



125W Constant Current LED Driver PDA125 Series for Outdoor Lighting



Features

- High Efficiency
- UL8750 Compliant
- 5 Year Warranty
- OVP, Short and Open Circuit Protection
- IP66, Potted
- 90V-304VAC Input Voltage Range
- Brownout/Brownout Recovery
- Wide Operating Temperature Range

Applications

- General Lighting
- Street Lighting
- Outdoor Lighting
- Architectural Lighting

Safety Approvals

- CE
- cUL/UL

Mechanical Characteristics

- Length: 217.2mm (8.55in)
- Width: 68mm (2.67in)
- Height: 38mm (1.49in)
- Weight: 936g (2.06lbs)

Output Specifications

Model ⁽¹⁾	DC Output Voltage			Output Current	Output Power ⁽²⁾
	Min.	Typ.	Max.		
PDA125X-700F	134V	-	178.6V	700mA	125W
PDA125X-1A0F	84V	-	119V	1050mA	125W
PDA125X-1A4F	67V	-	89.3V	1400mA	125W
PDA125X-2A0F	47V	-	61.5V	2000mA	125W
PDA125X-2A8F	34V	-	44.6V	2800mA	125W
PDA125X-3A1F	30V	-	40.3V	3100mA	125W

Note (1): X is B for non-dimming or W for 0-10V Dimming

Note (2): Output power drops to 112.5W maximum when input is 90-100VAC

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Input:

AC Input Voltage Range
90VAC to 304VAC

AC Input Frequency
47~63Hz

Maximum Input Current
≤ 2A

Leakage Current
0.5mA maximum at 230VAC Input

Inrush Current
≤ 30A

OUTPUT:
Power Factor
≥ 0.9

Ripple and Noise
<35% (p-p)

Efficiency
93% at 230~ 277VAC
91% at 120VAC

Turn-on Delay Time
<1s maximum at nominal AC Power ON

Environmental:

Temperature
Operation -40 to +60°C
Non-operation -40 to +85°C
Case Temperature <75°C
Operating Humidity 10 to 95%

Dimming Function: (W Models)

Dimming Control
0-10VDC

Dimming Output to Load
PWM at 1000Hz

Dimming Grounding
Dim(-) and Vout(-) must never be connected together to ensure proper operation and isolation requirements

EMC

EN55015/CISPR 15/FCC 47 Part 15/18 Class A

Immunity

IEC61000-4-2
IEC61000-4-3
IEC61000-4-4
IEC61000-4-5
IEC61000-4-6
IEC61000-4-8
IEC61000-4-11
IEC61000-3-2 Class C

Input Over Current Protection

The input power line will be fused with a 2A fuse

Short-Circuit Protection

The PSU will withstand a short circuit across the outputs without damage

Open Circuit Protection

Once the circuit is opened, the output voltage should be less than 120% at nominal AC input conditions

Dielectric Withstand (Hi-pot) Test

Primary to secondary: 4242VDC for 1 minute, 5.5mA

Insulation Resistance

Primary to secondary: >5M Ohm 500VDC, 1 Minute

Lifespan

50K Hours at full output power, 50°C ambient, Tcase < rating

Wire Connections

Position	Terminal Color	Specification
Line	Black	AWG18 Solid Wire
Neutral	White	AWG18 Solid Wire
Ground	Green/Yellow	AWG18 Solid Wire
Vout+	Red	AWG18 Solid Wire
Vout-	Blue	AWG18 Solid Wire
Dim+	Violet	AWG18 Solid Wire
Dim-	Grey	AWG18 Solid Wire

Warranty

5 Years

