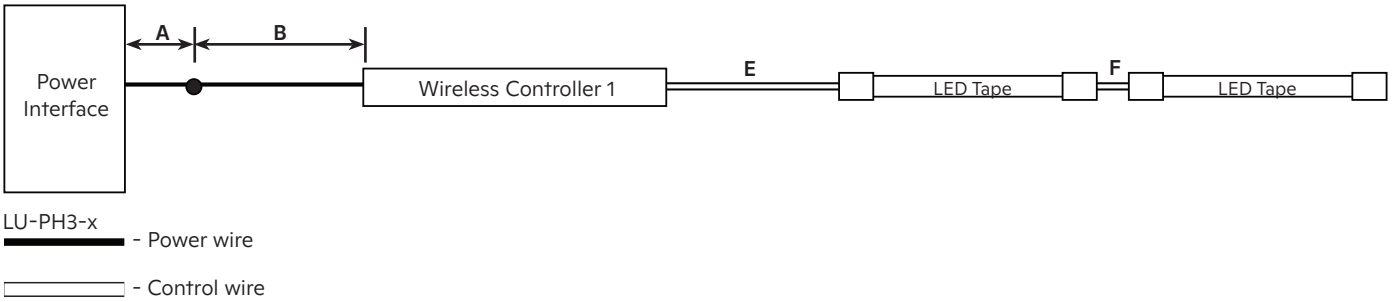
- Power up to three wireless controllers and 96 W of LED tape.
- LU-PH3-A: Terminals on the power interface accept 12 AWG to 20 AWG (4.0 mm^2 to 0.75 mm^2).
  - Each screw terminal may only accept one wire.
  - LU-PH3-A is grounded by a terminal connection. LU-PH3-B is grounded by a grounding screw.
- LU-PH3-B: Use provided wire connectors to connect flying leads to wire per instructions printed on the connector bag.

WIRE LENGTH RECOMMENDATIONS (POWER INTERFACE LU-PH3-X ONLY)

The wiring diagrams and wiring tables on the next pages demonstrate how power wire and control wire lengths can be varied to increase installation flexibility and maintain optimum performance.

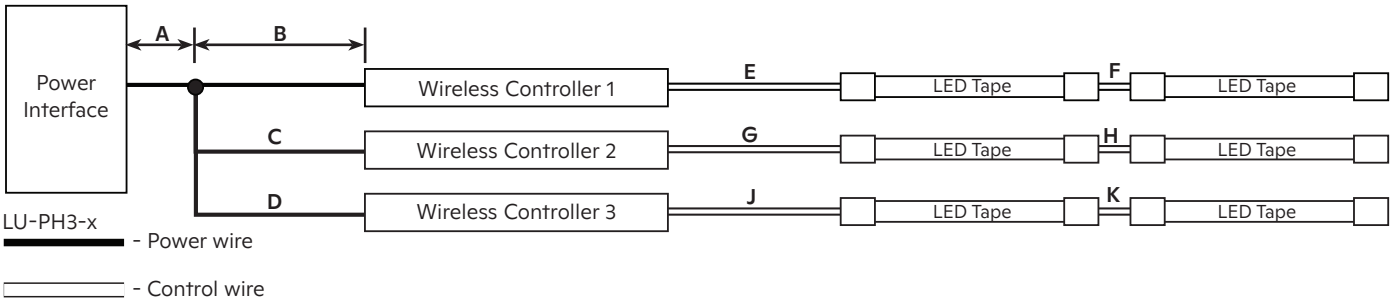
WIRING DIAGRAM 1: Lumaris Tape Light Installation

For a single wireless controller:
- Power Cable = A + B Control Cable = E + F



WIRING DIAGRAM 2: Lumaris Tape Light Installation with Multiple Controllers

For a multiple wireless controllers:
Each wireless controller cable lengths should be calculated by each controller using the below table.
- Wireless Controller 1: Power Cable = A + B Control Cable = E + F
- Wireless Controller 2 Power Cable = A + C Control Cable = G+ H
- Wireless Controller 3 Power Cable = A + D Control Cable = J + K



