



# LDP60 SERIES

## 60WATT OUTPUT

## LED POWER SUPPLY



### Features

- \* 60W Single / Dual outputs
- \* Universal AC input range 90-305Vac
- \* Constant Current Design
- \* Active PFC > 0.9
- \* Low inrush current < 5A
- \* Low profile with 25.2mm height and narrow 40mm width
- \* Low frequency flicker design
- \* Continuous short circuit protection
- \* Over temperature protection
- \* IP 67 Rated
- \* Fully isolated plastic case
- \* Dimming function: DALI / PWM / 1~10VDC / Potentiometer



| MODEL            | Output<br>Rated<br>Voltage | Constant<br>Current<br>Region | Ripple and<br>Noise(V <sub>pp</sub><br>max) <sub>N<sub>o</sub>is<sub>e</sub></sub> | Output<br>Rated<br>Current | No Load Output<br>Voltage<br>(max.) | Output<br>Rated<br>Power | %EFF<br>( $\eta$ ) |
|------------------|----------------------------|-------------------------------|------------------------------------------------------------------------------------|----------------------------|-------------------------------------|--------------------------|--------------------|
| LDP60A240-C250BR | 24V                        | 9-24Vdc                       | 0.24V                                                                              | 2500mA                     | 29Vdc                               | 60.0W                    | 85%                |
| LDP60A240-C250B  | 24V                        | 16-24Vdc                      | 2.2V                                                                               |                            |                                     |                          | 88%                |
| LDP60A240-C210BR | 24V                        | 9-24Vdc                       | 0.24V                                                                              | 2100mA                     | 29Vdc                               | 50.4W                    | 84%                |
| LDP60A240-C210B  | 24V                        | 16-24Vdc                      | 2.2V                                                                               |                            |                                     |                          | 87%                |
| LDP60A240-C175BR | 24V                        | 9-24Vdc                       | 0.24V                                                                              | 1750mA                     | 29Vdc                               | 42.0W                    | 84%                |
| LDP60A240-C175B  | 24V                        | 16-24Vdc                      | 2.2V                                                                               |                            |                                     |                          | 86%                |
| LDP60A360-C166BR | 36V                        | 9-36Vdc                       | 0.36V                                                                              | 1666mA                     | 43Vdc                               | 60.0W                    | 85%                |
| LDP60A360-C166B  | 36V                        | 24-36Vdc                      | 2.7V                                                                               |                            |                                     |                          | 89%                |
| LDP60A360-C140BR | 36V                        | 9-36Vdc                       | 0.36V                                                                              | 1400mA                     | 43Vdc                               | 50.5W                    | 84%                |
| LDP60A360-C140B  | 36V                        | 24-36Vdc                      | 2.7V                                                                               |                            |                                     |                          | 88%                |
| LDP60A480-C125BR | 48V                        | 9-48Vdc                       | 0.48V                                                                              | 1250mA                     | 56Vdc                               | 60.0W                    | 86%                |
| LDP60A480-C125B  | 48V                        | 32-48Vdc                      | 4.8V                                                                               |                            |                                     |                          | 90%                |
| LDP60A480-C105BR | 48V                        | 9-48Vdc                       | 0.48V                                                                              | 1050mA                     | 56Vdc                               | 50.4W                    | 85%                |
| LDP60A480-C105B  | 48V                        | 32-48Vdc                      | 4.8V                                                                               |                            |                                     |                          | 89%                |
| LDP60B240-C125BR | 24V                        | 9-24Vdc                       | 0.24V                                                                              | V1 1250mA<br>V2 1250mA     | 29Vdc<br>29Vdc                      | 30.0W<br>30.0W           | 85%                |
| LDP60B240-C105BR | 24V                        | 9-24Vdc                       | 0.24V                                                                              | V1 1050mA<br>V2 1050mA     | 29Vdc<br>29Vdc                      | 25.2W<br>25.2W           | 84%                |
| LDP60B360-C083BR | 36V                        | 9-36Vdc                       | 0.36V                                                                              | V1 833mA<br>V2 833mA       | 43Vdc<br>43Vdc                      | 30W<br>30W               | 85%                |
| LDP60B360-C070BR | 36V                        | 9-36Vdc                       | 0.36V                                                                              | V1 700mA<br>V2 700mA       | 43Vdc<br>43Vdc                      | 25.2W<br>25.2W           | 84%                |
| LDP60B480-C062BR | 48V                        | 9-48Vdc                       | 0.48V                                                                              | V1 625mA<br>V2 625mA       | 56Vdc<br>56Vdc                      | 30W<br>30W               | 87%                |

