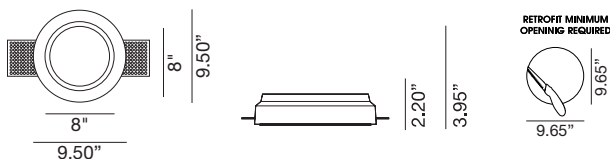


# LG-8017

## Round 8" Flat Recessed Downlight LED



Project Information:	Project Name:
Fixture Type:	Location:

## FOCUS

### Round 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



<b>Application</b> New Construction / Remodeling	<b>LED Type</b> Epistar
<b>Delivered Lumens</b> 1200lm (18W) 36V 500mA	<b>Color Quality</b> 95 CRI, 3-step SDCM
<b>Color Temperature</b> 2700K 3000K	<b>Light Distribution</b> General
<b>Input Voltage</b> 120/277V	<b>Beam Spread</b> 120°
<b>Trims</b> Gypsum Flangless (seamless)	<b>Dimming</b> (Installed remote or behind fixture in a junction box) TRIAC/ ELV
<b>Housing Ratings</b> N/A	<b>Module Ratings</b>  Wet Location
<b>Guarantee</b> 40,000 hrs   3 years	<b>Additional Dimming Options</b> Lutron EcoSystem 0-10 DALI

# LG-8017

Round 8" Flat  
Recessed Downlight LED

Project Information:	Project Name:
Fixture Type:	Location:

## Ordering Guide

### PRODUCT CODE

LG - 8017

### Example Number

LG-8017 CL2-18SMD-R 30K 95 120 T

### Order Number

LG-8017 CL2-18SMD-R \_ \_ \_ \_

### MODEL

☐ CL2-18SMD-R (STANDARD)

### \* COLOR TEMPERATURE

☐ 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)

☐ 0 - 10

\*Custom color temperature available upon request.

## Product Features

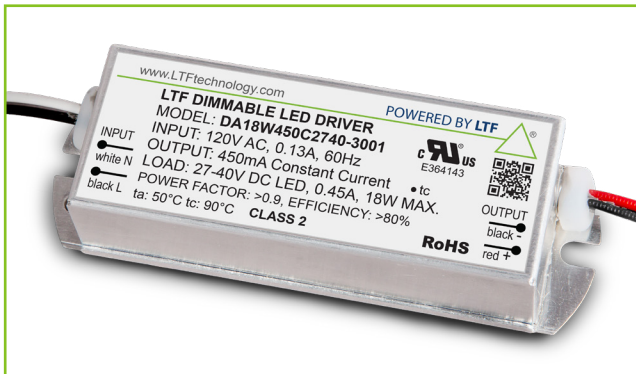
- Made out of gypsum and acrylic materials
- Our gypsum fixture can be painted fast and easy by simply using your standard paint colors.
- Energy efficient LED light engines
- Dimmable with a variety of commonly used drivers
- Fixtures can be used with all Smart House Systems such as Lutron, Vantage, 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



**L.T.F.**

## Dimmable LED Driver - Class 2

### 18W DA18W-3001 Series 120V AC Constant Current & Constant Voltage



Efficiency	> 80%
Power Factor	> 0.90
Case TC	90°C Max.
Protection	Input / Output
Storage	-30°C / +90°C
Humidity	95% RH Max.
IP Rating	IP 60
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

### MODEL NUMBER KEY (Constant Current)

DA | 18W | 450C | 2740 | T11 | (D010) | -3001

Input Voltage  
DA = 120V AC  
DE = 277V AC  
DU = 220-240V AC  
DS = 120-277V AC

Wattage

450mA  
Constant  
Current

Output  
Voltage Range  
27-40V DC

Case  
Form  
Factor

0-10V  
Dimming  
(Optional)

Internal  
Code

### ELECTRICAL SPECIFICATIONS

Constant Current					
Model Number	Input	Wattage	Load	Output Current	Available Form Factors
DA18W300C4760-3001	120V AC 0.15A, 60Hz	18W	47V - 60V DC LED	300mA	T11, BF, BF1
DA18W350C3851-3001			38V - 51V DC LED	350mA	
DA18W400C3245-3001			32V - 45V DC LED	400mA	
DA18W450C2740-3001			27V - 40V DC LED	450mA	
DA18W500C2336-3001			23V - 36V DC LED	500mA	
DA18W600C1730-3001			17V - 30V DC LED	600mA	
DA18W700C1225-3001			12V - 25V DC LED	700mA	
DA18W800C0922-3001			9V - 22V DC LED	800mA	

\*\*UL Listed Models Include External Remote Mount Case



**L.T.F.**

## Dimmable LED Driver - Class 2

**18W DA18W-3001 Series 120V AC  
Constant Current & Constant Voltage**

### MODEL NUMBER KEY (Constant Voltage)

DA | 18W | 24V | T11 | (D010) | -3001

Input Voltage  
DA = 120V AC  
DE = 277V AC  
DU = 220-240V AC  
DS = 120-277V AC

Wattage

24V DC  
Constant  
Voltage

Case  
Form  
Factor

0-10V  
Dimming  
(Optional)

Internal  
Code

### ELECTRICAL SPECIFICATIONS

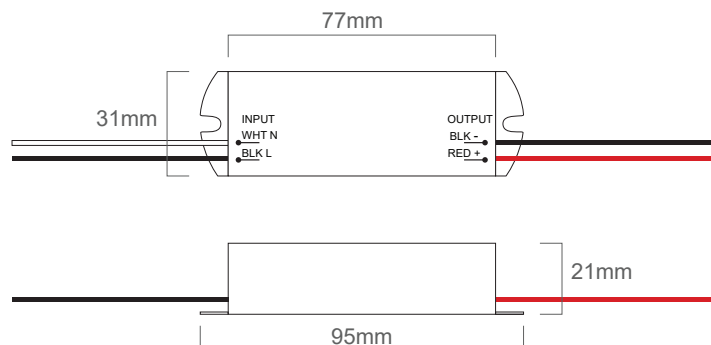
Constant Voltage					
Model Number	Input	Wattage	Output Voltage	Load	Available Form Factors
DA18W12V-3001	120V AC 0.13A, 60Hz	18W	12V DC	12V DC LED 1.5A max.	T11, BF, BF1
DA18W24V-3001			24V DC	24V DC LED 0.75A max.	
DA18W48V-3001			48V DC	48V DC LED 0.375A max.	

