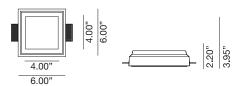
# LG-8018

#### Square 4" Flat Recessed Downlight LED







# Project Information: Project Name: Fixture Type: Location:

# **FOCUS**

#### Square Trimless Plaster LED Recessed Downlight

Revolutionary Plaster recessed downlight which allows for a truly seamless and trimless installation. Lighting technology meets precise design. Visual comfort in its purest form. Our fixtures are paintable and texturable using standard paint and paint colors. Complete with translucent acrylic diffuser for uniform light distribution.

LED lighting panel is high performance, low power that provides outstanding reliability and color quality/consistency. 2700K, 3000K, 3500K, 4000K color temperatures are available with 95 CRI.

- Life Rated for 40.000 hours at 70% lumen maintenance
- · All testing reports are based on published industry procedures







# Quick Info

Application	LED Type
New Construction / Remodeling	Epistar
Delivered Lumens	Color Quality
570lm (9W) 36V 250mA	95 CRI, 3-step SDCM
Color Temperature	Light Distribution
2700K 3000K	General
Input Voltage	Beam Spread
120/277V	120°
Trims Gypsum Flangless (seamless)	Dimming (Installed remote or behind fixture in a junction box) TRIAC/ ELV
Housing Ratings	Module Ratings
N/A	Wet Location
Guarantee 40,000 hrs   3 years	Additional Dimming Options  Lutron EcoSystem 0-10 DALI

# LG-8018

Square 4" Flat Recessed Downlight LED

Project Information:	Project Name:
Fixture Type:	Location:

0	La latina and	- 1 -
( )rc	lering	IU6
$\mathbf{O}_{\mathbf{I}}$	1011119	IGO

PRODUCT CODE

LG - 8018

**Example Number** 

LG-8018 CL2-9SMD-S 30K 95 120 T

Order Number

<u>LG-8018</u> <u>CL2-9SMD-S</u> \_\_\_\_\_\_

MO	DE	L
----	----	---

\* COLOR TEMPERATURE

□ CL2-9SMD-S (STANDARD) □ 30K - 3000K (STANDARD)

□ 27K - 2700K

#### **CRI**

□ 95 - 95 CRI

#### **BEAM SPREAD**

□ 120° (STANDARD)

#### **DIMMING OPTION**

(Installed remote or behind fixture in a junction box)

- □ T Triac/ELV (STANDARD)
- D DALI
- ECO (Hi lume Premier 0.1% Eco System LED Driver with Soft-on, Fade-to-black dimming technology)
- **a** 0 10

# **Product Features**

- Made out of gypsum and acrylic materials
- Our gypsum fixture can be painted fast and easy by simply using your standard paint colors.
- Energy efficient LED light engines
- · Dimmable with a variety of commonly used drivers
- Fixtures can be used with all Smart House Systems such as Lutron,
   Vantage, Control4, Crestron and others
- Easy installation for new construction and remodel applications
- Class 2
- . IC Rated UL approved fixtures
- Environmentally Friendly Materials
- Wet location
- Driver Included



<sup>\*</sup>Custom color temperature available upon request.



# **Dimmable LED Driver**



# 10W DA10W-3001 Series 120V AC Constant Current & Constant Voltage



Efficiency	> 80%
Power Factor	> 0.90
Case TC	90C° Max.
Protection	Input / Output
Storage	-30°C / +90°C
Humidity	95% RH Max.
IP Rating	IP 64
Class	Class 2 Power Supply
Dimming	ELV, Triac











#### **FEATURES**

- Fully dimmable with ELV & Triac dimmers
- Flicker free dimming
- · Title 24 compliant
- Isolated output power per NEC and UL safety requirements
- UL & ETL recognized/ listed, meets UL 8750, 1310 requirements
- Aluminum casing for optimal heat dissipation
- Auto-reset; short circuit, overload and thermal protection
- Low profile, small form factor, junction box mountable
- Class 2 power supply
- Efficient, High power factor > 0.90





\* Ask for more information

#### **CONSTANT CURRENT OPTIONS**

Model #	Input	Wattage	Voltage Range	Output Current	Form Factor
DA10W100C7999-3001			79V - 99V DC	100mA	
DA10W150C4767-3001			47V - 67V DC	150mA	
DA10W200C3050-3001	120V AC 0.12A 60Hz		30V - 50V DC	200mA	
DA10W250C2040-3001		10W	20V - 40V DC	250mA	T11
DA10W300C1333-3001		0.12A 60Hz	1000	13V - 33V DC	300mA
DA10W350C0929-3001			9V - 29V DC	350mA	
DA10W400C0525-3001			5V - 25V DC	400mA	
DA10W450C0222-3001			2V - 22V DC	450mA	