Note : Ripple and Noise are measured at 20MHz bandwidth with a 0.1uF ceramic capacitor and 10uF aluminum capacitor.

All specifications are Typical at nominal line, full load and 25°C unless otherwise noted

**Order Information:**

| Series | Output(W) | O/P: Single/Dual            | Output Voltage | Dimming Function                                                      | Rated Output Current |                                           | Input Voltage   | Ripple Noise                                                                      |
|--------|-----------|-----------------------------|----------------|-----------------------------------------------------------------------|----------------------|-------------------------------------------|-----------------|-----------------------------------------------------------------------------------|
| LDP    | 60        | X                           | XXX            | X                                                                     | XXX                  |                                           | B               | X                                                                                 |
|        |           | A : Single O/P<br>with IP67 | 240 : 24V      | C : No dimming<br>D : DALI dimming<br>P : PWM 1-10V,<br>Potentiometer | 24V                  | 250: 2500mA<br>210: 2100mA<br>175: 1750mA | B : 100-277 Vac | R : 1% output<br>ripple and noise<br>or<br>Blank : 10% output<br>ripple and noise |
|        |           |                             | 360 : 36V      |                                                                       | 36V                  | 166: 1666mA<br>140: 1400mA                |                 |                                                                                   |
|        |           |                             | 480 : 48V      |                                                                       | 48V                  | 125: 1250mA<br>105: 1050mA                |                 |                                                                                   |
|        |           | B : Dual O/P<br>with IP67   | 240 : 24V      |                                                                       | 24V                  | 125: 1250mA<br>105: 1050mA                |                 |                                                                                   |
|        |           |                             | 360 : 36V      |                                                                       | 36V                  | 082: 833mA<br>070: 700mA                  |                 |                                                                                   |
|        |           |                             | 480 : 48V      |                                                                       | 48V                  | 062: 625mA                                |                 |                                                                                   |
|        |           |                             |                |                                                                       |                      |                                           |                 |                                                                                   |
|        |           |                             |                |                                                                       |                      |                                           |                 |                                                                                   |
|        |           |                             |                |                                                                       |                      |                                           |                 |                                                                                   |

**Specifications****INPUT SPECIFICATIONS:**

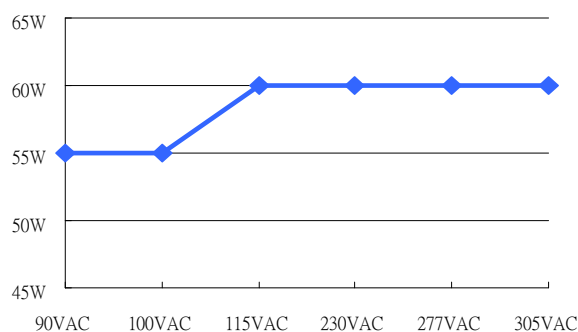
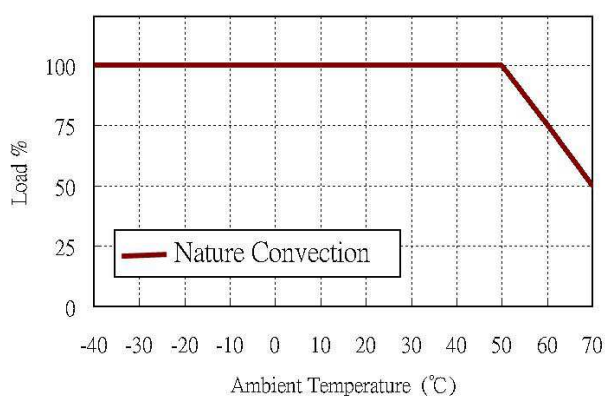
AC Input Voltage ..... 90~305Vac.  
Frequency ..... 50/60Hz.  
Power Factor.....115Vac/230Vac.....PF $\geq$ 0.9 at 75%~100%Load.  
Inrush Current ..... <5A after 100us @240Vac, Cold Start @25°C.  
Leakage Current ..... 0.75mA max.  
No load Consumption.....2W typ.(Note 1)

