



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 ⁽¹⁾	DC Output Voltage			Output Current	Output Power ⁽²⁾
	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** ≥ 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 ResistancePrimary to secondary: $>5M\ \Omega$ 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