<sup>\*\*</sup>UL Listed Models Include External Remote Mount Case



# **Dimmable LED Driver**

# $\Delta$

# 10W DA10W-3001 Series 120V AC Constant Current & Constant Voltage

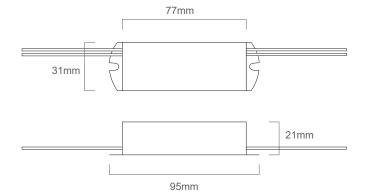
#### **CONSTANT VOLTAGE OPTIONS**

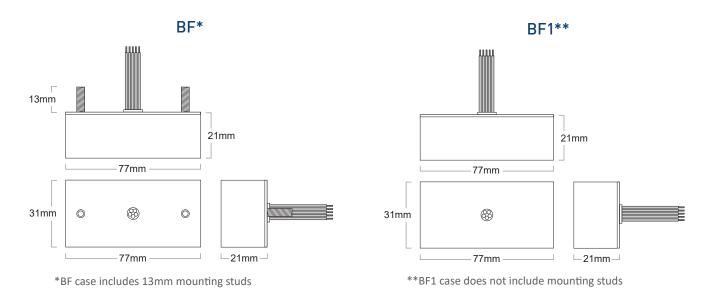
Model #	Input	Wattage	Output Voltage	Load	Form Factor
DA10W12V-3001	120V AC	10)4/	12V DC	12V DC LED 0.83A Max.	T14
DA10W24V-3001	0.12A, 60Hz	10W	24V DC	24V DC LED 0.42A Max.	T11

#### **MECHANICAL SPECS**

Available Form Factors	Dimensions
"T11"	95 (77) x 31 x 21mm
"BF"	77 x 31 x 21mm
"BF1"	77 x 31 x 21mm

#### T11







# **Dimmable LED Driver**



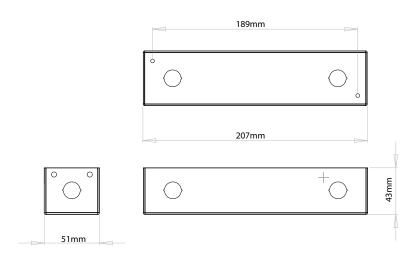
# 10W DA10W-3001 Series 120V AC Constant Current & Constant Voltage

#### **REMOTE ENCLOSURES - UL LISTED**

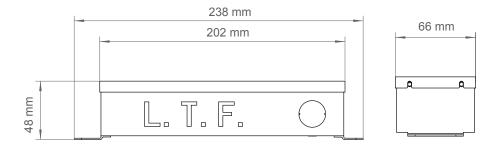
Model	Enclosure Type	Enclosure Dimensions
LDA10W-XXXX-RE-3001	G1 (Damp Rated)	207 x 51 x 43mm
LDA10W-XXXX-REO-3001	G4 (Wet Rated)	238 (202) x 66 x 48mm



#### **G1 INDOOR REMOTE ENCLOSURE**



#### **G4 OUTDOOR REMOTE ENCLOSURE**



#### **Direct current dimmable electronic drivers with DIP-SWITCH** Alimentatori elettronici regolabili in corrente continua con DIP-SWITCH







































DC MINI JOLLY DALI B





110  $\div$  127 V  $^{(2)}$ 220 ÷ 240 V

#### Frequency Frequenza 50-60 Hz

Dimmable multipower drivers - Compact case multipotenza regolabili - Formato compatto -