\*\*UL Listed Models Include External Remote Mount Case

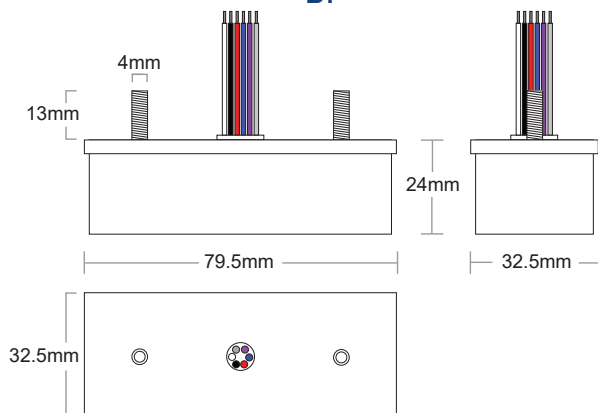
### MECHANICAL SPECS

Available Form Factors	Dimensions
"T11"	95 (77) x 31 x 21mm
"BF"	79.5 x 32.5 x 24mm
"BF1"	79.5 x 32.5 x 24mm

#### T11

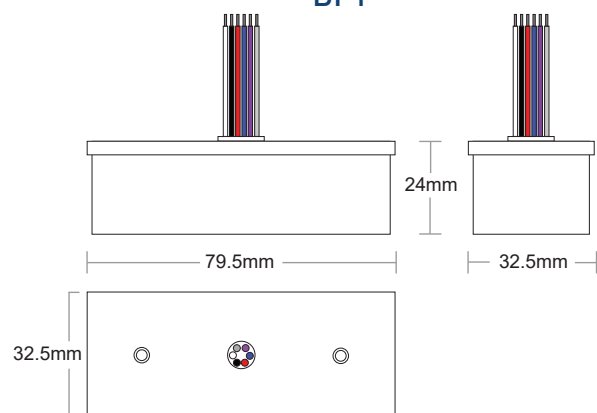


#### BF\*



\*BF case includes 13mm mounting studs

#### BF1\*\*



\*\*BF1 case does not include mounting studs



**L.T.F.**

## Dimmable LED Driver - Class 2

**18W DA18W-3001 Series 120V AC  
Constant Current & Constant Voltage**

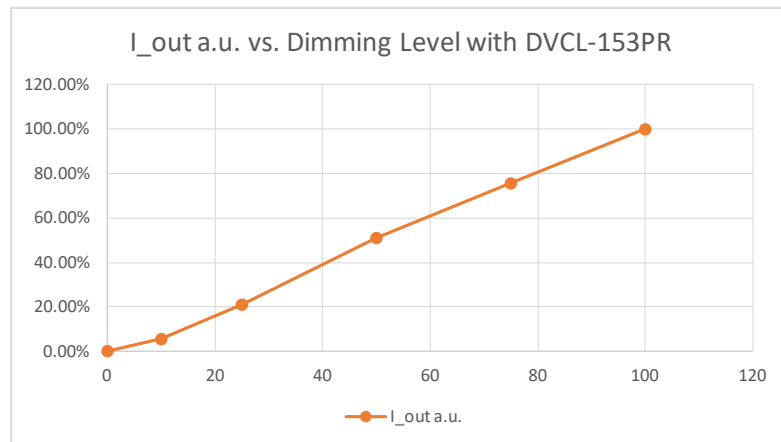
### DIMMING CHARACTERISTICS

#### CL Dimming (DVCL-153PR)

Dim %	I <sub>in</sub> (mA)	P <sub>in</sub> (W)	PF	V <sub>out</sub> (V)	I <sub>out</sub> (mA)	IFP (min.)	IFP (max)	P <sub>out</sub> (W)	Flicker
100	282.2	20.49	0.607	35.62	449.2	448	452	16.00	0.44%
75	209.4	15.11	0.602	34.71	339.8	338	340	11.79	0.29%
50	170.4	10.33	0.505	33.75	229.5	173.1	173.1	7.75	0.00%
25	99.5	5	0.421	32.28	94.6	93	96	3.05	1.59%
10	52.7	2.06	0.317	31.1	25	21	30.5	0.78	18.45%
0	32.5	0.85	0.21	28.5	0.8	0.8	0.8	0.02	

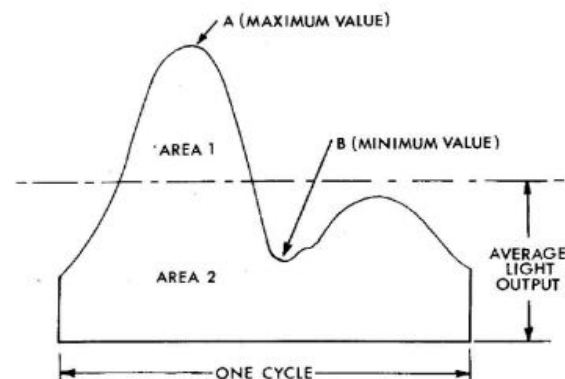
#### CL Dimming (DVCL-153PR)

Dim %	I <sub>out</sub> (mA)	I <sub>Out</sub> a.u.
100	449.2	100.00%
75	339.8	75.65%
50	229.5	51.09%
25	94.6	21.06%
10	25	5.57%
0	0.8	0.18%



