

REV: 07242014

PRODUCT FEATURES:

- 48V, 6A DC Output (288W) Rectifier Module
- IP65 Enclosure for Outdoor Applications
- Easy Installation w/Quick-Mount Brackets
- High Efficiency (>91% at 50%~100% Load)
- Free-Air Convection Cooling up to +50°C
- Designed for High Reliability
- Complies with FCC Part 15 (Class B Emissions)
- International Safety Approvals (pending)



INPUT SPECIFICATIONS:

VOLTAGE	85VAC ~ 132VAC
FREQUENCY	45Hz ~ 63 Hz
INRUSH	≤ 25A @ 120VAC Full Load
CURRENT	≤ 5A @ 230VAC (Max Continuous)
LEAKAGE	< 3.5mA @ 132VAC
EFFICIENCY	>91% typical @ ≥ 50% Load (pending verif.)
HOLD-UP	20ms minimum @ 120VAC
HARMONICS	EN61000-3-2 Class D (>0.99PF; > 50% loading)

OUTPUT SPECIFICATIONS:

OUTPUT VOLTAGE	48Vdc (typical)
OUTPUT CURRENT	6A (max, continuous)
LINE REGULATION	±1.0%, across full input range
LOAD REGULATION	±3.0%, across full load range
RIPPLE	≤100mV p-p; ≤ 10mVrms (20MHz BW)
OUTPUT ADJUSTMENT	tbd
EXCURSION	tbd
RECOVERY	tbd
OVER-CURRENT	110% ~ 160% (8.5A ~ 9.6A);Auto-Recovery
PROTECTION	OVP Shutdown: 110%~140% (Auto-Restart) Over-Temp Shutdown: 80°C ± 10°C (Auto-Restart @ 50°C)-see Thermal Guard drawing

GENERAL SPECIFICATIONS:

OPERATING TEMPERATURE	-30°C to +50°C (Full Power)
OPERATING HUMIDITY	5% ~ 95% (non-condensing)
STORAGE	-40°C to +85°C; 5% ~ 95% RH (non-condensing)
COOLING	Free-Air Convection (no fans; fully enclosed, IP65)
ALTITUDE	3962 m (13,000ft), max
VIBRATION	10-55Hz, 2G, 3Min Period, 60 min each (3 axes)
SHOCK	20G Peak Acceleration
RELIABILITY	368K Hours @ 50°C (per MIL STD 217F)
SIZE (WxDxH)	174mm x 76mm x 429.5mm
WEIGHT	4.7kg (10.3 lbs)

EMISSIONS:

EMISSIONS	FCC Part 15 Class B (Conducted)
ELECTROSTATIC DISCHARGE	EN61000-4-2, 4KV Contact/ 8KV Air
RADIATED SUSCEPTIBILITY	EN61000-4-3, 26MHz-2000MHZ, 10V/m, 80%AM
EFT/BURSTS	EN61000-4-4, 2KV
SURGES	EN61000-4-5, 2KV Earth, 1KV Line-Line
CONDUCTED IMMUNITY	EN61000-4-6, 150KHz-80MHz, 10Vrms, 80%AM
VOLTAGE DIPS	EN61000-4-10, 95% Dip, 10ms / 30% Dip, 500ms
VOLTAGE INTERRUPTIONS	EN61000-4-11, 95% reduction, 5ms
FLUCTUATIONS & FLICKER	EN61000-3-3

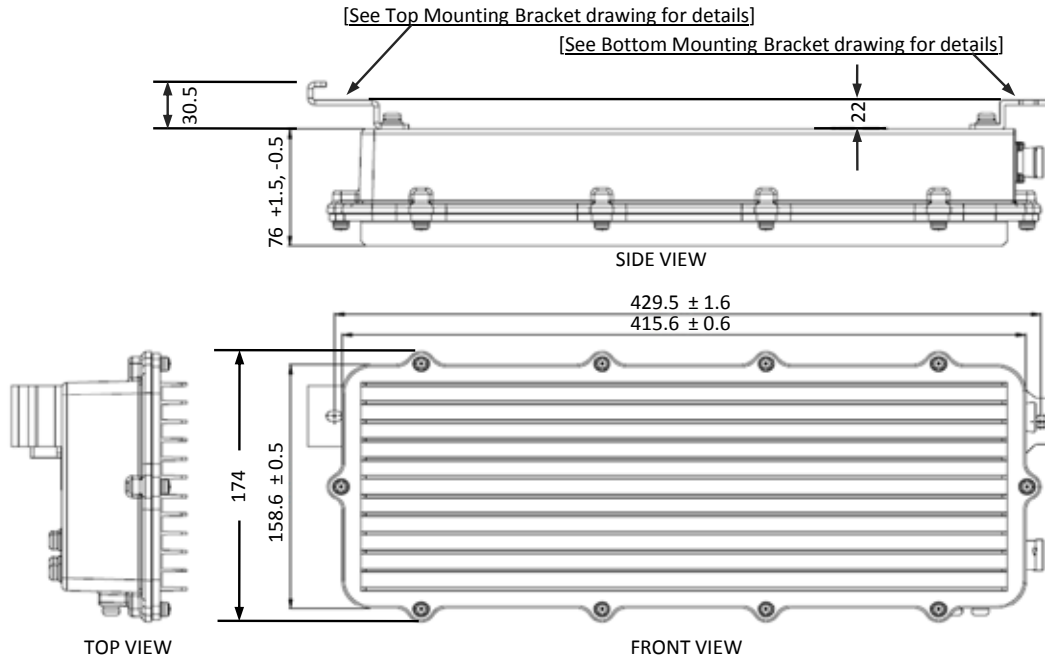
SAFETY STANDARDS: (Approvals Pending)