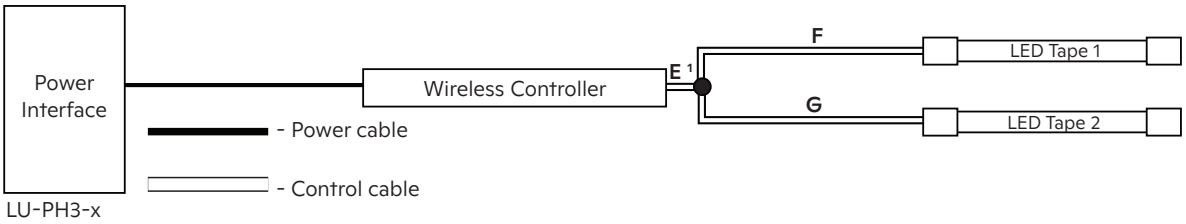
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WIRING (cont.)

All Lumaris tape light installations > 16.4 ft (5.0 m) should implement one of the following wiring techniques:

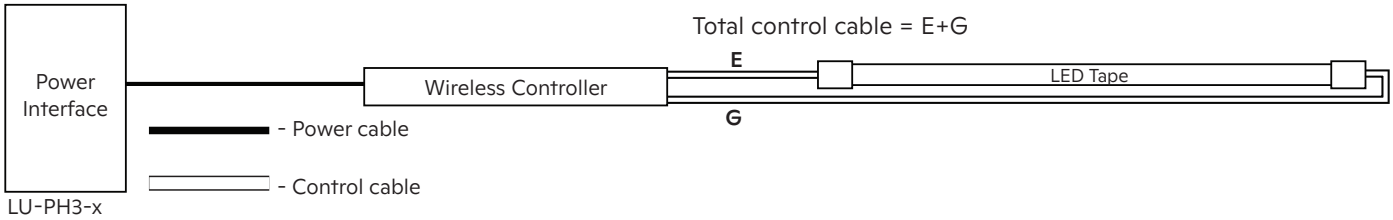
WIRING DIAGRAM 3: Lumaris Tape Installation - Split into Parallel Runs, Each No More Than 16.4 ft (5 m)

Total control cable length for each tape includes the following:
– Control Cable 1 = E + F
– Control Cable 2 = E + G
– Total Control Cable = (E + F) + (E+G)



Note:
1 It is recommended to keep cable length (E) as short as possible, less than 1 ft (0.3 m) is ideal, to maintain optimum performance.

WIRING DIAGRAM 4: Lumaris Tape Installation with Connection to Both Ends of the Tape (Dual-Ended); Total LED Tape Must be Less Than 32.8 ft (10 m)



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WIRING (cont.)

TABLE 1: Tunable White Installation Cable Lengths for Power and Control Cable

The below table values apply to a tunable white tape light solution with one (1) power interface and one (1) multi-channel wireless controller (Wiring diagrams 1, 3, and 4) or one (1) power interface and up to three (3) multi-channel wireless controllers (wiring diagram 2). If parallel power wiring exists, the table values assume that the power cable connections are in the homerun configuration to the power interface (spliced closest to the power interface) and the tape lengths are similar. The displayed values allow for up to 25% lumen drop at the beginning of the LED tape.

