

# PSAW48I Power Supply Series (48W)

## Features:

- Interchangeable Plugs for Worldwide Use
- Class II Configuration
- Efficiency Level VI
- <100mW No Load Power Consumption
- Short Circuit Protection
- Overload Protection
- Meets DOE level VI requirements



## Description:

The PSAW48I series of AC/DC wall mount switching power supplies provide 25-48 watts of continuous power. They are Class II devices with interchangeable AC plugs that provide ease of use in several regions throughout the world. All models meet FCC, CISPR32, and EN55032 class B emission limits, and comply with UL, DOE level VI, CE, and more.

Model Number	Voltage	Current	Total Power	Output Regulation	Ripple & Noise (P-P)	Efficiency Level
PSAW48I-10-B2	5VDC	5A	25W	±5%	200mV	VI
PSAW48I-11-B2	9VDC	5A	40W	±5%	200mV	VI
PSAW48I-12-B2	12VDC	4A	48W	±5%	200mV	VI
PSAW48I-13-B2	15VDC	3.2A	48W	±5%	200mV	VI
PSAW48I-14-B2	24VDC	2A	48W	±5%	200mV	VI

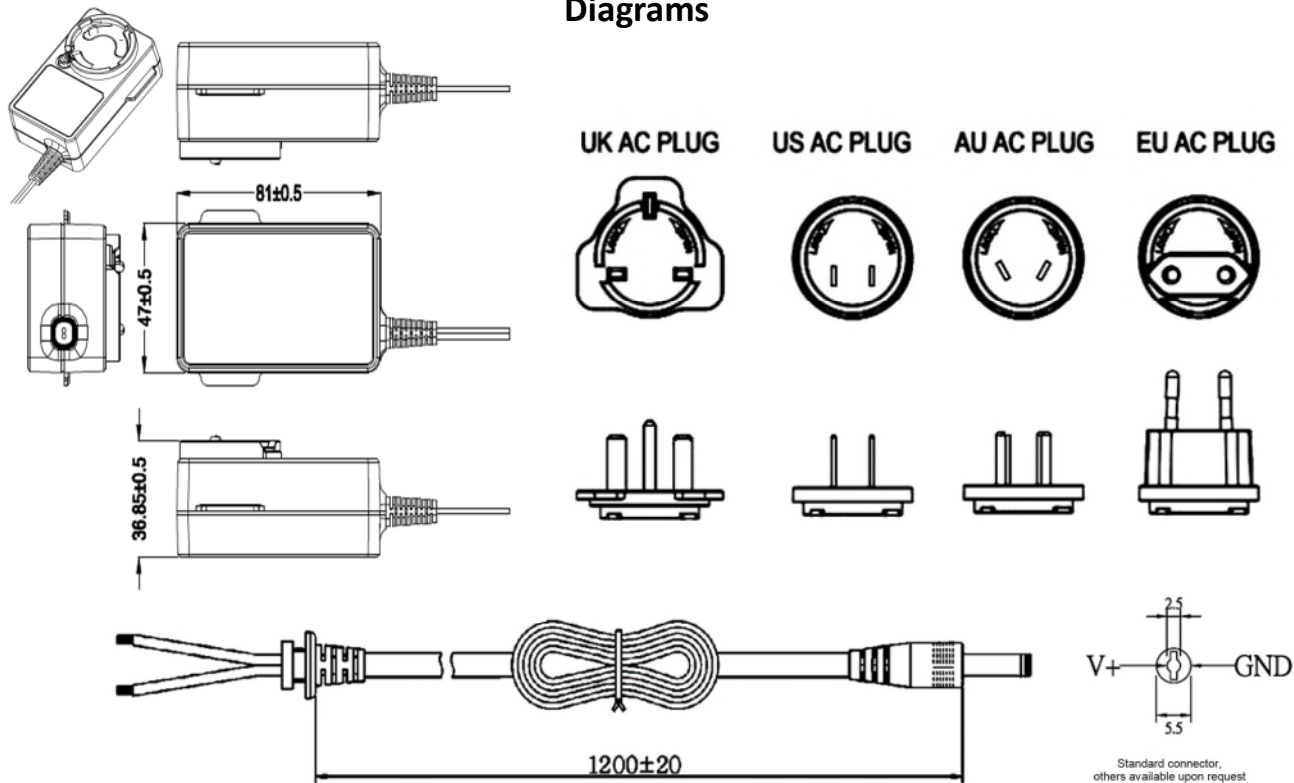
### Notes:

1. Ripple and noise is measured at output within 20MHz bandwidth, at rated line voltage and full load, with a 10  $\mu$ F tantalum capacitor in parallel with a 0.1  $\mu$ F ceramic capacitor across the output.
2. Shipped with USA AC Blade; others are optional.
3. The suffix "B2" in the model number indicates a 5.5x2.5 (mm) barrel jack output connector. For a 5.5x2.1 (mm) barrel jack output connector, use the suffix "B1." For example, the PSAW48I-12 model with a 5.5x2.1 (mm) connector would be formatted as PSAW48I-12-B1.

Specifications	
Input	
Input Voltage	90-264VAC
Input Frequency	47-63Hz
Input Current	1.2A Max.
Inrush Current	<40A peak @ 264VAC, cold start at 25°C
No Load Power Consumption	100mW
Output	
Total Output	48W, see table for details
Output Voltage	See table
Turn on Time	<3S @ 100-200VAC input & full output load
Rise Time	20mS max. @full load
Fall Time	20mS max. @full load
Line Regulation	± 1% of rated output voltage at full load
Load Regulation	± 5% of rated voltage from 0 to full load
Transient Response	Maximum voltage excursion of 5% for 25% load change with 0.25A/μS slew rate
Efficiency	Meets DOE level VI requirements
Protection Features	
Overcurrent Protection	150-170% Max. of rated current. Auto-restart when fault removed.
Short Circuit Protection	Hiccup Mode. Auto Recovery
Ingress	IP22 Compliant
Environmental	
Operating Temperature	0°C to 60°C (Derate output power linearly from 100% at 40°C to 50% at 60°C)
Storage Temperature	-20°C to +80°C
Operating Humidity	5% - 95% non-condensing
General Specifications	
Dimensions	3.19"(81.05mm) x 1.85"(47.05mm) x 1.45"(36.85mm)
Weight	0.37lbs
MTBF	>100,000 hours per MIL-HDBK-217F at full load and 25°C ambient
AC Input Receptacle	Interchangeable Plugs
DC output Plug	Barrel Type: 5.5mm x 2.5mm x 10mm Center positive (others upon request)

Specifications Continued	
Safety	
Approved to USA/Canada	UL62368-1 cUL62368-1
Approved to Europe	CB Report CE Report
*Consult with TT Electronics for information on additional country safety approvals	
EMC	
EMC	FCC Part 15 Radiated & Conducted CISPR32 Class B Radiated & Conducted EN55032 Class B Radiated & Conducted
Harmonic Currents	IEC 61000-3-2
Voltage Flicker	IEC 61000-3-3
Electrostatic Discharge	IEC 61000-4-2
Radiated Immunity	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4
Surge Immunity	IEC 61000-4-5
Conducted Immunity	IEC 61000-4-6
Magnetic Field	IEC 61000-4-8
Dips/Interruptions	IEC 61000-4-11

Diagrams



\*Shipped with USA AC Blade; others are optional.