#### Flicker Metrics

Two metrics proposed by IESNA lighting experts were used to measure the severity of flicker in our test setup: percent flicker and flicker index. Percent flicker is a measure of the depth of modulation of flicker and is calculated using the following formula:  
 Percent Flicker =  $100\% \times (\max - \min) / (\max + \min)$



Source: IESNA Lighting Handbook, 9<sup>th</sup> Edition (Rea 2000)



**L.T.F.**

## Dimmable LED Driver - Class 2

**18W DA18W-3001 Series 120V AC  
Constant Current & Constant Voltage**

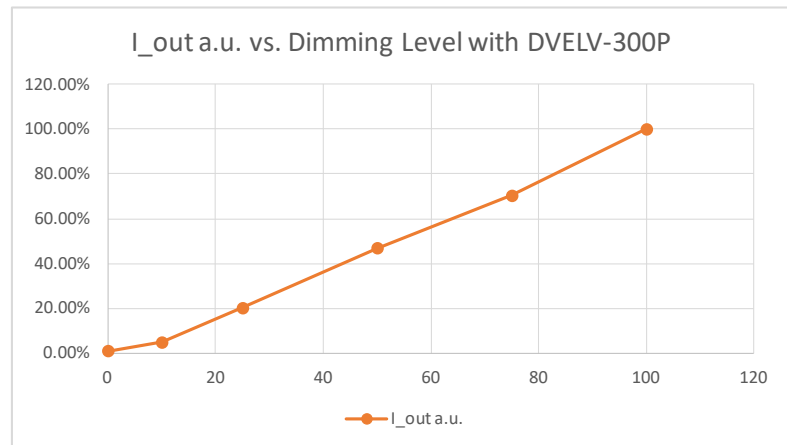
### DIMMING CHARACTERISTICS (Continued)

#### ELV Dimming (DVELV-300P)

Dim %	I <sub>in</sub> (mA)	P <sub>in</sub> (W)	PF	V <sub>out</sub> (V)	I <sub>out</sub> (mA)	IFP (min.)	IFP (max)	P <sub>out</sub> (W)	Flicker
100	188	16.56	0.733	35.05	390.6	389	394	13.69	0.64%
75	147.3	12.03	0.723	34.03	274.6	273	276	9.34	0.55%
50	91.7	8.21	0.745	33.19	183.2	183.2	183.2	6.08	0.00%
25	61.4	4.27	0.578	32	78.5	70	81	2.51	7.28%
10	30.7	1.65	0.448	30.74	17.05	13	18	0.52	16.13%
0	37.2	1.11	0.249	29.97	3.72	3.72	3.72	0.11	

#### ELV Dimming (DVELV-300P)

Dim %	I <sub>out</sub> (mA)	I <sub>Out</sub> a.u.
100	390.6	100.00%
75	274.6	70.30%
50	183.2	46.90%
25	78.5	20.10%
10	18.55	4.75%
0	3.72	0.95%





**L.T.F.**

## Dimmable LED Driver - Class 2

**18W DA18W-3001 Series 120V AC  
Constant Current & Constant Voltage**

### MODEL NUMBER KEY (UL Listed Models)

**L | DA | 18W | 12V | T11 | (D010) | RE(O)**

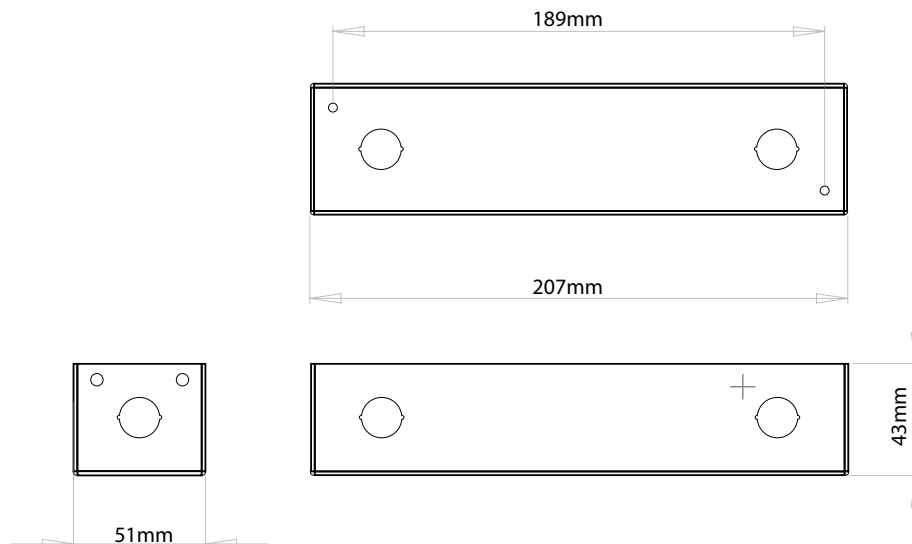
UL Listed    Input Voltage    Wattage    12V DC Constant Voltage    T11 Case Form Factor    0-10V Dimming (Optional)    Remote Enclosure  
 DA = 120V AC    DE = 277V AC    DU = 220-240V AC    DS = 120-277V AC  
 REO = Outdoor    RE = Indoor

### REMOTE ENCLOSURES - UL LISTED

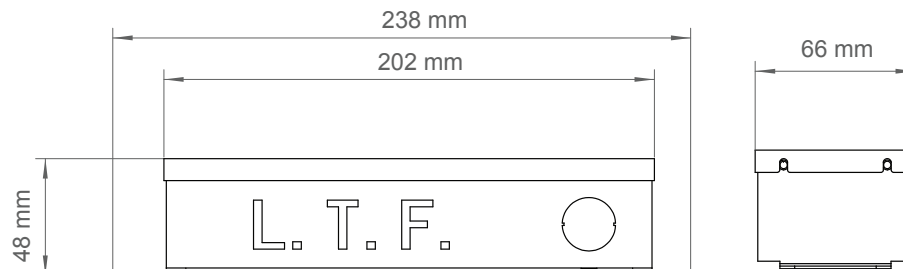
Model	Enclosure Type	Enclosure Dimensions
LDA18W-XXXX-RE-3001	G1 (Damp Rated)	207 x 51 x 43mm
LDA18W-XXXX-REO-3001	G4 (Wet Rated)	238 (202) x 66 x 48mm