UL/cUL	Designed to Meet IEC/UL 60950-1 (pending)
CE MARK	Designed to Meet Low Voltage Directive (pending)



MECHANICAL OUTLINE DRAWING:

(Units in mm)



Connectors



BOTTOM VIEW of Module

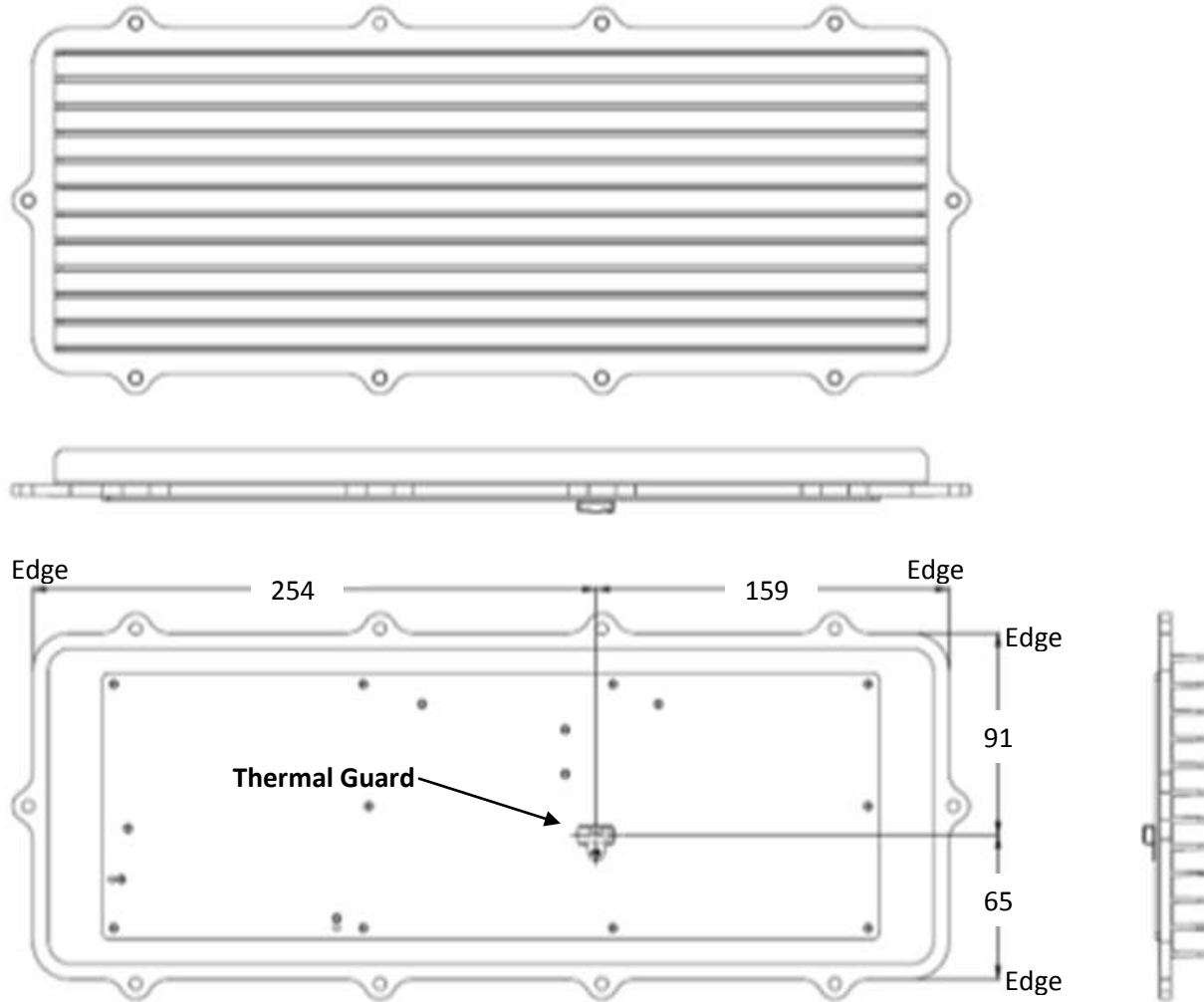
AC Input Connector			
Port name	Manufacturer / Part#	Pin Assignment	
PWR	DDK / WEBR1303MS-D	Pin 1	L1(L)
		Pin 2	L2(N)

