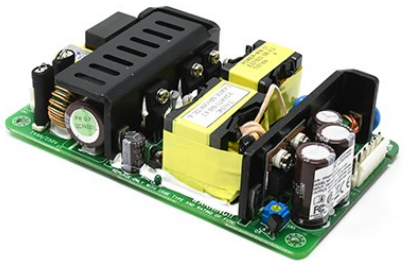
PPWAM180 Power Supply Series (180W)

Features:

- IEC 60601-1-2 4th Edition Compliant
- BF Rated Output
- >87% Efficient
- Active Power Factor Correction
- <100uA @ 264VAC Earth Leakage Current
- Short Circuit and Overload Protection
- Overvoltage Protection
- RoHS Compliant



Description:

The PPWAM180 series of compact, open-framed AC-DC switching power supplies offers a high power density to fit in a small space. This dense 5" x 3" platform offers up to 180W of continuous power across a wide range of operating temperatures, all while maintaining a low emissions profile. All models meet FCC, EN55011, and CISPR11 class B emission limits, and comply with CE, IEC, and more.

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 10CFM Forced Air	Output Power	Output Regulation	Ripple & Noise (Vp-p)
PPWAM180-12	12V	0A	10A	15A	180W	±3%	240mV
PPWAM180-12	15V	0A	8A	12A	180W	±3%	240mV
PPWAM180-12	19V	0A	6.32A	9.48A	180W	±3%	240mV
PPWAM180-12	24V	0A	5A	7.5A	180W	±3%	240mV
PPWAM180-12	28V	0A	4.29A	6.43A	180W	±3%	240mV
PPWAM180-12	48V	0A	2.5A	3.75A	180W	±3%	240mV

NOTES:
1. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
2. Peak-to-peak with 20MHz bandwidth with an electrolytic 47uF in parallel with a 0.1uF ceramic capacitor.

Specifications	
Input	
Input Voltage	90-264VAC
Input Frequency	47-63Hz
Input Current	3A max (RMS) @ 115VAC
Inrush Current	<50A peak @ 115VAC <100A peak @ 230VAC, cold start, 25ºC
Power Factor	>0.9 (Full Load)
Output	
Total Output Power	180W (with 15 CFM airflow)
Output Voltage	See table
Hold Up Time	>20mS at full load and 115VAC nominal line
Efficiency	87% typical, full load, 115VAC
Minimum Load	No Minimum Load
Protection Features	
Overvoltage Protection	Latching Type, AC Recycle
Overload Protection	110%-150% of maximum output current. Auto recovery
Short Circuit Protection	Auto Recovery
Environmental	
Operating Temperature	0°C to +60°C , with linear derating from 41°C to 60% power at 60°C
Storage Temperature	-40°C to +85°C
Humidity	5% - 95% RH
General Specifications	
Dimensions	5” x 3” x 1.18”
Weight	0.77 lbs.
MTBF	>150K hours per MIL-HDBK-217F at full load and 25°C ambient

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Specifications Continued	
Safety	
Approvals USA/Canada	ANSI/AAMI ES60601-1 cUL ES60601-1
Approvals Europe	TUV EN60601-1 3rd edition CB Report
Isolation	4000VAC input to output, 2 x MOPP 1500 VAC input to ground, 1 x MOPP 1500 VAC output to ground,1 x MOPP
*Consult with TT Electronics for information on additional country safety approvals	
EMC	
EMC (IEC 60601-1-2:2014):	FCC Class B Radiated & Conducted CISPR11 Class B Radiated & Conducted EN55011 Class B Radiated & Conducted
Harmonic Currents Voltage Flicker Electrostatic Discharge Radiated Immunity EFT/Burst Surge Immunity Conducted Immunity Magnetic Field Dips/Interruptions	IEC 61000-3-2 IEC 61000-3-3 IEC 61000-4-2: ±15kV Air, ±8kV contact IEC 61000-4-3: 10V/m IEC 61000-4-4: ±2kV IEC 61000-4-5: 1kV diff, 2kV com IEC 61000-4-6: 10Vrms IEC 61000-4-8: 30A/m IEC 61000-4-11: Voltage dip immunity, 30% reduction for 500ms, 100% reduction for 10ms

