



## LED Engine Smart 100W 48V Outdoor



The LED Engine 100W 48V Outdoor is a universal AC input Power Supply Unit (PSU) with open-wire cable, ready for any terminal block connections. The unit is a slim, fanless Class 2 (UL1310) power supply that ensures high reliability in any LED lighting application and suitable for outdoor use.



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#### ORDERING

Model No.	Description	Item Code
PS.CU.0000008	LED Engine 100W Outdoor 48V	AA766150055

## OUTPUT SPECIFICATIONS

• DC Voltage: 48V

• Rated Current: 2A

• Rated Power: 96W

• Ripple & Noise (max.): 200mVp-p

• Voltage Tolerance: ±2.0%

• Line Regulation: ±1.0%

• Load Regulation: ±2.0%

• Setup, Rise Time (max.): 500ms, 80ms/230VAC

1200ms, 80ms/115VAC at full load

• Hold Up Time (typ.): 60ms/230VAC

30ms/115VAC at full load

### INPUT SPECIFICATIONS

• Mains Interface: Universal AC input

• Voltage Range: 90 ~ 295VAC

• Frequency Range: 47 ~ 63Hz

PF > 0.95/230VAC • Power Factor (typ.):

PF > 0.95/115VAC at full load

• Efficiency (typ.): 88%

• AC Current (typ.): 0.55A/230VAC

1.1A/115VAC

• Inrush Current (typ.): COLD START 40A / 230VAC

• Leakage Current (typ.): <0.75mA / 240VAC

## **PROTECTION**

- Over Current: 95 ~ 102% (Constant current limiting, recovers automatically after fault condition is removed)
- Over Voltage: 52 ~ 64V (Shut down and latch off output voltage, re-power on to recover)
- Over Temperature: Shut down output voltage, re-power on to recover

### **ENVIRONMENT**

- Working Temperature: -30°C  $\sim$  +70°C / -22°F  $\sim$  158°F
- Working Humidity: 20 ~ 95% RH non-condensing
- Storage Temperature; Humidity:  $-40^{\circ}$ C  $\sim +80^{\circ}$ C /  $-40^{\circ}$ F  $\sim +176^{\circ}$ F;  $10 \sim 95\%$  RH
- Vibration: 10 ~ 500Hz, 5G 12min./cycle, period for 72min. each along X, Y, Z, axes





# LED Engine Smart 100W 48V Outdoor

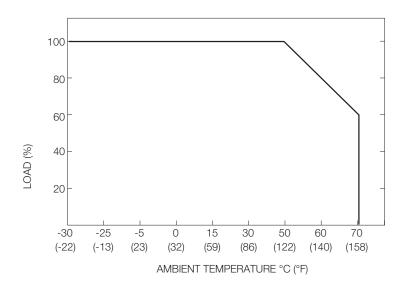
### SAFETY & EMC

Safety Standards:	rds: UL879, UL8750, UL1310, TUV EN61347-1, EN61347-2-13 independent, TUV EN60950-1, IP6 J61347-1, J61347-2-13 approved	
• EMI Emission:	Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (≥75% load), EN61000-3-3	
• EMS Immunity:	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge 4KV), criteria A	

### OTHERS

- MTBF: 301khrs min. MIL-HDBK-217F (25°C / 77°F)
- Dimension: 222.2mm x 68mm x 38.8mm / 8.75" x 2.68" x 1.53"
- Cables: 300mm/13.79" 18AWGx3C AC input cable; 300mm/12.20" 18AWGx2C DC output cable
- Packing: 1.0kg / 2.2lbs

### DERATING CURVE



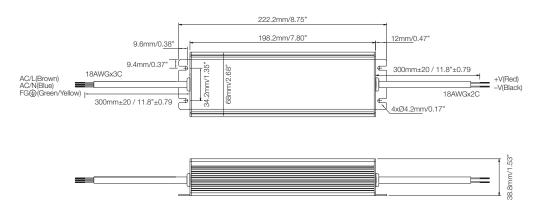




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**Dimensions** 

## TECHNICAL DRAWING



Not to scale