Tape Length ft (m)	Power Cable		Total Control Cable Length ft (m)				
	Wire Gauge AWG (mm^2)	Total Cable Length ft (m)	12 AWG (4.0 mm^2)	14 AWG (2.5 mm^2)	16 AWG (1.5 mm^2)	18 AWG (1.0 mm^2)	22 AWG (0.5 mm^2)
0-4.1 (0-1.2)	20 (0.75)	24 (7.3)	684 (208.5)	430 (131.1)	270 (82.3)	169 (51.5)	67 (20.4)
	16 (1.5)	65 (19.8)					
	14 (2.5)	103 (31.4)					
	12 (4.0)	164 (50.0)					
4.2-8.2 (1.2-2.4)	20 (0.75)	12 (3.7)	342 (104.2)	215 (65.5)	135 (41.1)	85 (26.0)	33 (10.1)
	16 (1.5)	33 (10.1)					
	14 (2.5)	52 (15.8)					
	12 (4.0)	83 (25.3)					
8.3-12.3 (2.5-3.7)	20 (0.75)	8 (2.4)	228 (69.5)	143 (43.6)	90 (27.4)	56 (17.1)	22 (6.7)
	16 (1.5)	22 (6.7)					
	14 (2.5)	35 (10.7)					
	12 (4.0)	56 (17.1)					
12.4-16.4 (3.7-5.0)	20 (0.75)	6 (1.8)	171 (52.1)	107 (32.6)	67 (20.4)	42 (12.8)	16 (4.9)
	16 (1.5)	16 (4.9)					
	14 (2.5)	26 (7.9)					
	12 (4.0)	42 (12.8)					
16.5-20.5 (5.0-6.2) [1]	20 (0.75)	5 (1.5)	273 (83.2)	172 (52.4)	108 (33.0)	68 (20.7)	26 (7.9)
	16 (1.5)	13 (4.0)					
	14 (2.5)	21 (6.4)					
	12 (4.0)	33 (10.1)					
20.6-24.6 (6.2-7.4) [1]	20 (0.75)	4 (1.2)	228 (69.5)	143 (43.6)	90 (27.4)	56 (17.1)	22 (6.7)
	16 (1.5)	11 (3.4)					
	14 (2.5)	17 (5.2)					
	12 (4.0)	28 (8.5)					
24.7-28.7 (7.5-8.7) [1]	20 (0.75)	3 (0.9)	195 (59.4)	122 (37.2)	77 (23.5)	48 (14.6)	19 (5.8)
	16 (1.5)	9 (2.7)					
	14 (2.5)	15 (4.6)					
	12 (4.0)	24 (7.3)					
28.8-32.8 (8.7-9.9) [1]	20 (0.75)	3 (0.9)	171 (52.1)	107 (32.6)	67 (20.4)	42 (12.8)	16 (4.9)
	16 (1.5)	8 (2.4)					
	14 (2.5)	13 (4.0)					
	12 (4.0)	21 (6.4)					
32.9-36.9 (10.0-11.2) [2]	20 (0.75)	2 (0.6)	230 (70.1)	144 (43.9)	91 (27.7)	57 (17.4)	22 (6.7)
	16 (1.5)	7 (2.1)					
	14 (2.5)	11 (3.4)					
	12 (4.0)	18 (5.5)					
37.0-41.0 (11.2-12.4) [2]	20 (0.75)	2 (0.6)	205 (62.5)	128 (39.0)	81 (24.7)	50 (15.2)	20 (6.1)
	16 (1.5)	6 (1.8)					
	14 (2.5)	10 (3.0)					
	12 (4.0)	17 (5.2)					
41.1-45.1 (12.5-13.7) [2]	20 (0.75)	2 (0.6)	187 (57.0)	118 (36.0)	74 (22.6)	46 (14.0)	18 (5.5)
	16 (1.5)	6 (1.8)					
	14 (2.5)	9 (2.7)					
	12 (4.0)	15 (4.6)					
45.2-49.2 (13.7-14.9) [2]	20 (0.75)	2 (0.6)	171 (52.1)	107 (32.6)	67 (20.4)	42 (12.8)	16 (4.9)
	16 (1.5)	5 (1.5)					
	14 (2.5)	8 (2.4)					
	12 (4.0)	14 (4.3)					

Notes:

[1] Lengths 16.5 ft - 32.8 ft (5.0 m - 10.0 m) assumes the cable runs split into equal parallel runs (wiring diagram 3) or a connection on both ends of the tape (wiring diagram 3).

[2] Lengths over 32.8 ft (10.0 m) assumes the cable runs are split into equal parallel runs with similar wire and tape lengths (wiring diagram 3) or a combination of parallel and runs with connections on both ends (combination of wiring diagram 3 and 4).

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WIRING (cont.)

TABLE 2: RGB + Tunable White Installation Wire Lengths for Power and Control Wire

The below table values apply to RGB + tunable white tape light solution with one (1) power interface and one (1) multi-channel wireless controller (Wiring diagrams 1, 3, and 4) or one (1) power interface and up to three (3) multi-channel wireless controllers (wiring diagram 2). If parallel power wiring exists, the table values assume that the power cable connections are in the homerun configuration to the power interface (spliced closest to the power interface) and the tape lengths are similar. The displayed values allow for up to 25% lumen drop at the beginning of the LED tape.