**AC Operation range** Tensione di utilizzo AC 99 ÷ 264 V

#### **DC** Operation range Tensione di utilizzo DC

(see page info15) 176 ÷ 280 V

#### Power - Potenza

1 ÷ 20 W

#### iTHD

≤ 10% <sup>(1)</sup>

### **Output current ripple**

≤ 3% <sup>(1)</sup>

#### Standards compliance CSA C22.2 no. 223 (2)

EN 50172 (VDE 0108) EN 55015 EN 61000-3-2

EN 61000-3-3 EN 61347-1 EN 61347-2-13

EN 61547

EN 62384 EN 62386-101

EN 62386-102 EN 62386-207

UL 1310 (2) VDE 0710-T14

#### Max. pcs for CB B16A

(see page info17) 50 pcs

#### In rush current 5A 50µsec











Article Articolo	Code Codice	Dimming type	P out W	V out DC <sup>(1)</sup>	I out DC	U out V	ta °C	tc °C	λ max. Power Factor	η max. Efficiency <sup>(1)</sup>
DC MINI JOLLY	125403 <sup>(4)</sup>	AM/PWM	Constant curr	ent output -	Uscita in corrente c	ostante <sup>(4)(5)</sup>	-25+45	75	0,95 C	> 87
DALI	151403 <sup>(5)</sup>	AM	12 (12(2))	1549	250 mA cost.	55				
			17 (15 <sup>(2)</sup> )	1049	350 mA cost.					
DC MINI JOLLY	125403BI <sup>(4)</sup>	AM/PWM	19 (15 <sup>(2)</sup> )	549	400 mA cost.					
DALI BI	151403BI(5)	AM	20 (15(2))	545	450 mA cost.					
- N	10110051	7	20 (15(2))	540	500 mA cost.					
			20 (15(2))	336	550 mA cost.					
			20 (15(2))	333	600 mA cost.					
			20 (15(2))	328	700 mA cost.					
			Constant volta	age output -	Uscita in tensione c	ostante <sup>(4)</sup>				
			16 (15 <sup>(2)</sup> )	24 cost.	700 mA max.	-				

- $^{(1)}$  Referred to  $V_{\mbox{\tiny in}}=230$  V, 100% load Riferito a  $V_{\mbox{\tiny in}}=230$  V, carico 100%
- (6) 125403BIS 151403BIS 125403BIBIS 151403BIBIS: order codes for BIS marked products - codici di ordine per i prodotti marchiati BIS

#### **Features**

- · Multipower driver supplied with dip-switch for the selection of the output current.
- IP20 independent driver, for indoor use.
- · Class II protection against electric shock for direct or indirect
- Driver for built-in use (DC MINI JOLLY DALI BI).
- It can be used for lighting equipment in protection class I and II (DC MINI JOLLY DALI BI).
- IP00, creepage distances and clearances rely on the final application according to IEC/EN 60598-1 (DC MINI JOLLY DALI BI).
- · Active Power Factor Corrector.
- · Analogical input (NTC) for thermal sensor connection.
- Current regulation  $\pm 5$  % including temperature variations.
- . Input and output terminal blocks on the same side (wire cross-section up to 1,5 mm<sup>2</sup> / AWG15).
- · Clamping screws on primary and secondary circuits for cables with diameter: PRI 5-8 mm / SEC 3-5 mm.
- · Protections:
- against overheating and short circuits;
- against mains voltage spikes;
- against overloads.
- Thermal protection = C.5.a.

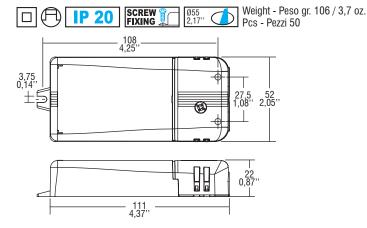
#### Caratteristiche

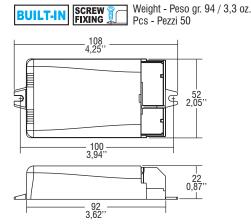
- Alimentatore multipotenza fornito di dip-switch per la selezione della corrente in uscita.
- · Alimentatore indipendente IP20, per uso interno.
- Protetto in classe II contro le scosse elettriche per contatti diretti e indiretti.
- Alimentatore da incorporare (DC MINI JOLLY DALI BI).
- Utilizzabile per apparecchi di illuminazione in classe di protezione I e II (DC MINI JOLLY DALI BI).
- IP00, le distanze di sicurezza sono demandate all'applicazione finale, in accordo alla IEC/EN 60598-1 (DC MINI JOLLY DALI BI).
- PFC attivo.
- Entrata analogica (NTC) per connessione sensore termico.
- Corrente regolata ±5 % incluse variazioni di temperatura.
- Morsetti di entrata e uscita sullo stesso lato (sezione cavo fino a 1,5 mm<sup>2</sup> / AWG15).
- Serracavo su primario e secondario per cavi di diametro: PRI 5-8 mm / SEC 3-5 mm.
- · Protezioni:
- termica e cortocircuito;
- contro le extra-tensioni di rete;
- contro i sovraccarichi.
- Protezione termica = C.5.a.

3.1.2

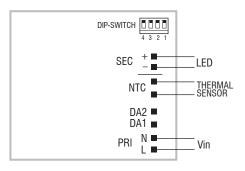
#### Direct current dimmable electronic drivers with DIP-SWITCH Alimentatori elettronici regolabili in corrente continua con DIP-SWITCH







Wiring diagram - Schema di collegamento (Max. LED distance on page info8 - Massima distanza LED a pagina info8)



DALI diagram - Collegamento DALI

#### **Operation Mode**

- Features DALI dimming (0/0,5 100 %):
- memory function for sets or light groups;
- recall of stored functions;
- compatible with standard DALI interfaces.
- (4) Designed to work with DALI-2 systems.
- (4) **Default dimming AM+PWM**: 1-25% PWM 2 kHz+25-100% AM.
- <sup>(4)</sup>Full PWM dimming (240 Hz 1-100%) available by short circuit of NTC port during switch on of the driver. Same operation to reset to AM+PWM.
- (5) Full AM DIMMING: 1 100%.