### G1 INDOOR (RE) REMOTE ENCLOSURE



### G4 OUTDOOR (REO) REMOTE ENCLOSURE



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

Made in Italy 



IS 15885  
(Part 2 / Sec 13)  
R - 41049751



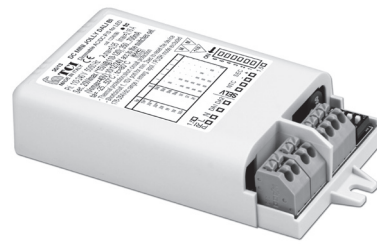
EL SELV 60V



DIM-TO-WARM



DC MINI JOLLY DALI



DC MINI JOLLY DALI BI



**Rated Voltage**  
**Tensione Nominale**  
 110 ÷ 127 V <sup>(2)</sup>  
 220 ÷ 240 V

**Frequency**  
**Frequenza**  
 50-60 Hz

**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 <sup>(2)</sup>  
 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 <sup>(2)</sup>  
 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 DALI	125403 <sup>(4)</sup> 151403 <sup>(5)</sup>	AM/PWM AM	Constant current output - Uscita in corrente costante <sup>(4)(5)</sup>				-25...+45	75	0,95 C	> 87			
DC MINI JOLLY DALI BI	125403BI <sup>(4)</sup> 151403BI <sup>(5)</sup>	AM/PWM AM	12 (12 <sup>(2)</sup> )	15...49	250 mA cost.	55							
			17 (15 <sup>(2)</sup> )	10...49	350 mA cost.								
			19 (15 <sup>(2)</sup> )	5...49	400 mA cost.								
			20 (15 <sup>(2)</sup> )	5...45	450 mA cost.								
			20 (15 <sup>(2)</sup> )	5...40	500 mA cost.								
			20 (15 <sup>(2)</sup> )	3...36	550 mA cost.								
			20 (15 <sup>(2)</sup> )	3...33	600 mA cost.								
			20 (15 <sup>(2)</sup> )	3...28	700 mA cost.								
Constant voltage output - Uscita in tensione costante <sup>(4)</sup>													
16 (15 <sup>(2)</sup> )	24 cost.	700 mA max.	-										

<sup>(1)</sup> Referred to V<sub>m</sub> = 230 V, 100% load - Riferito a V<sub>m</sub> = 230 V, carico 100%

<sup>(6)</sup> 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 contact.
- 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 ±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.

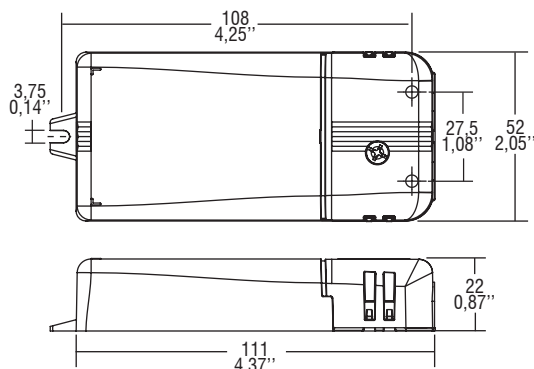


**Direct current dimmable electronic drivers with DIP-SWITCH**  
**Alimentatori elettronici regolabili in corrente continua con DIP-SWITCH**

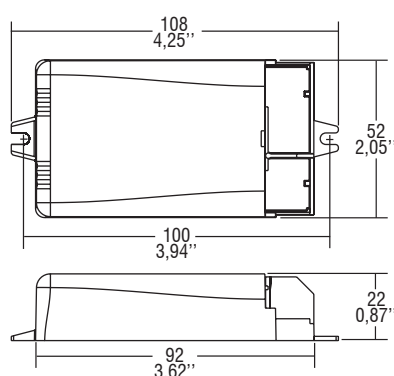
Made in Italy



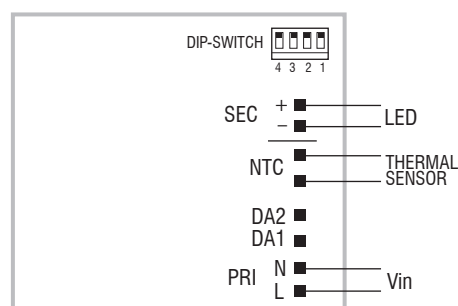
**IP 20** **SCREW FIXING** **Ø55 2,17"** Weight - Peso gr. 106 / 3,7 oz.  
Pcs - Pezzi 50



**BUILT-IN** **SCREW FIXING** Weight - Peso gr. 94 / 3,3 oz.  
Pcs - Pezzi 50



**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.
- <sup>(4)</sup> Designed to work with DALI-2 systems.
- <sup>(4)</sup> **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.
- <sup>(5)</sup> **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.
- <sup>(4)</sup> Progettato per funzionare con sistemi DALI-2.
- <sup>(4)</sup> **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.

3.1.2

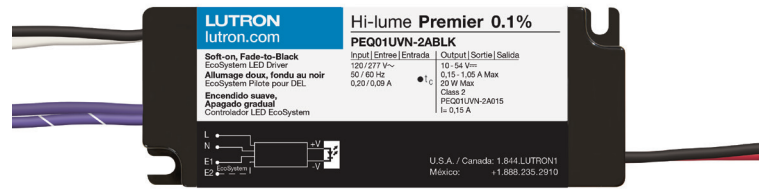
Dimmable multipower drivers - Compact case - DALI  
Alimentatori multipotenza regolabili - Formato compatto - DALI

## 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 ( $t_0$ ).
- FCC Part 15 Class A
- 100% performance tested at factory before shipping.
- RoHS compliant.
- Non-volatile memory restores all settings after power failure.
- For more information, visit [www.lutron.com](http://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<sub>DC</sub>.
- 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.