**OUTPUT SPECIFICATIONS:**

Maximum Output Voltage..... See Table.  
Constant Current Accuracy...(note 2)..... $\pm$ 5%max.  
Current Line Regulation .....(note 3)..... $\pm$ 5%max.  
Current Load Regulation .....(note 4)..... $\pm$ 5%max.  
Start up time..... 0.5 second max.  
Over Voltage Protection.....TVS Clamp.  
Short Circuit Protection..... Hiccup Mode, Auto Recovery  
Over Temperature Protection.....105°C typ.

**GENERAL SPECIFICATIONS:**

Efficiency.....See Table.  
Temperature coefficient..... $\pm$ 0.05%/°C (0~50°C).  
Isolation voltage, Input to output.....3.75KVac.  
Isolation resistance, Input to output.....10<sup>8</sup>Ω min.  
Operating Ambient Temperature .....-40 ~ 70°C (see derating curve).  
Cooling.....natural convection.  
Storage Temperature..... -40 ~ 85°C.  
Operating Humidity.....20%~95%RH non-condensing.  
Operating Altitude.....Sea Level to 3000m  
MTBF,MIL-HDBK-217F (25°C Ta) .....200K Hrs.  
Dimensions.....10.315x1.575x0.992inch (262.00x40.00x25.20mm).  
Weight.....530g.

**LDP60 Series Derating Curve****SAFETY AND EMISSIONS:**

Safety.....UL8750, IEC/EN61347-1  
IEC/EN61347-2-13  
EMI.....FCC part 15/EN55015 Class B  
EMS.....EN61547, EN61000-4-2,3,4,5,6,8,11  
EN61000-3-2 Harmonic Class C, EN61000-3-3