Tape Length ft (m)	Power Cable		Total Control Cable Length ft (m)				
	Wire Gauge AWG (mm^2)	Total Cable Length ft (m)	12 AWG (4.0 mm^2)	14 AWG (2.5 mm^2)	16 AWG (1.5 mm^2)	18 AWG (1.0 mm^2)	22 AWG (0.5 mm^2)
0-4.1 (0-1.2)	20 (0.75)	36 (11.0)	1004 (306.0)	633 (192.9)	397 (121.0)	251 (76.5)	99 (30.2)
	16 (1.5)	96 (29.3)					
	14 (2.5)	153 (46.6)					
	12 (4.0)	244 (74.4)					
4.2-8.2 (1.2-2.4)	20 (0.75)	18 (5.5)	504 (153.6)	317 (96.6)	199 (60.7)	125 (38.1)	49 (14.9)
	16 (1.5)	48 (14.6)					
	14 (2.5)	77 (23.5)					
	12 (4.0)	123 (37.5)					
8.3-12.3 (2.5-3.7)	20 (0.75)	12 (3.7)	335 (102.1)	211 (64.3)	132 (40.2)	83 (25.3)	33 (10.1)
	16 (1.5)	32 (9.8)					
	14 (2.5)	52 (15.8)					
	12 (4.0)	83 (25.3)					
12.4-16.4 (3.7-5.0)	20 (0.75)	9 (2.7)	252 (76.8)	158 (48.2)	99 (30.2)	62 (18.9)	24 (7.3)
	16 (1.5)	24 (7.3)					
	14 (2.5)	39 (11.9)					
	12 (4.0)	62 (18.9)					
16.5-20.5 (5.0-6.2) [1]	20 (0.75)	5 (1.5)	273 (83.2)	172 (52.4)	108 (32.9)	68 (20.7)	26 (7.9)
	16 (1.5)	13 (4.0)					
	14 (2.5)	21 (6.4)					
	12 (4.0)	33 (10.1)					
20.6-24.6 (6.2-7.4) [1]	20 (0.75)	4 (1.2)	228 (69.5)	143 (43.6)	90 (27.4)	56 (17.1)	22 (6.7)
	16 (1.5)	11 (3.4)					
	14 (2.5)	17 (5.2)					
	12 (4.0)	28 (8.5)					
24.7-28.7 (7.5-8.7) [1]	20 (0.75)	3 (0.9)	195 (59.4)	122 (37.2)	77 (23.5)	48 (14.6)	19 (5.8)
	16 (1.5)	9 (2.7)					
	14 (2.5)	15 (4.6)					
	12 (4.0)	24 (7.3)					
28.8-32.8 (8.7-9.9) [1]	20 (0.75)	3 (0.9)	171 (52.1)	107 (32.6)	67 (20.4)	42 (12.8)	16 (4.9)
	16 (1.5)	8 (2.4)					
	14 (2.5)	13 (4.0)					
	12 (4.0)	21 (6.4)					

Notes:

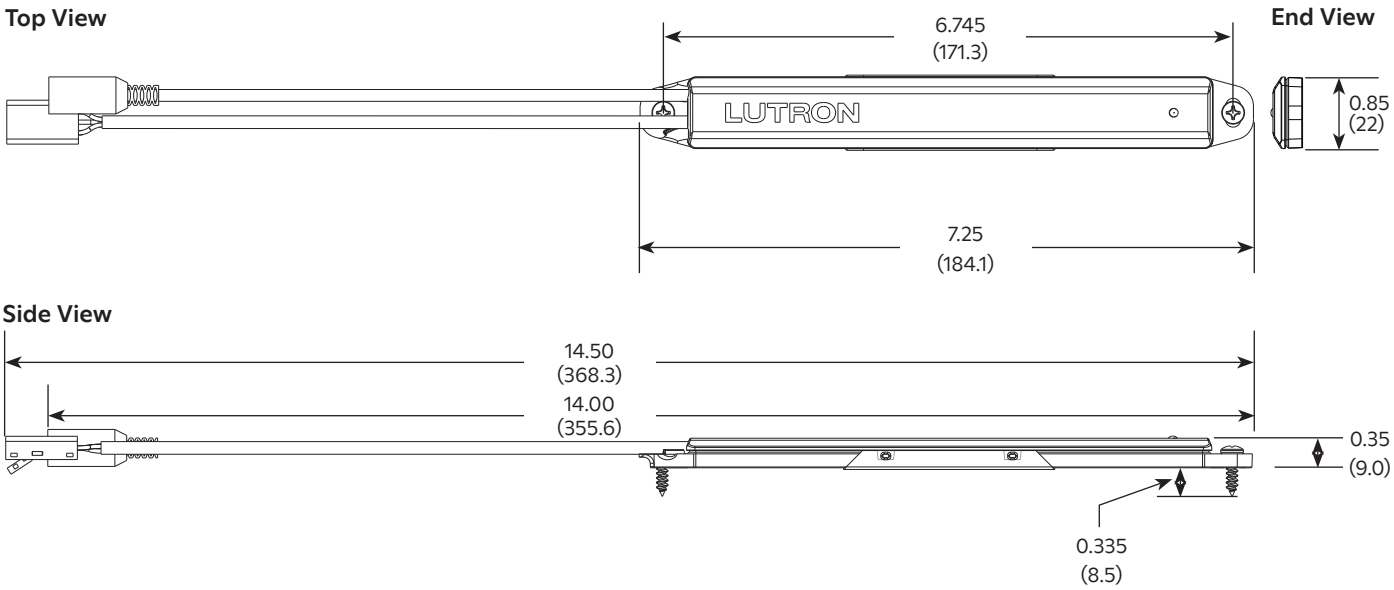
[1] Lengths over 16.5 ft (5.0 m) assumes that control cable runs are split into equal parallel or dual-ended wiring runs and identical tape lengths (wiring diagrams 3 and 4).

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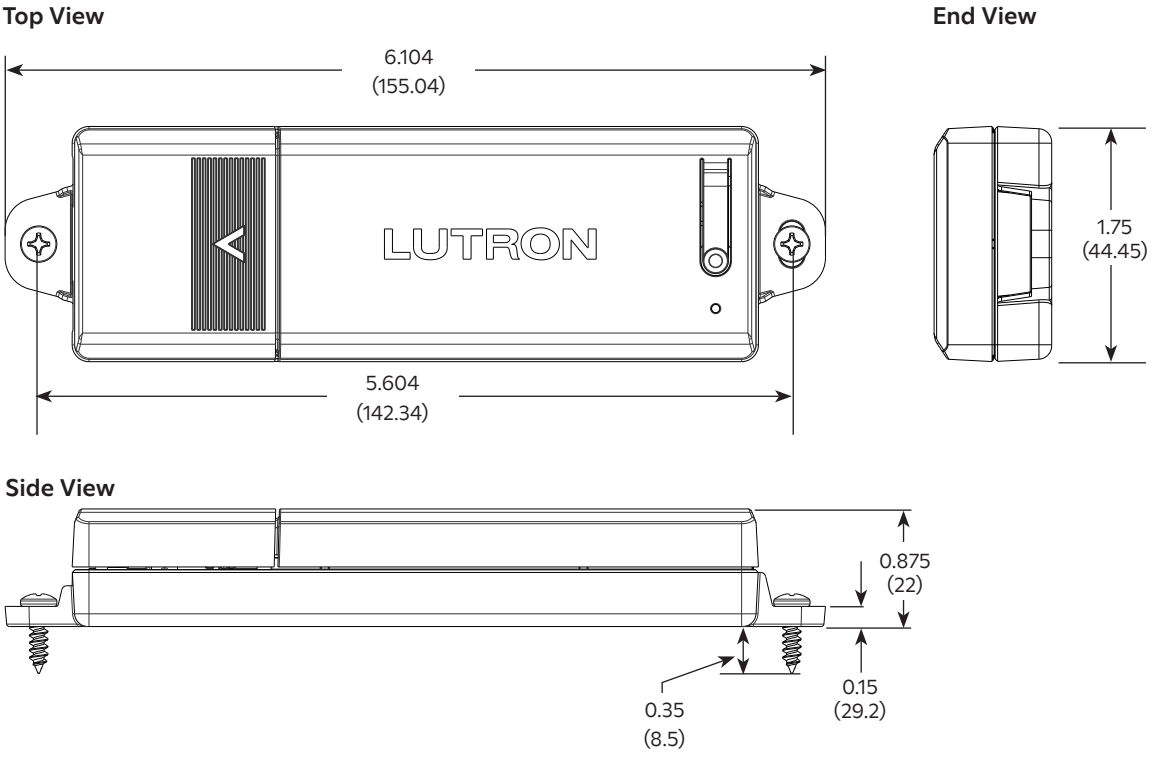
DIMENSIONS