<sup>1</sup> Light output at low-end depends on the efficacy of the LED light engine used with the driver.

Job Name:

Model Numbers:

Job Number:

## 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® 8750, "Light Emitting Diode (LED) Equipment For Use in Lighting Products"
- Class 2 output

### ENERGY STAR® Luminaires V2.0 Specification

- LED drivers need to meet certain performance criteria in order for the completed luminaires to comply with the ENERGY STAR® 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~ / 277 V~ at 50/60 Hz
- Lifetime: 50,000 hours when calibration point ( $t_c$ ) at 80 °C (176 °F)<sup>2</sup>
- For rated warranty,  $t_c$  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~ / 277 V~
- Open-circuit protected output
- Short-circuit protected output

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

Job Name:

Model Numbers:

Job Number:

## Specifications (continued)

### Environmental

- Sound rated: Class A inaudible in 24 dBA ambient
- Relative Humidity: maximum 90% non-condensing
- Minimum Operating Ambient Temperature:  
 $t_a = 0\text{ }^{\circ}\text{C}$  (32  $^{\circ}\text{F}$ )<sup>3</sup>
- 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 mm<sup>2</sup>), 600 V~ and 105  $^{\circ}\text{C}$  (221  $^{\circ}\text{F}$ ) rated. Stripped to 0.5 in (12.7 mm)
- Maximum driver-to-LED light engine wire length for:

Wire Gauge	Maximum Lead Length		
	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)

<sup>1</sup> Light output at low-end depends on the efficacy of the LED light engine used with the driver.

<sup>2</sup> 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>3</sup> Where  $t_a$  is the temperature of the air directly surrounding the driver.

Job Name:	Model Numbers:
Job Number:	

## 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

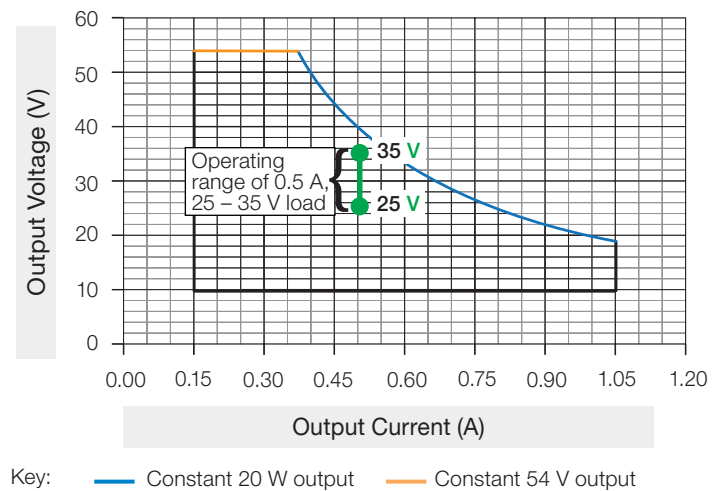
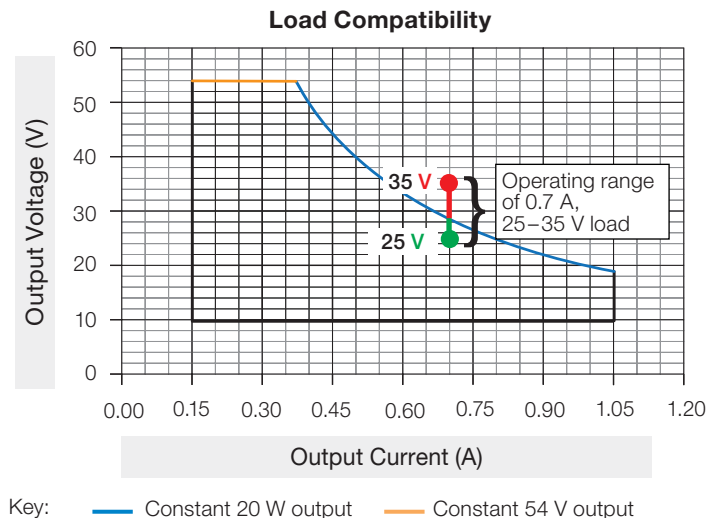
Load B (25 – 35 V) at 0.7 A

### Load B (Not Compatible) ❌

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.



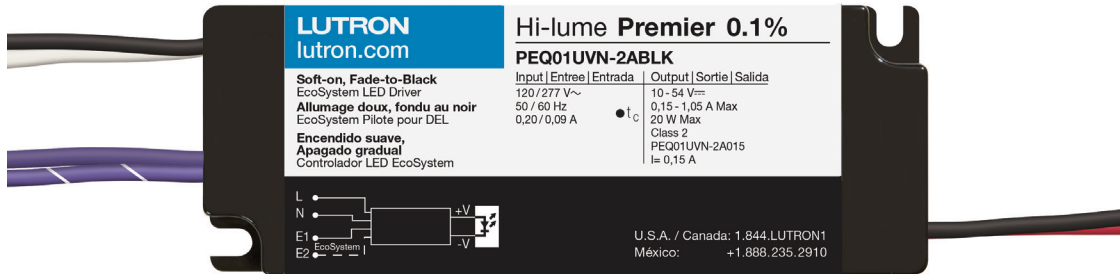
4. The [LED Driver Selection Tool](#) is a website compatibility tool that allows for a fast compatibility search of all Lutron LED Drivers that are compatible with an LED Load.
5. See **How to Build A Model Number** to create the appropriate model number for the desired driver. If a QwikFig compatible 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.