DC Input Connector			
Port name	Manufacturer / Part#	Pin Assignment	
DC-48V	Souriau / UTG012E4P97	Pin 1	(+), non ground
		Pin 3	(-), non ground



THERMAL GUARD LOCATION (for Over-Temperature Protection)

(Units in mm)



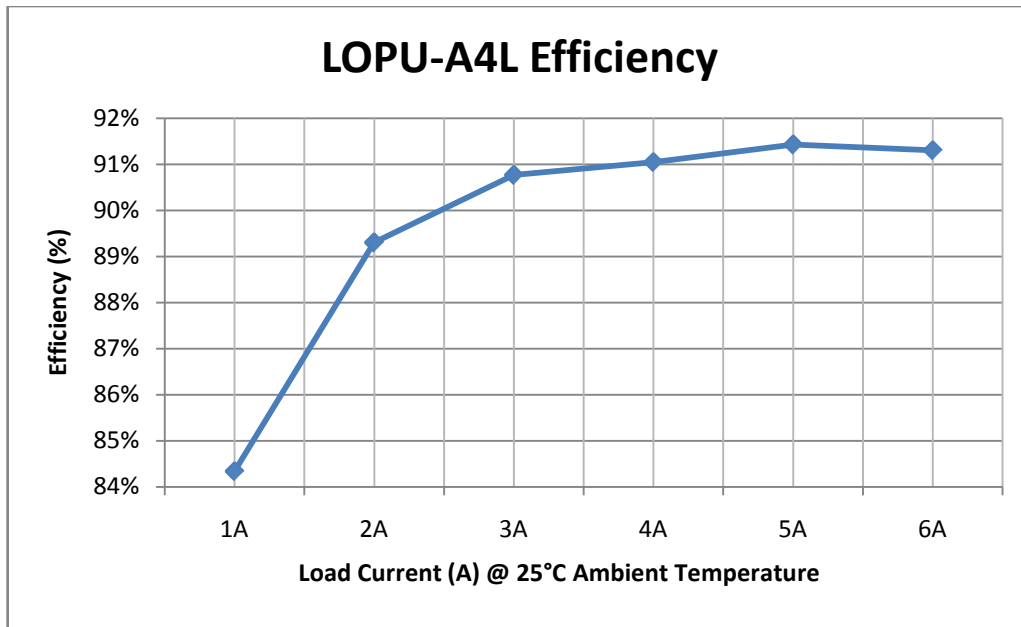


Figure 1. Efficiency measured at 120V AC input and 25°C ambient.

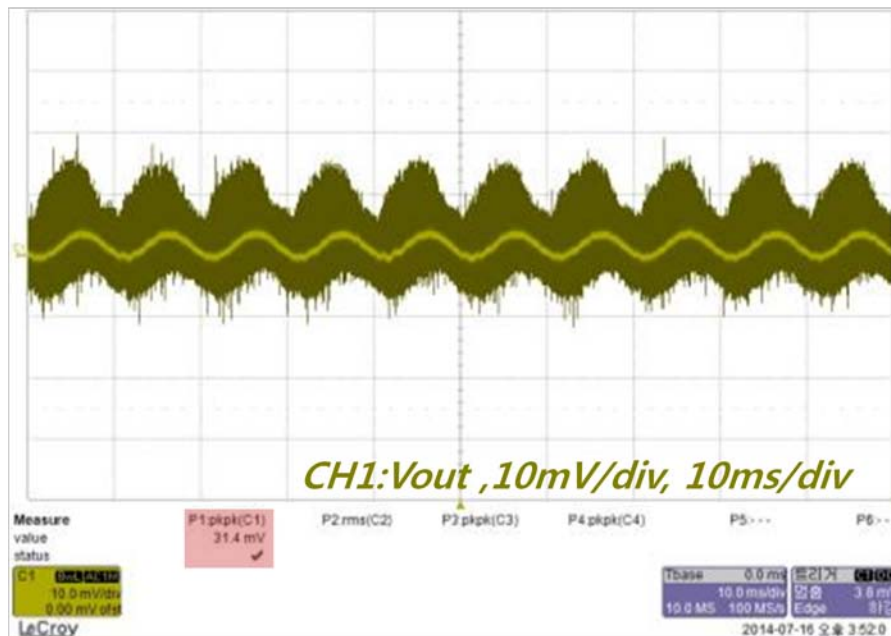


Figure 2. Ripple and Noise measured at 120V AC input, Full Load (6A), and 25°C ambient.