For additional details for regulations see pages info12-14.

#### Modalità di funzionamento

- Caratteristiche della regolazione DALI (0/0,5 100 %):
- funzione di memoria per scenari o gruppi luminosi;
- richiamo di funzioni memorizzate;
- compatibilità con interfacce DALI standard.
- (4) Progettato per funzionare con sistemi DALI-2.
- (4) Regolazione default AM+PWM: 1-25% PWM 2 kHz+25-100% AM.
- <sup>(4)</sup>Regolazione solo PWM (240 Hz 1-100%) attuabile tramite corto su porta NTC durante l'accensione dell'alimentatore. Reset a AM+PWM nello stesso modo.
- <sup>(5)</sup> Regolazione solo AM: 1 100%.

Per ulteriori dettagli sulle regolazioni vedi pagine info12-14.

3691077b 1 05.03.18

# Hi-lume Premier 0.1% EcoSystem LED Driver

Hi-lume Premier 0.1% EcoSystem LED Drivers provide a high-performance solution for any space, in any application. They provide smooth, continuous dimming down to 0.1% of full output current, and fade smoothly between 0% and 0.1% with Soft-on, Fade-to-Black.

#### **Features**

- Soft-on, Fade-to-Black: fades smoothly between 0% and 0.1% when turned on and off for an incandescent-like experience.
- Continuous, flicker-free dimming from 100% to 0.1%<sup>1</sup>.
- Dimming Method:
  - Constant-current reduction dimming provides video-friendly performance down to 0.1%.
  - Meets IEEE 1789 over entire dimming range.
- Hi-lume 1% EcoSystem with Soft-on, Fade-to-Black models also available for dimming from 100% to 1%.
- Guaranteed dimming performance when used with Lutron controls:
  - HomeWorks QS, Energi Savr Node units with EcoSystem controls, GRAFIK Eye QS with EcoSystem controls, PowPak with EcoSystem dimming modules, PowPak with EcoSystem wireless fixture controls, and Quantum systems, allowing for integration into a planned or existing EcoSystem lighting control solution.
- QwikFig compatible models available, see How to Build a Model Number page for details. For more information, please refer to the QwikFig User Guide (Lutron P/N 041473) or contact your Lutron sales representative.
- Protected from miswires of input power to EcoSystem control inputs up to 277 V∼.
- Rated lifetime of 50,000 hours at 80 °C (176 °F) calibration point (t<sub>c</sub>).
- FCC Part 15 Class A
- 100% performance tested at factory before shipping.

**SPECIFICATION SUBMITTAL** 

- RoHS compliant.
- Non-volatile memory restores all settings after power failure.
- For more information, visit www.lutron.com



#### Case type V

1.60 in (40.64 mm) W x 1.07 in (27.18 mm) H x 4.30 in (109.22 mm) L

#### **EcoSystem Features**

- Simpler to wire and more reliable than 0–10 V===.
- Guarantees compatibility between Lutron controls, LED drivers, ballasts, and sensors.
- Accommodates zone and control changes without rewiring.
- Connect to Lutron Vive and Quantum Total Light Management Systems to monitor lighting power consumption.
- Polarity-free and topology-free.
- Digital EcoSystem intelligence allows easy code compliance.
- Digital EcoSystem control link can be Class 1 or Class 2.

Dago

Light output at low-end	 		: 4   -   -   -	

The state of the s					
Job Name:	Model Numbers:				
Job Number:					

3691077b 2 05.03.18

#### **Specifications**

#### Regulatory Approvals and Compliance

- UL Listed Class P
- NOM certified for Mexico
- Lutron Quality Systems registered to ISO 9001.2015
- Manufacturing facilities employ ESD reduction practices that comply with the requirements of ANSI/ESD S20.20
- Inrush current less than NEMA 410-2011 limit
- FCC Part 15 Class A
- Canadian EMI Class A Compliance Equivalent: CAN ICES-005(A)/NMB-005(A)
- Meets UL<sub>®</sub> 8750, "Light Emitting Diode (LED) Equipment For Use in Lighting Products"
- Class 2 output

#### **ENERGY STAR**<sub>®</sub> Luminaires V2.0 Specification

- LED drivers need to meet certain performance criteria in order for the completed luminaires to comply with the ENERGY STAR<sub>®</sub> Luminaires V2.0 Specification.
- PEQ1 and PEQ0 models meet performance criteria at 120 V∼ input and when driver output power exceeds 5 W
- PEQ1 and PEQ0 models meet performance criteria at 277 V∼ input and when driver output power exceeds 13 W