All dimensions shown as: in (mm)

LUMARIS TUNABLE WHITE WIRELESS CONTROLLER (HWL-TWCL-WH OR RRL-TWCL-WH)



MULTI-CHANNEL WIRELESS CONTROLLER (HWL-MWCL-WH, RRL-MWCL-WH, CM-MWCL-WH)



NOTE: The location of the wireless controller must be considered when laying out the Clear Connect - Type X network. See the communication section of the wireless controller for Clear Connect - Type X spacing details.

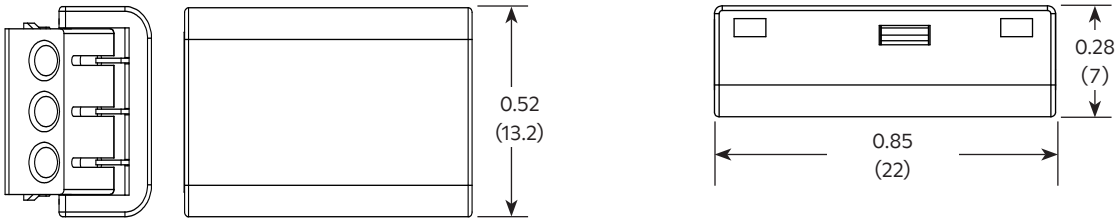
NOTE: Do not mount wireless controllers in or on metal enclosures or cabinets.

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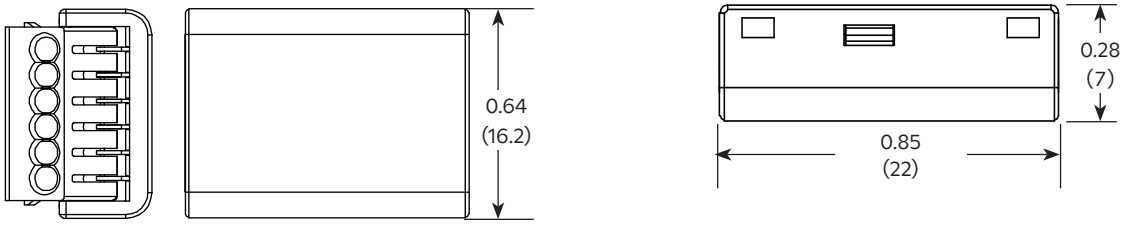
DIMENSIONS (cont.)

All dimensions shown as: in (mm)

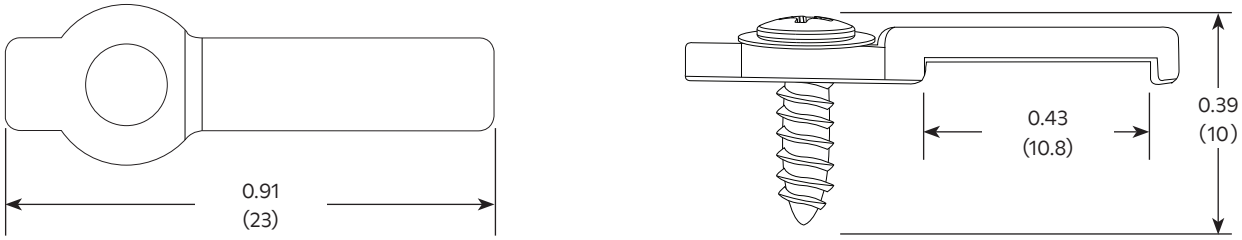
3-PIN WIRE-TO-TAPE CONNECTOR (LU-CK1-TW)