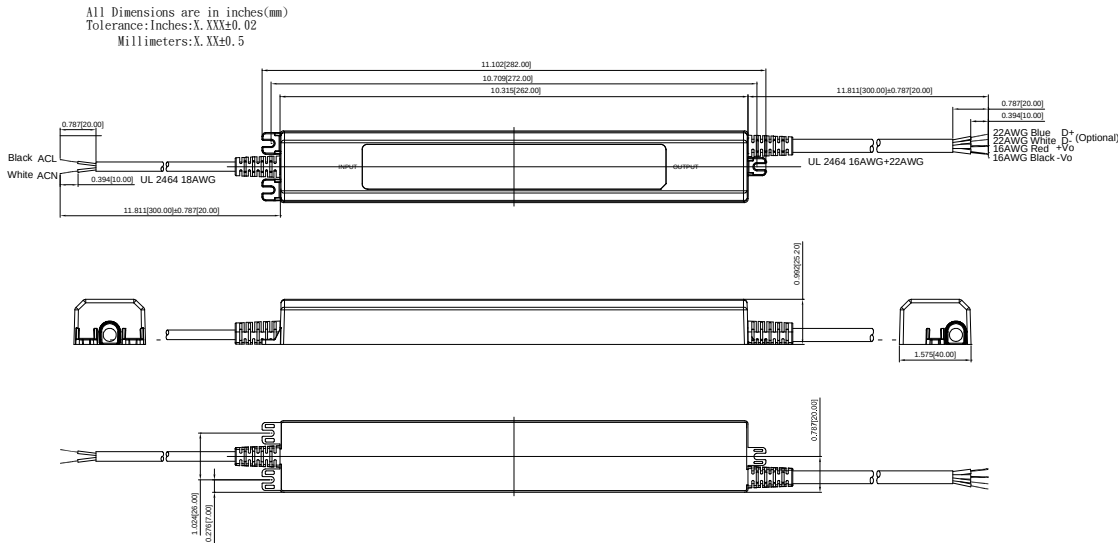
**NOTE:**

- 1.No load power consumption 1W will be introduced in Sep. 2014.
2. Current accuracy is set at nominal input voltage and full load.
3. Line regulation is measured from High Line to Low Line with full load.
4. Load regulation is measured minimum to maximum of the constant current region
5. Nominal Input Voltage at 230Vac
6. The input/output wires accessibility shall be evaluated during final system assembly.

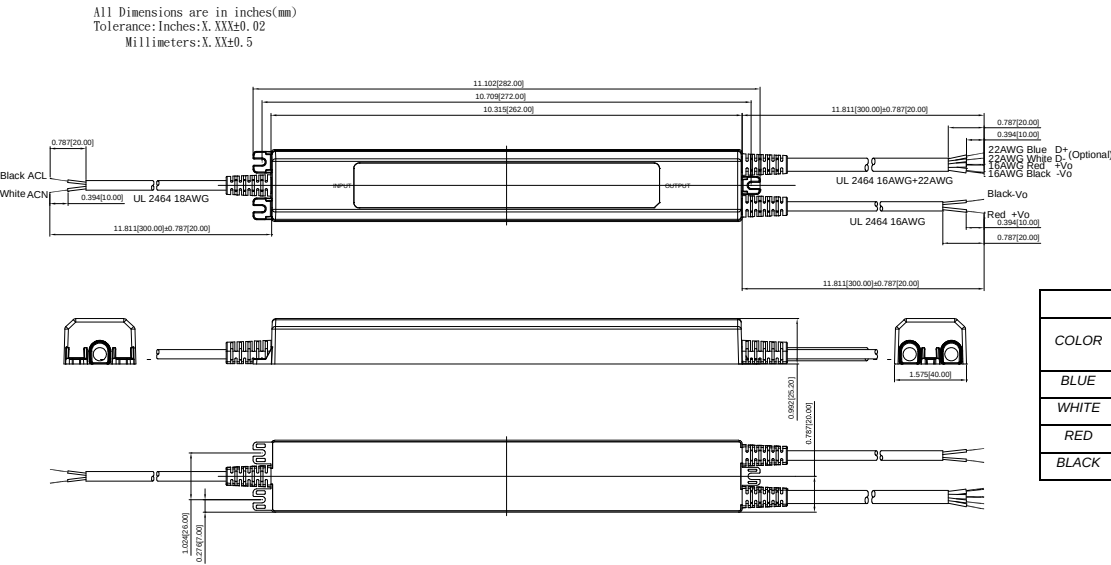
*All specifications are Typical at nominal line , full load and 25°C unless otherwise noted*

Mechanical Specification

Single output



Dual Output



| WIRE CONNECTION |            |             |              |
|-----------------|------------|-------------|--------------|
| COLOR           | NO DIMMING | PWM DIMMING | DALI DIMMING |
| BLUE            | (N.A.)     | D+          | DA           |
| WHITE           | (N.A.)     | D-          | DA           |
| RED             | +VO        | +VO         | +VO          |
| BLACK           | -VO        | -VO         | -VO          |

All specifications are Typical at nominal line , full load and 25°C unless otherwise noted



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.