#### Title 24

- LED drivers need to meet certain performance criteria in order for the completed luminaires to comply with Title 24 requirements as detailed in Reference Joint Appendix JA8
- PEQ1 and PEQ0 models meet performance criteria at 120 V~ input and when driver output power exceeds 10 W
- Consult CEC-400-2015-032-CMF Section 6.2.7 for important information on meeting start-up time requirements with fade-in lighting

#### Performance

- Soft-on, Fade-to-Black: fades smoothly between 0% and 0.1% when turned on and off for an incandescent-like experience
- Dimming Range: 100% to 0.1%<sup>1</sup>
- Operating Voltage: 120  $V\sim$  / 277  $V\sim$  at 50/60 Hz
- Lifetime: 50,000 hours when calibration point (t<sub>c</sub>) at 80 °C (176 °F)<sup>2</sup>
- For rated warranty, t<sub>c</sub> not to exceed 80 °C (176 °F) (maximum rated temperature)<sup>2</sup>
- Patented thermal foldback protection
- At turn on, lighting fades smoothly to the desired level without decreasing or flashing to full brightness
- Non-volatile memory restores all driver settings after power failure
- Typical standby power consumption: < 0.5 W at 120 V $\sim$  / 277 V $\sim$
- Open-circuit protected output
- Short-circuit protected output

ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency

2 <sup>11</sup> /2	П	ITRO	N	SPECIFICATION SUBMITTAL
35 L	-1	1101		SECULICIALION SUDMILLAL

		90	
Job Name:	Model Numbers:		
Job Number:			

3691077b 3 05.03.18

### Specifications (continued)

#### **Environmental**

- Sound rated: Class A inaudible in 24 dBA ambient
- Relative Humidity: maximum 90% non-condensing
- Minimum Operating Ambient Temperature:  $t_a = 0 \, ^{\circ}\text{C} \, (32 \, ^{\circ}\text{F})^3$
- Indoor use only
- Rated for dry and damp locations

#### **Driver Wiring and Mounting**

- Fixture must be grounded in accordance with local and national electrical codes
- Includes 6 in (152 mm) leads of stranded 18 AWG (0.75 mm²), 600 V $\sim$  and 105 °C (221 °F) rated. Stripped to 0.5 in (12.7 mm)
- Maximum driver-to-LED light engine wire length for:

	Maximum Lead Length			
Wire Gauge	150 mA to 700 mA	710 mA to 1.50 A	1.51 A to 2.10 A	
18 AWG (0.75 mm <sup>2</sup> )	30 ft (9 m)	15 ft (4.5 m)	10 ft (3 m)	
16 AWG (1.5 mm <sup>2</sup> )	35 ft (10.5 m)	25 ft (7.5 m)	15 ft (4.5 m)	
14 AWG (2.5 mm <sup>2</sup> )	50 ft (15 m)	40 ft (12 m)	25 ft (7.5 m)	
12 AWG (4.0 mm <sup>2</sup> )	100 ft (30 m)	60 ft (18 m)	40 ft (12 m)	

<b><b>LUTRON</b> SPECIFICATION SUBMITTA</b>
---

<b>LUTRON</b> SPECIFIC	CATION SUBMITTAL	Page
Job Name:	Model Numbers:	
Job Number:		

Light output at low-end depends on the efficacy of the LED light engine used with the driver.

To maintain warranty, installer is responsible for ensuring that the driver calibration point does not exceed 80  $^{\circ}\text{C}$  (176  $^{\circ}\text{F}$ ).

<sup>&</sup>lt;sup>3</sup> Where t<sub>a</sub> is the temperature of the air directly surrounding the driver.

3691077b 4 05.03.18

### How to Determine Compatibility Between an LED Driver and LED Load

- 1. Review the specifications of the LED load.
- 2. Identify the minimum and maximum operating voltage of the LED load at the desired operating current. This "current" will be the rated output current of the LED driver. Consult the LED load manufacturer for any questions.

Example: An LED load that is rated at 0.7 A and 30 V nominally, has an input (forward) voltage range of 25-35 V (at 0.7 A) due to unit-to-unit variation, temperature, etc.

3. Examine the **LED Driver Load Compatibility** graphs below for each output range to ensure that the voltage range of the LED load is within the load compatibility range.