6-PIN WIRE-TO-TAPE CONNECTOR (LU-CK1-6W)



SURFACE MOUNTING CLIP (LU-MK1)



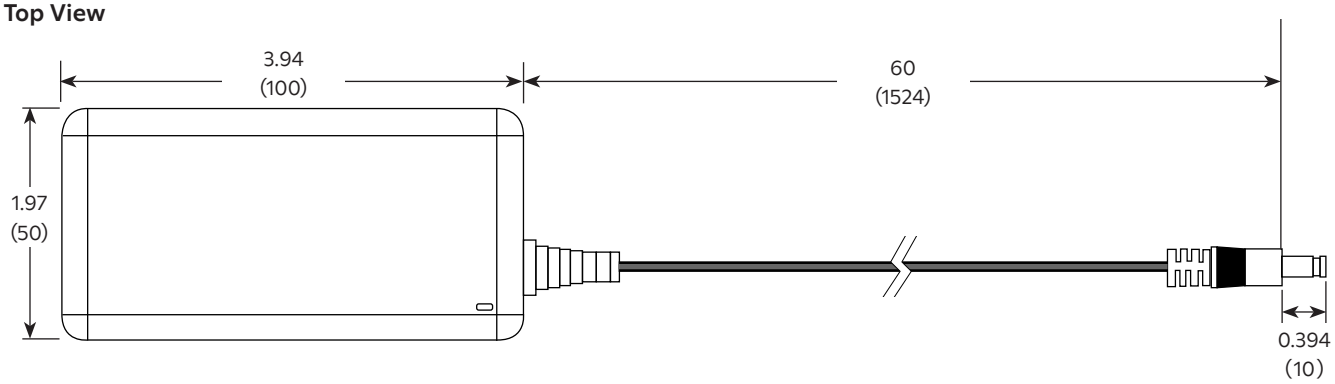
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DIMENSIONS (cont.)

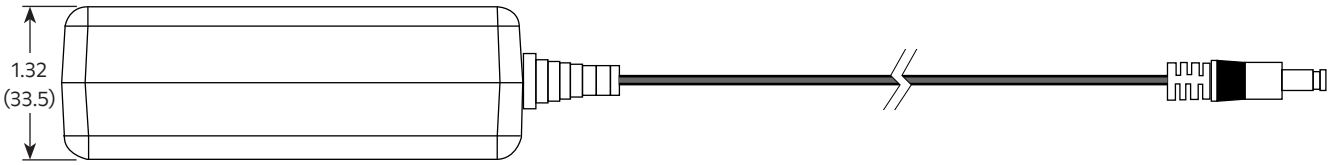
All dimensions shown as: in (mm)

PLUG-IN POWER SUPPLY (T120-24DC-15)

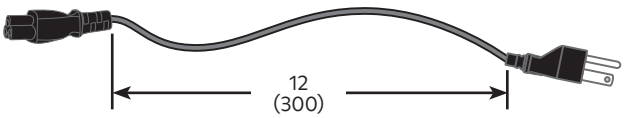
Top View



Side View



Power Cord

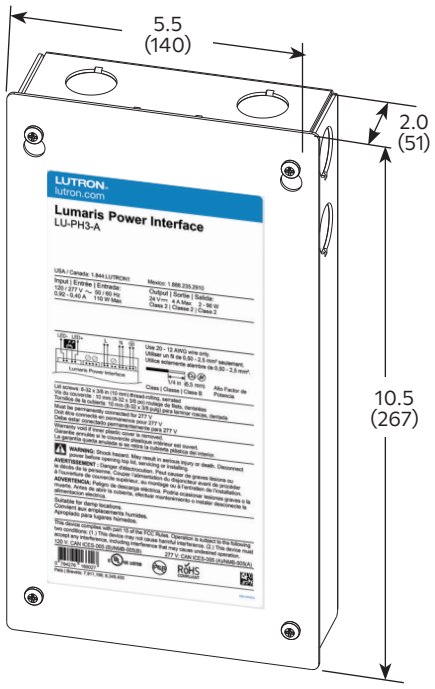


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DIMENSIONS (cont.)

