



## 80W Constant Current LED Driver PDA080 Series for Outdoor Lighting



### Features

- High Efficiency
- UL8750 Compliant
- 5 Year Warranty
- OVP, Short and Open Circuit Protection
- IP67 - waterproof, Potted
- Wide Operating Temperature Range
- Brownout/Brownout Recovery
- 120V-277V Rated Operation

### Applications

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

### Safety Approvals

- CE
- cUL/UL

### Mechanical Characteristics

- Length: 242mm (9.5in)
- Width: 43.5mm (1.7in)
- Height: 30.5mm (1.2in)
- Weight: 750g (1.65lbs)

### Output Specifications

Model <sup>(1)</sup>	DC Output Voltage			Output Current	Output Power <sup>(2)</sup>
	Min.	Typ.	Max.		
PDA080X-700G	90V	-	114V	700mA	80W
PDA080X-1A0G	50V	-	76V	1000mA	80W
PDA080X-1A6G	34V	-	48V	1670mA	80W

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

Note (2): Output power drops to 65W 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**  
 $\leq 20A$

**OUTPUT:**  
**Power Factor**  
 $\geq 0.9$  at nominal

**Ripple and Noise**  
 $<7\%$  (p-p)

**Efficiency (Target)**  
85% at 277VAC  
84% at 120VAC

**Turn-on Delay Time**  
0.5s maximum at nominal AC Power ON

**Environmental:**

**Temperature**  
Operation -40 to +60°C  
Non-operation -40 to +85°C

Operating Humidity 10 to 95%

**Case Temperature**  
80°C maximum

**Warranty**  
5 Years

**Dimming Function: (W Models)**  
**Dimming Control**  
0-10VDC

**Dimming Output to Load**  
PWM at 500Hz

**Dimming Grounding**

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

**EMC**

EN55015/CISPR 15, FCC 47 CFR 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

\*Surge Differential mode: 2.0kV, Common mode: 4.0kV

**Ring Wave Surge (ANSI C62.41.2 Cat A)**

Differential mode: 4.0kV

Common mode: 6.0kV

**Input Over Current Protection**

The input power line will be fused with a 3.15A 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, 5mA

**Insulation Resistance**

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

**Design Life**

50K hours at full power, ambient 50°C and  $T_{case} < \text{rating}$

**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