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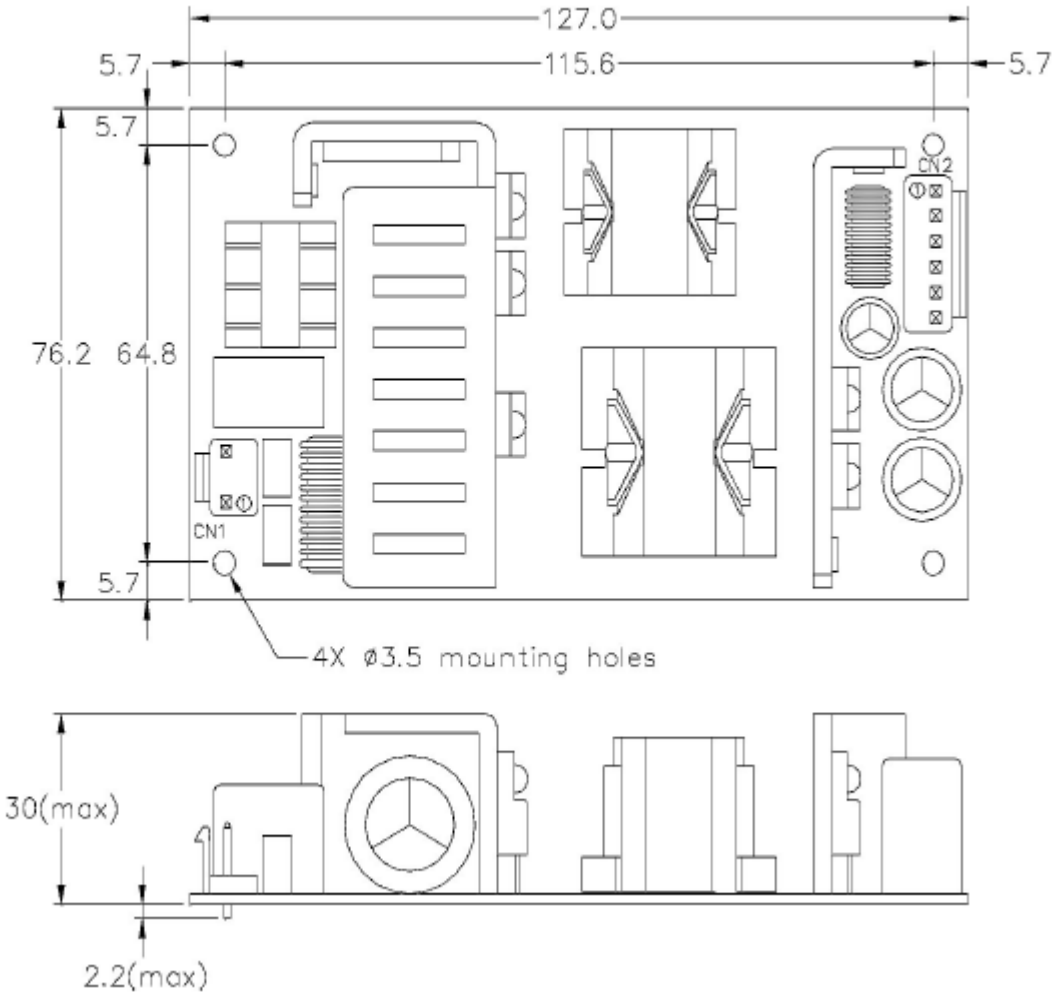
Mechanical Outline / Output Cable and Pin Assignment



CN1: Input Connector

JST B3P-VH-B pitch: 3.96mm or equivalent, mates with JST VHR-3N or equivalent

Pin #	Signal
1	AC Neutral
2	AC Line

CN2: Output Connector

JST B6P-VH-B pitch: 3.96mm or equivalent, mates with JST VHR-6N or equivalent

Pin #	Signal
1	GND
2	GND
3	GND
4	+Vo
5	+Vo
6	+Vo