



80W Constant Voltage LED Driver PDA080 Series for Outdoor Lighting



Features

- High Efficiency
- Class 2 per UL1310
- 5 Year Warranty
- OVP, Short and Open Circuit Protection
- IP67 - waterproof, Potted
- Wide Operating Temperature Range
- Brownout/Brownout Recovery
- 120V-277V AC Operation

Applications

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

Safety Approvals

- CE
- cUL/UL

Mechanical Characteristics

- Length: 241mm (9.5in)
- Width: 43mm (1.7in)
- Height: 30.5mm (1.2in)
- Weight: 750g (1.65lbs)

Output Specifications

Model ⁽¹⁾	Output Voltage	Output Current			Output Power ⁽²⁾
		Min.	Typ.	Max.	
PDA080X-48VG	48V	0A	1.67A	1.70A	80W

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

Note (2): Output power derated to 72W when input voltage is <100VAC

Input:

AC Input Voltage Rating
90VAC to 304VAC

AC Input Frequency
47~63Hz

Maximum Input Current
≤ 2A

Leakage Current
0.5mA maximum at 230VAC Input

Inrush Current
≤ 20A

OUTPUT:

Power Factor
≥ 0.9 at nominal

Ripple and Noise
<7% (p-p)

Efficiency (Target)
87% at 277VAC
85% 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 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

