

PSAD65 Power Supply Series (65W)

Features:

- Class I and II Configurations Available
- Efficiency Level VI
- <210mW No Load Power Consumption
- Short Circuit Protection
- Overload Protection
- No Load Operation



Description:

The PSAD65 series of AC/DC switching power supplies are for 60-65 watts of continuous output power. They are available as Class I or Class II devices with the inlet of the IEC320/C14, C6, C8, or C18 to mate with an interchangeable cord for world-wide use. All models meet FCC, EN55032, and CISPR32 class B emission limits, and comply with UL, IEC, DOE level VI, CE, and more.

Model No.	Output Voltage	Current	Total Power	Output Regulation	Ripple & Noise (Vp-p) ¹	Efficiency Level
PSAD65-12-B1	12VDC	5A	60W	±5%	200mV	VI
PSAD65-13-B1	15VDC	4.33A	65W	±5%	200mv	VI
PSAD65-13-1-B1	18VDC	3.61A	65W	±5%	200mV	VI
PSAD65-13-2-B1	19VDC	3.42A	65W	±5%	200mV	VI
PSAD65-14-B1	24VDC	2.70A	65W	±5%	200mV	VI
PSAD65-17-B1	36VDC	1.80A	65W	±5%	360mV	VI
PSAD65-18-B1	48VDC	1.35A	65W	±5%	480mV	VI

Notes:

Ripple and noise is measured at output within 20MHz bandwidth, at rated line voltage and full load, with a 10 µF electrolytic capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

For C8 input receptacle, use model number PSAD65SF-XX-B1.

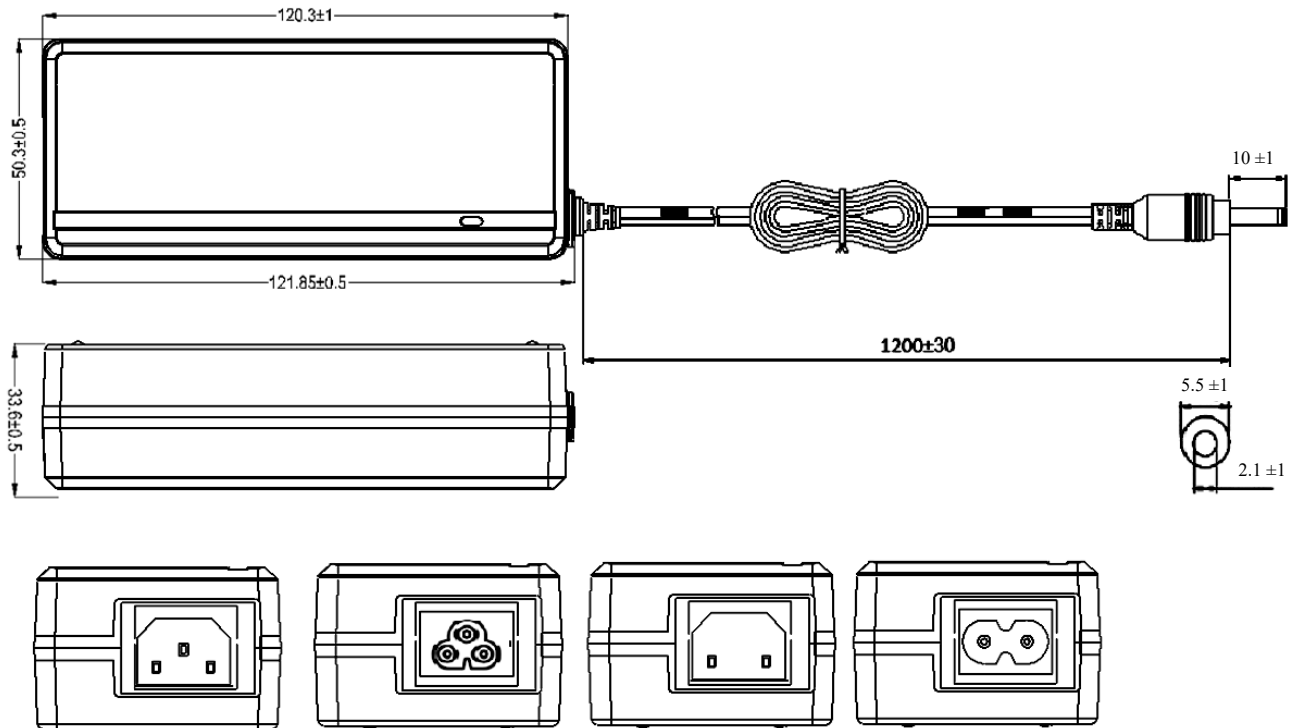
For C6 input receptacle, use model number PSAD65S-XX-B1.

For C18 input receptacle, use model number PSAD65F-XX-B1.

Specifications	
Input	
Input Voltage	90-264VAC
Input Frequency	47-63Hz
Input Current	1.5A Max.
Inrush Current	<40A peak @ 264VAC, cold start at 25°C
No Load Power Consumption	<210mW, meets DOE level VI requirements
Output	
Output Power	65W max, see table for details
Turn on Time	<3S @100-240VAC input & full output load
Rise Time	20mS max. @ full load
Fall Time	20mS max. @ full load
Hold Up Time	10mS min @ full load 115VAC input 20mS min @ full load 230VAC input
Line Regulation	±1% of rated output voltage at fixed 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/ uS slew rate. Recovery time: 200uS
Efficiency	Meets DOE level VI requirements
Protection Features	
Overcurrent Protection	150-200% 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
Humidity	10% - 90% non-condensing
Operating Altitude	<2000m
General Specifications	
Dimensions	4.72"(120.3mm) x 1.98"(50.3mm) x 1.32"(33.6mm)
AC Input	IEC60320 C14, C6, C8, C18
Output Plug	Barrel Type: 5.5mm x 2.1mm x 10mm Center positive (others available)
Weight	0.60lbs
MTBF	>100,000 hours per MIL-HDBK-217F at full load and 25°C ambient

Specifications Continued	
Safety	
Approvals	UL62368-1 cUL62368-1 CB Report CE Report CCC (China) PSE J61558 (Japan) RCM (Australia)
*Consult with TT Electronics for information on additional country safety approvals, including applicability of approvals on a model to model basis.	
EMC	
EMC	FCC Class B Radiated & Conducted CISPR32 Class B Radiated & Conducted EN55032 Class B Radiated & Conducted
Harmonic Currents Voltage Flicker Electrostatic Discharge Radiated Immunity EFT/Burst Surge Immunity Conducted Immunity Power Frequency Magnetic Field Immunity Dips/Interruptions	IEC 61000-3-2 IEC 61000-3-3 IEC 61000-4-2: ±8 KV air, ±4 KV contact IEC 61000-4-3: 3V/m IEC 61000-4-4: ±1 KV IEC 61000-4-5: ±1 KV differential mode IEC 61000-4-6: 3Vrms IEC 61000-4-8: 1A/m IEC 61000-4-11: 30% reduction for 500 ms, and >95% reduction for 10 ms

Diagrams



Thermal Derating Curve

