



LED Engine 100W 48V Outdoor



PS.CU.0000007

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 II (UL1310) power supply that ensures high reliability in any LED lighting application and suitable for outdoor use.









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.): 1200ms, 80ms/230VAC

1200ms, 80ms/115VAC at full load 60ms/230VAC

• Hold Up Time (typ.):

30ms/115VAC at full load

INPUT SPECIFICATIONS

- Mains Interface: Universal AC input
- Voltage Range: 90 ~ 264VAC
- Frequency Range: 47 ~ 63Hz

PF > 0.95/230VAC PF > 0.95/115VAC at full load • Power Factor (typ.):

• Efficiency (typ.): 87%

• AC Current: 0.55A/230VAC 1.1A/115VAC

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

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

PROTECTION

- Over Current (typ.): 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: 90°C ± 10°C / 194°F ± 50°F (RTH2) (Shut down output voltage, re-power on to recover)

ENVIRONMENT

- Working Temperature: -30°C ~ +40°C / -22°F ~ 104°F
- Working Humidity: 20 ~ 95% RH non-condensing
- Storage Temperature; Humidity: -40°C ~ +80°C / -40°F ~ 176°F; 10 ~ 95% RH
- Vibration: 10 ~ 500Hz, 5G 12min./cycle, period for 72min. each along X, Y, Z, axes





LED Engine 100W 48V Outdoor

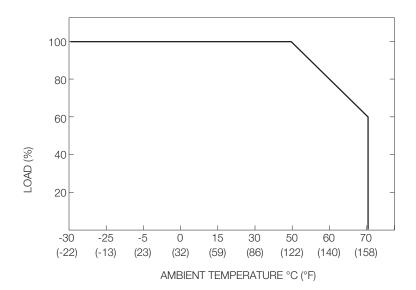
SAFETY & EMC

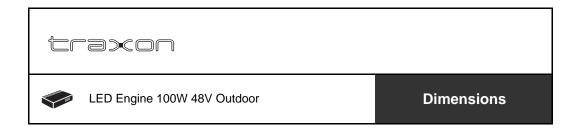
- Safety Standards: UL1310 Class 2, TUV EN60950-1
- EMI Conduction & Radiation: Compliance to EN55022 (CISPR22) Class B
- Harmonic Current: Compliance to EN61000-3-2,3
- EMS Immunity: Compliance to EN61000-4-2,3,4,5,6,8,11; EN55024, light industry level, criteria A

OTHERS

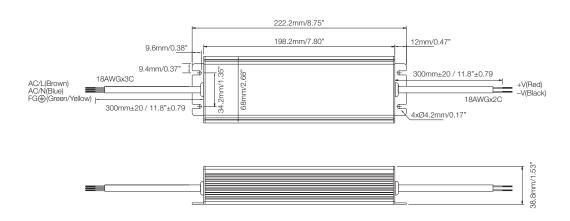
- MTBF: 301khrs min. MIL-HDBK-217F (25°C / 77°F)
- Dimensions: 222.2mm x 68mm x 38.8mm / 8.75" x 2.68" x 1.53"
- Cables: 350mm/13.79" 18AWGx3C AC input cable; 310mm/12.20" 18AWGx2C DC output cable
- Packing: 1.0kg / 2.2lbs

DERATING CURVE





TECHNICAL DRAWING



Not to scale