All dimensions shown as: in (mm)

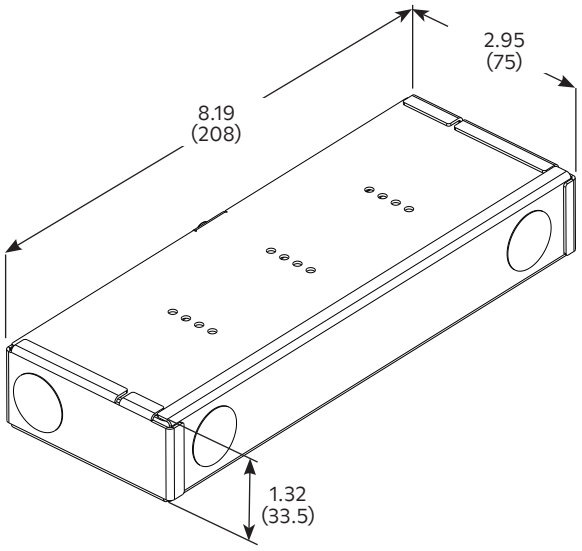
POWER INTERFACE ENCLOSURE (LU-PH3-A)



KNOCKOUTS

- Sides
  – 4 locations: 1/2 in or 21 mm trade size
- Top
  – 2 locations: 1/2 in or 21 mm trade size

POWER INTERFACE ENCLOSURE (LU-PH3-B)



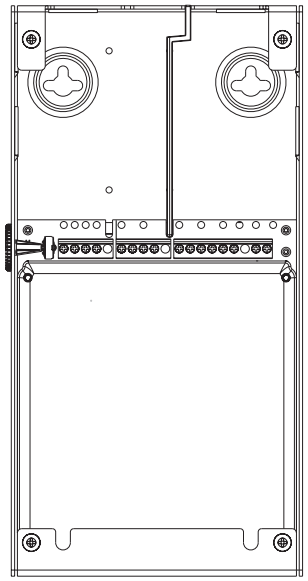
KNOCKOUTS

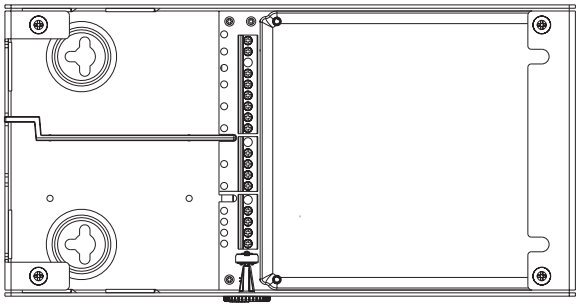
- Sides
  – 6 locations: 1/2 in or 21 mm trade size
- Bottom
  – 2 locations: 1/2 in or 21 mm trade size

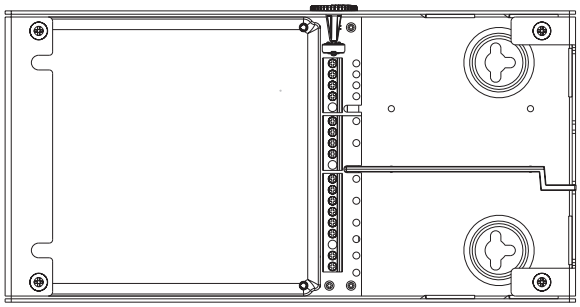
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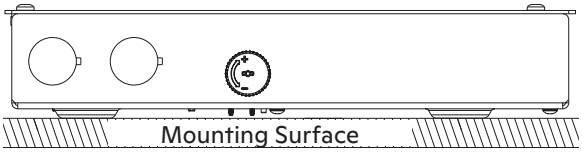
MOUNTING OPTIONS

POWER INTERFACE ENCLOSURE (LU-PH3-A) [1,2]









Note: The gray knob on the side of the enclosure is not used and does not need to be accessed after installation. This knob has no affect on the operation of the power interface.

1 Any other mounting configuration will require additional mechanical support. Improper installation may result in hazards to personnel or property.

2 Mount the power interface in a position where it can be easily located and accessed if service or troubleshooting is necessary.

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