Job Name:

Model Numbers:

Job Number:

## 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

PEQ 1 UVN – A

#### Dimming Performance

- 0: select for Hi-lume Premier 0.1%
- 1: select for Hi-lume 1%

#### LED Load Output Range: Class 2 Constant Current

(see the following pages for more detail)

- 2: 20 W Max, 0.15 - 1.05 A, 10 – 54 V==\*

#### 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**.

Example: PEQ01UVN-2A040

- 0.40 A
- Hi-lume Premier 0.1%
- 4 – 20 W\*\*
- 10 – 54 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 W (0.40 A × 50 V = 20 W)


\* 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.

Job Name:

Model Numbers:

Job Number:

## “2” Output Range

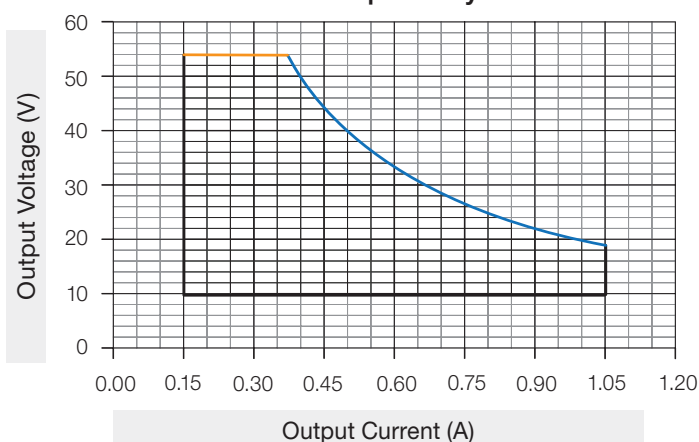
Driver Type	Output Voltage	Output Current	Output Power	Standards Recognition	Maximum Rated Temp. @ $t_c$ for Warranty
Constant Current Driver (Class 2)	10–54 V $\sim$	0.15–1.05 A*	20 W	 US LISTED CLASS P E322469	80 °C

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

### Typical Performance Specifications:

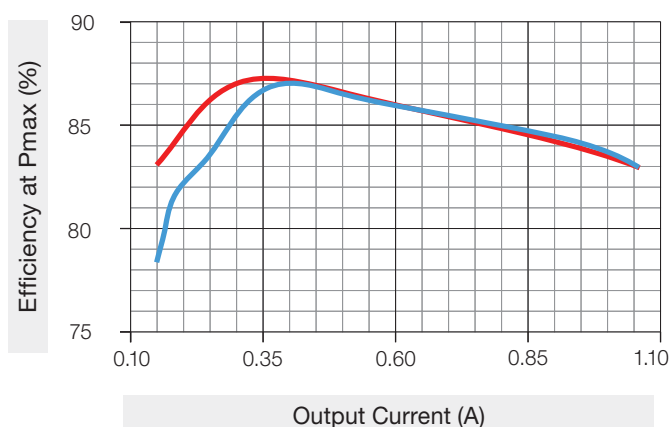
Parameter	Value	Test Conditions
Input Current	0.2 A	$V_i = 120\text{ V}\sim$ , $t_a = 25\text{ }^\circ\text{C}$ , $I_o = 0.40\text{ A}$ , $V_o = 50\text{ V}\sim$ , Maximum Light Output PEQ01UVN-2A040
Power Factor	0.95	
THD	15%	
Driver Efficiency	85%	

#### Load Compatibility



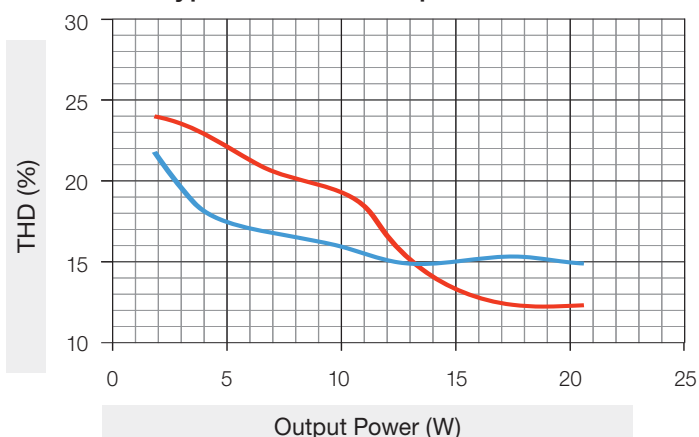
Key: — Constant 20 W output — Constant 54 V output

