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100W Constant Current LED Driver PDA100W LED Power Supply with 0-10V Dimming





Features

- OVP, OTP Short and Open Circuit **Protections**
- **Brownout Protection**
- High Efficiency

- IP66 Rated
- 108-304VAC Input Range
- Wide Operating Temperature Range
- ≥ 0.9 Power Factor Correction & THD 20%

Applications

- General Lighting
- Street Lighting

- **Outdoor Lighting**
- Architectural Lighting

Safety Approvals

• cUL/UL 8750

Mechanical Characteristics

• Length: 241mm (9.49in) • Width: 59mm (2.32in)

• Height: 39mm (1.54in)

Weight: 1050g (37.04oz)

Output Specifications

Model	DC Output Voltage			Output	Output
	Min.	Тур.	Max.	Current	Power
PDA100W-700GB	93V	136V	143V	700mA	100W
PDA100W-1A0GB	65V	95V	100V	1050mA	100W
PDA100W-1A4GB	46V	58V	72V	1400mA	100W
PDA100W-1A8GB	34V	45V	57V	1750mA	100W
PDA100W-2A1GB	30V	36V	48V	2100mA	100W

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PDA100W Characteristics

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Input:

AC Input Voltage Range

108VAC to 304VAC

Nominal AC Input Voltage

120 to 277VAC

AC Input Frequency

47~63Hz

Maximum Input Current

< 1.26A

Leakage Current

0.75mA maximum at 120VAC Input

Inrush Current

< 80A

OUTPUT:

Power Factor

 ≥ 0.9

Output Current Ripple

<105mA (p-p)

Efficiency

Model	Typical Efficiency
PDA100W-700GB	91%
PDA100W-1A0GB	91%
PDA100W-1A4GB	89%
PDA100W-1A8GB	89%
PDA100W-2A1GB	89%

Turn-on Delay Time

< 0.5s maximum at nominal AC Power ON

Environmental:

Temperature

Operation Tc -40 to 83°C Non-operation -40 to +90°C Operating Humidity 5 to 98%

Dimming Grounding

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

EMC

FCC Part 15 Class A

Immunity

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

Input Over Current Protection

The input power line will be fused with a 3.15A fuse

Short-Circuit Protection

The Driver will withstand a short circuit across the outputs without damage.

Over Temperature Protection

The load will drop by 50% automatically if the case temperature exceeds the recommended limit.

Over Voltage Protection

During no load condition, the over voltage protection trigger level should be less than 195Vrms.

Dielectric Withstand (Hi-pot) Test

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

Insulation Resistance

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

Wire Connections

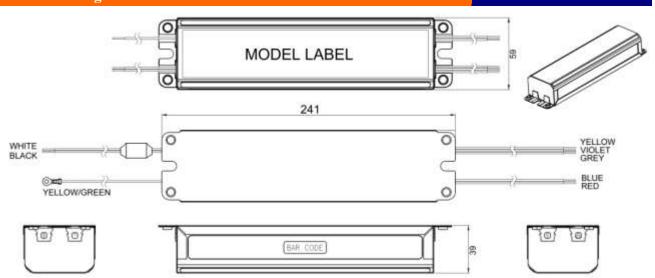
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Position	Terminal Color	Specification	Length			
Line	Black	AWG18 Solid Wire	390mm			
Neutral	White	AWG18 Solid Wire	390mm			
Ground	Green/Yellow	AWG18 Solid Wire	390mm			
Vout+	Red	AWG18 Solid Wire	390mm			
Vout-	Blue	AWG18 Solid Wire	390mm			
20V	Yellow	AWG22 Solid Wire	390mm			
Dim+	Violet	AWG22 Solid Wire	390mm			
Dim-	Grey	AWG22 Solid Wire	390mm			

Warranty

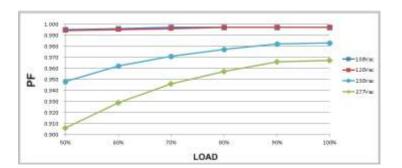
5 Years

Dimension Diagram Unit:mm

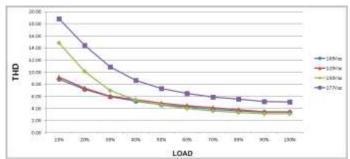
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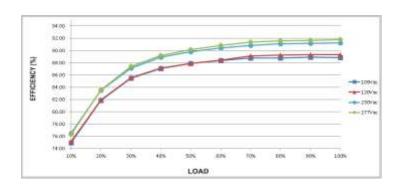
Power Factor vs. Load



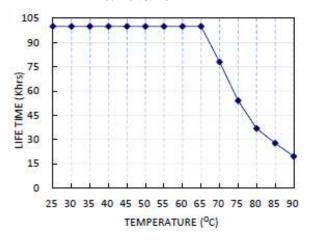
Total Harmonic Distortion vs. Load



Efficiency vs. Load for PDA100W-700GB



Lifetime vs. Tc



Dimming Curve