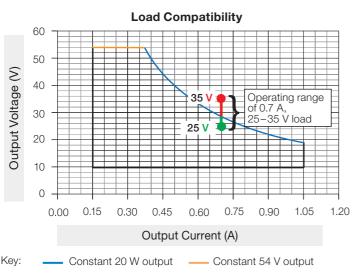
**Example:** Lines marked below indicate two load specifications:

Load A (25 - 35 V) at 0.5 A Load B (25 - 35 V) at 0.7 A

#### Load B (Not Compatible) X



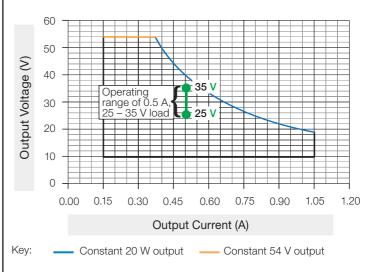
Since the maximum voltage of the load, 35 V, exceeds the 28.5 V allowable at 0.7 A, this combination of LED load and LED driver is not compatible.



#### Load A (Compatible)



Operating voltage range for load A is 25 – 35 V at 0.5 A. Since the load specifications are within the operating range, the combination of LED Load and LED Driver is compatible.



- 4. The LED Driver Selection Tool is a website compatibility tool that allows for a fast compatibility search of all Lutron LED Drivers that are compatible with an LED Load.
- 5. See **How to Build A Model Number** to create the appropriate model number for the desired driver. If a QwikFig compatible driver is needed, identify the proper LED Load Output Range (voltage and current) and insert "BLK" in the Current Level (for Constant Current) section of the model number.

#### **LUTRON** SPECIFICATION SUBMITTAL

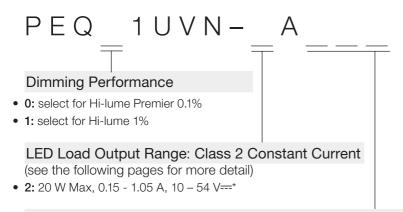
Job Name:	Model Numbers:
Job Number:	

3691077b 5 05.03.18

# How to Build a Model Number, V-Case Type ("BLK" models for use with Lutron QwikFig technology): Hi-lume Premier 0.1% EcoSystem LED Driver with Soft-On, Fade-to-Black



V-case type



Example: PEQ01UVN-2A040

- 0.40 A
- Hi-lume Premier 0.1%
- 4-20 W\*\*
- 10-50 V===

For further assistance in selecting your model number, contact our LED Center of Excellence at

LEDs@lutron.com

At 0.40 A, maximum voltage of 50 V provides  $20 \text{ W} (0.40 \text{ A} \times 50 \text{ V} = 20 \text{ W})$ 

#### Current Level (for Constant-Current)

• **015** = 0.15 A

**Option 1:** Order a driver configured by Lutron to a desired output current.

**Example:** PEQ01UVN-2A040 has been pre-configured at Lutron to an output of 0.40 A. Refer to the example above.

• **105** = 1.05 A

• **BLK** = QwikFig compatible bulk Option 2: Order a QwikFig compatible driver.

**Example:** PEQ01UVN-2ABLK (0.15 - 1.05 A)\*

Note: Default set to minimum output current for the respective LED Load Output Range.

#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:	
Job Number:		

Output voltage range changes with output current and according to power limits. Check driver specifications on the following pages carefully to understand output voltage range of a particular SKU. Purchaser is responsible for electrical compatibility between LED driver and LED load.

3691077b 6 05.03.18

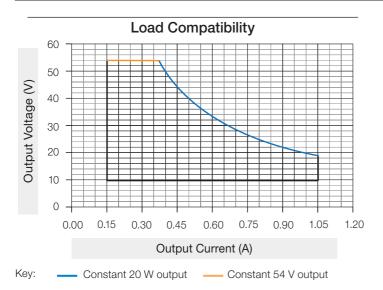
# "2" Output Range

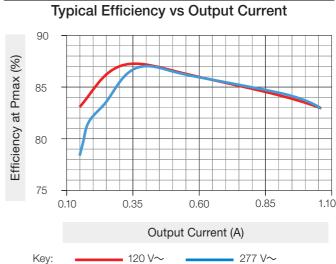
Driver Type	Output Voltage	Output Current	Output Power		Maximum Rated Temp. @ t <sub>c</sub> for Warranty
Constant Current Driver (Class 2)	10-54 V===	0.15 – 1.05 A*	20 W	CUL US LISTED CLASS P E322469	80 °C

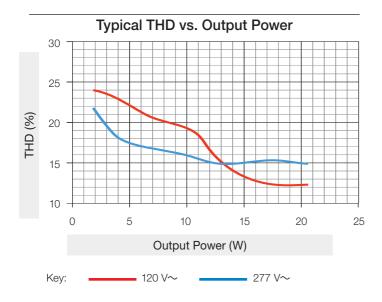
<sup>\*</sup> QwikFig compatible model number PEQ01UVN-2ABLK is configurable to any current within this range in 0.01 A increments.