#### Typical Efficiency vs Output Current



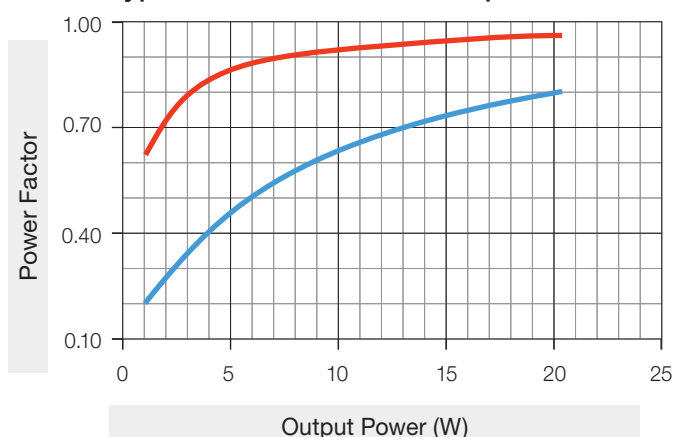
Key: — 120 V~ — 277 V~

#### Typical THD vs. Output Power



Key: — 120 V~ — 277 V~

#### Typical Power Factor vs. Output Power



Key: — 120 V~ — 277 V~

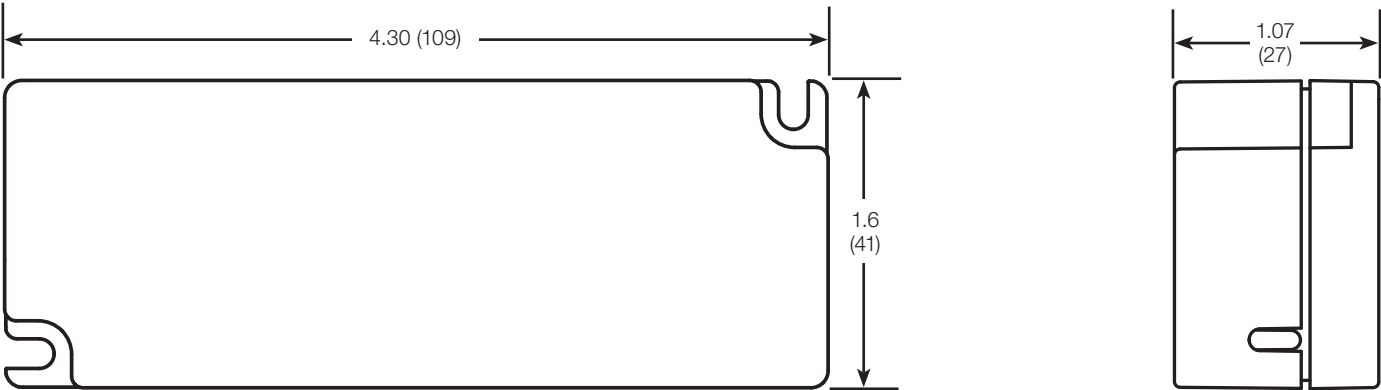
Job Name:

Model Numbers:

Job Number:

Outer Dimensions

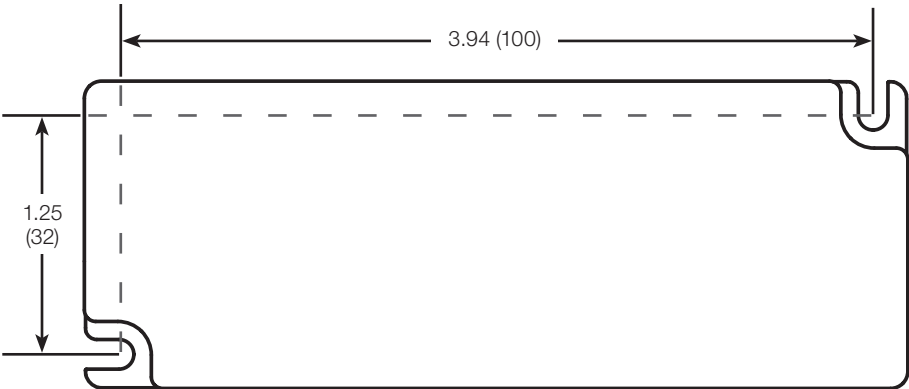
All measurements shown as: in (mm)



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).

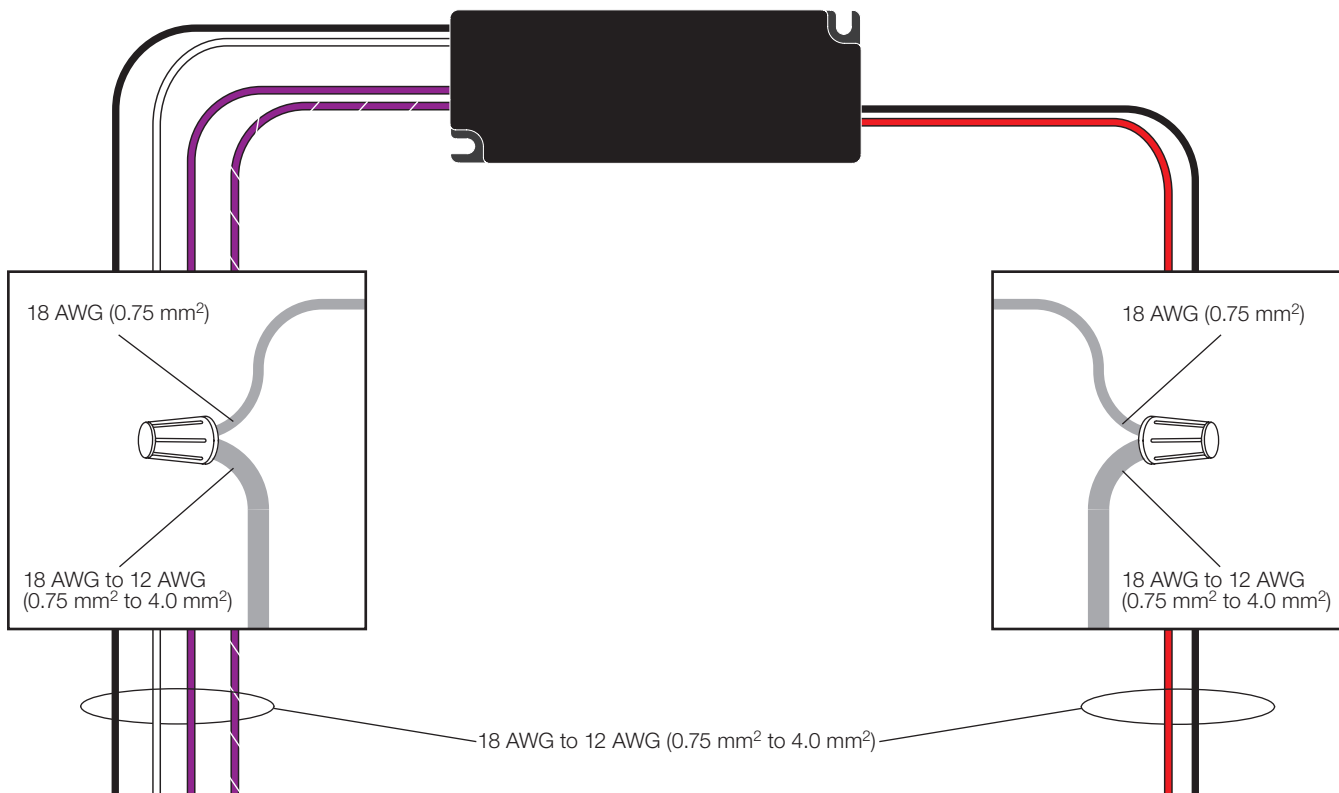


Job Name:	Model Numbers:
Job Number:	

