



## 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 <sup>(1)</sup>	DC Output Voltage			Output Current	Output Power <sup>(2)</sup>
	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** $\leq 2A$ **Leakage Current**

0.5mA maximum at 230VAC Input

**Inrush Current** $\leq 30A$ **OUTPUT:****Power Factor** $\geq 0.9$ **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  $<75^{\circ}C$ 

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,  $T_{case} <$  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