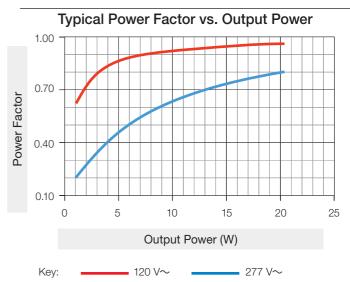
#### **Typical Performance Specifications:**

Parameter	Value	Test Conditions
Input Current	0.2 A	
Power Factor 0.95		$V_i = 120 \text{ V} \sim$ , $t_a = 25 ^{\circ}\text{C}$ , $l_o = 0.40 \text{A}$ , $V_o = 50 \text{V} = -100 \text{C}$
THD	15%	Maximum Light Output PEQ01UVN-2A040
Driver Efficiency	85%	









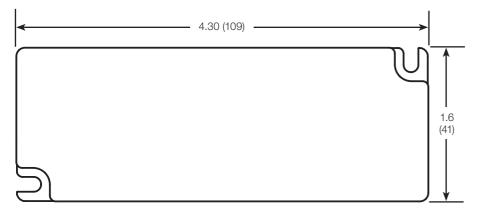
#### **LUTRON** SPECIFICATION SUBMITTAL

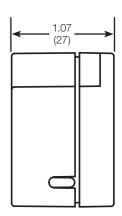
Job Name:	Model Numbers:
Job Number:	

3691077b 7 05.03.18

#### **Outer Dimensions**

All measurements shown as: in (mm)

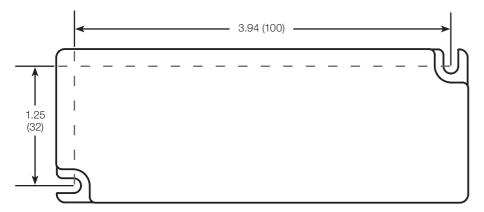




# Mounting

All measurements shown as: in (mm)

Accommodates #6 screws for mounting. Tighten screws to a maximum of 8 in-lb (0.9 N•m).



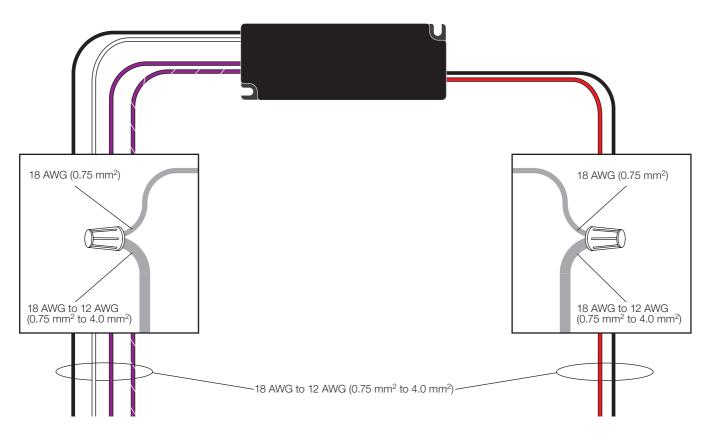
#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

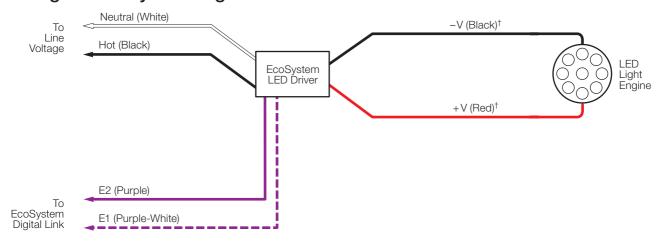
3691077b 8 05.03.18

### Wiring Gauges

Wire colors shown correspond to wires on driver.



# Wiring for EcoSystem Digital Control\*



<sup>\*</sup> Refer to Lutron Application note #142, "EcoSystem Bus Class 1 and Class 2 listing" for more information on wiring options.

#### **LUTRON** SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

<sup>&</sup>lt;sup>†</sup> For maximum driver-to-LED light engine wire length, see charts in the **Driver Wiring and Mounting** section on page 2.

3691077b 9 05.03.18

## Compatible Controls: Lutron EcoSystem Digital Controls

Guaranteed performance specifications with the controls listed in the chart below.