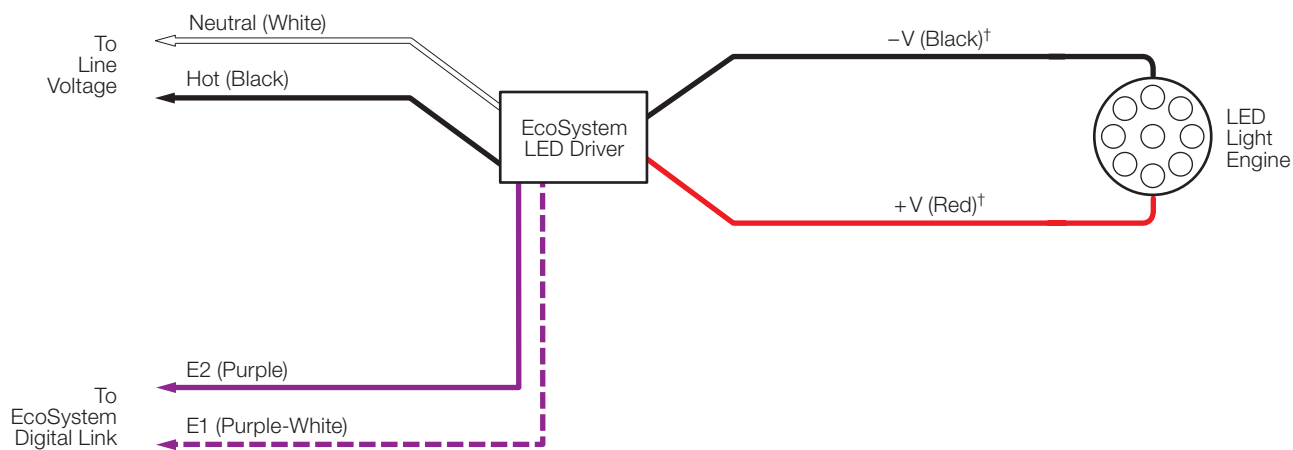


## Wiring Gauges

Wire colors shown correspond to wires on driver.



## Wiring for EcoSystem Digital Control\*



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

† For maximum driver-to-LED light engine wire length, see charts in the **Driver Wiring and Mounting** section on page 2.

Job Name:

Model Numbers:

Job Number:

## 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**

Lutron EcoSystem Compatible Controls	Part Number		Drivers per Control		
	120 V~	277 V~	EcoSystem Loops per Control	Drivers per EcoSystem Loop	Maximum Drivers per Control
PowPak Dimming Modules	RMJ-ECO32-DV-B		1	32	32
	FCJ/FCJS-ECO <sup>1</sup>		1	3	3
Energi Savr Node	QSN-1ECO-S	N/A	1	64	64
	QSN-2ECO-S		2	64	128
GRAFIK Eye QS / HomeWorks QS control unit	QSGRJ-_E (wireless) QSGR-_E	N/A	1	64	64
Quantum Hub	QP2-__ 2C	N/A	2	64	128
	QP2-__ 4C		4	64	256
	QP2-__ 6C		6	64	384
	QP2-__ 8C		8	64	512
HomeWorks QS / myRoom Plus power module	LQSE-2ECO-D	N/A	2	64	128

<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](http://www.lutron.com).

Job Name:	Model Numbers:
Job Number:	

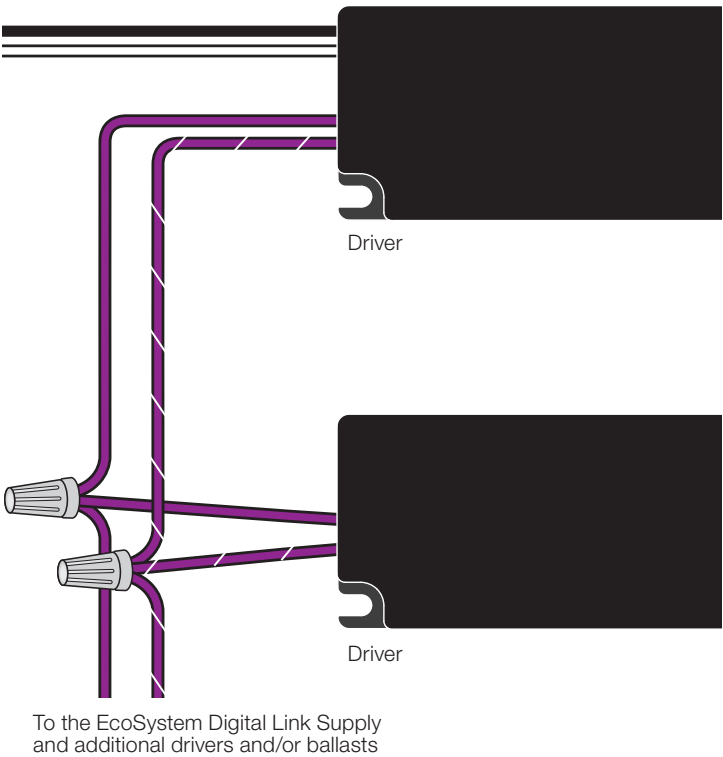
EcoSystem Wiring

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.



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

Job Name:	Model Numbers:
Job Number:	

## 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](http://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](http://www.lutron.com/hilume1softbled) or contact our LED Control Center of Excellence at 1.877.346.5338 or [LEDs@lutron.com](mailto:LEDs@lutron.com)

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## LUTRON SPECIFICATION SUBMITTAL

Page

<b>Job Name:</b>	<b>Model Numbers:</b>
<b>Job Number:</b>	