For assistance selecting controls, contact our LED Center of Excellence at 1.877.346.5338 or LEDs@lutron.com

	Part Number		Drivers per Control		
Lutron EcoSystem Compatible Controls	120 V∼	277 V∼	EcoSystem Loops per Control	Drivers per EcoSystem Loop	Maximum Drivers per Control
RMJ-EC032-DV-B		-DV-B	1	32	32
PowPak Dimming Modules	FCJ/FCJS-ECO <sup>1,</sup>		1	3	3
Enorgi Saur Nodo	QSN-1ECO-S	1	64	64	
Energi Savr Node	QSN-2ECO-S	N/A	2	64	128
GRAFIK Eye QS / HomeWorks QS control unit	QSGRJE (wireless) QSGRE	N/A	1	64	64
Quantum Hub	QP2 2C	N/A	2	64	128
	QP24C		4	64	256
	QP26C		6	64	384
	QP28C		8	64	512
HomeWorks QS / myRoom Plus power module	LQSE-2ECO-D	N/A	2	64	128

<sup>&</sup>lt;sup>1</sup> All devices connected to one FCJ/FCJS-ECO will be controlled together. Devices will dim to the same level as the result of a control command. For more detail on adjusting low-end light level refer to Application Note #556 at www.lutron.com.

<b><b>\$LUTRON</b> SPECIFICATION SUBMITTA</b>
---

Job Name:	Model Numbers:
Job Number:	

3691077b 10 05.03.18

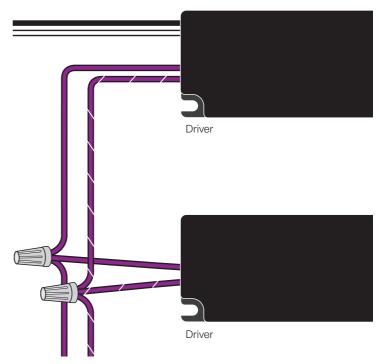
### **EcoSystem Wiring**

#### **EcoSystem Digital Link Overview**

- The EcoSystem Digital Link wiring (E1 and E2) connects the digital ballasts and drivers together to form a lighting control system.
- E1 and E2 (EcoSystem digital link wires) are polarity-insensitive and can be wired in any topology (e.g., T-tap and daisy-chain).
- Power is supplied to the EcoSystem Digital Link from the control system.

#### **EcoSystem Digital Link Wiring**

- Make sure that the supply breaker to the drivers and EcoSystem Digital Link Supply is OFF when wiring.
- Connect the two conductors to the two driver terminals E1 and E2 as shown.
- Using two different colors for E1 and E2 will reduce confusion when wiring several drivers together.
- The EcoSystem Digital Link may be wired Class 1 or Class 2. Consult applicable electrical codes for proper wiring practices. For more information on wiring options, refer to Lutron Application Note #142 "EcoSystem Bus Class 1 and Class 2 Listing".
- For emergency wiring, please refer to Lutron Application Note #106.



To the EcoSystem Digital Link Supply and additional drivers and/or ballasts

#### Notes

- The EcoSystem Digital Link Supply does not have to be located at the end of the Digital Link.
- Both wires of the EcoSystem link are included in maximum digital lead length.
- EcoSystem Digital Link length is limited by the wire gauge used for E1 and E2 as follows:

Wire Gauge	Digital Link Length (max)
12 AWG	2200 ft
14 AWG	1400 ft
16 AWG	900 ft
18 AWG	550 ft

Wire Size	Digital Link Length (max)
4.0 mm <sup>2</sup>	828 m
2.5 mm <sup>2</sup>	517 m
1.5 mm <sup>2</sup>	310 m
1.0 mm <sup>2</sup>	207 m
0.75 mm <sup>2</sup>	155 m

<b>『LUTRON</b> SPECIFICATION SUBMITTA
---------------------------------------

Job Name:	Model Numbers:
Job Number:	

3691077b 11 05.03.18

#### **EMC Information**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### Service

#### Warranty

For warranty information, please visit www.lutron.com/driverwarranty

#### Replacement Parts

When ordering Lutron replacement parts, please provide the full model number. Consult Lutron if you have any questions.

#### **Further Information**

For further information, please visit us at www.lutron.com/hilume1softbled or contact our LED Control Center of Excellence at 1.877.346.5338 or LEDs@lutron.com

\*\*Lutron, Lutron, EcoSystem, Hi-lume, GRAFIK Eye, PowPak, Vive, Quantum, and HomeWorks are trademarks of Lutron Electronics Co., Inc. registered in the U.S. and other countries.

Soft-on, Fade-to-Black, Energi Savr Node, and QwikFig are trademarks of Lutron Electronics Co., Inc.

	TRON	SPECIFICATION	SHRMITTAL
200		SECHEILAIILII	JUDIVILI I AL

Job Name:	Model Numbers:
Job Number:	