PROTEK POWER

TT Electronics
POWER PARTNERS

PMP65 Power Supply Series 65W

Features:

- High efficiencies up to 90%
- Low safety ground leakage current
- Wide input range 85 to 265 VAC
- 100% burn-in
- Overvoltage protection
- Over-temperature protection
- Short-circuit protection
- Compliant with CEC and Energy Star Efficiency level V requirements
- Compliant with RoHS requirements

c UL us RoHS TÜV EN 60601-1 IEC 60601-1

Description:

The PMP65 series of AC/DC switching power supplies are for 65 watts of continuous output power. They are enclosed in a 94V-0 rated polyphenylene case with an IEC320/C6 or IEC320/C8 inlet to mate with interchangeable cord for world-wide use. All models meet EN55011 and FCC class B emission limits, and are designed for medical applications.

Model		Output						Average Active Efficiency (typ.) @115 / 230 VAC
Class I	Class II	V1	Min. Current	Max. Current	Tol.	Ripple & Noise	Max. Power	
PMP65S-12 PMP65S-13	PMP65SF-12 PMP65SF-13	12.0 V 15.0 V	0 A 0 A	5.42 A 4.34 A	±5% ±5%	1% 1%	65 W 65 W	87 / 88% 89 / 89%
PMP65S-13-1 PMP65S-13-2	PMP65SF-13-1 PMP65SF-13-2	18.0 V 19.0 V	0 A 0 A	3.62 A 3.43 A	±5% ±5%	1% 1%	65 W 65 W	87 / 88% 88 / 89%
PMP65S-13-3 PMP65S-14	PMP65SF-13-3 PMP65SF-14	20.0 V 24.0 V	0 A 0 A	3.25 A 2.71 A	±5% ±5%	1% 1%	65 W 65 W	88 / 89% 88 / 90%

NOTES:

- Class-I models are equipped with IEC 320/C6 inlet, and Class-II models with IEC 320/C8 inlet.
- Ripple and noise is maximum peak to peak voltage value measured at output within 20MHz bandwidth, at rated line voltage and output load ranges, and with a 47 µF tantalum capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

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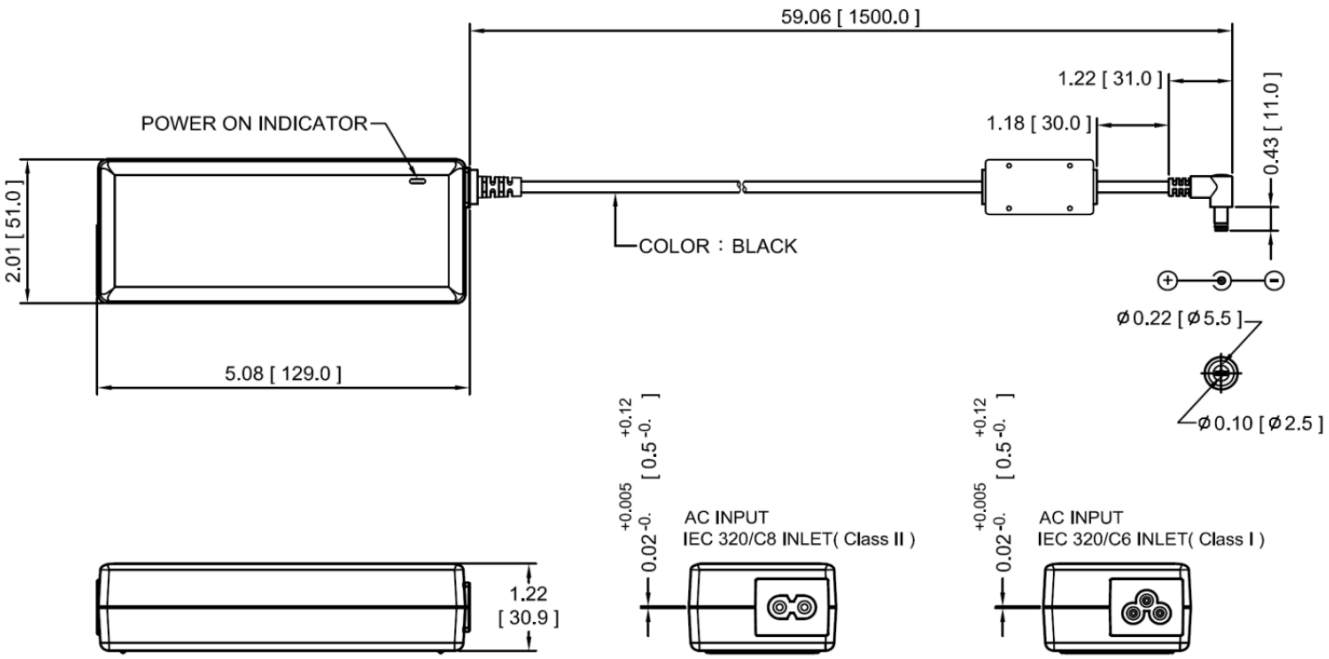
Specifications	
Safety Standards & EMC Specifications	
Safety Standard Approvals	UL ES 60601-1, CSA C22.2 No. 60601-1 File No. E211696 TÜV EN 60601-1
EMI Standard	EN55011, FCC, and VCCI Class B (radiated and conducted)
EMC Performance	EN61000-3-2: Harmonic distortion, Class A EN61000-3-3: Line flicker EN61000-4-2: ESD, ±15 KV air and ± 8KV contact EN61000-4-3: Radiated immunity, 10V/m EN61000-4-4: Fast transient/burst, ±2KV EN61000-4-5: Surge, ±1 KV diff., ±2 KV com. EN61000-4-6: Conducted immunity, 10Vrms EN61000-4-8: Magnetic field immunity, 30 A/m EN61000-4-11: Voltage dip immunity, 30% reduction for 500 ms, 100% reduction for 10 ms
*Consult with TT Electronics for information on additional country safety approvals	
Input Specifications	
Input Voltage Range	85 to 265VAC
Input Frequency Range: Input	47 to 63Hz
Input Current	2.0 A (rms) for 115 VAC 1.0 A (rms) for 230 VAC
Earth Leakage Current	300µA max. @ 264VAC, 63Hz
Touch Current	100µA max. @ 264 VAC, 63Hz
Output Specifications	
Ripple & Noise	1% peak to peak maximum
Overvoltage Protection	Provided on output #1 only, set at 112-140% of its nominal output voltage
Overcurrent Protection	All outputs protected to short circuit conditions
Temperature Coefficient	±0.04%/°C maximum
Transient Response	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 us after a 25% step load change
Environmental Specifications	
Operating Temperature	0°C to +60°C (See Derating)
Storage Temperature	-40°C to +85°C
Relative Humidity	5% to 95% non-condensing
Temperature Derating	Derate from 100% at +40°C linearly to 50% at +60°C
General Specifications	
Switching Frequency	75-100 KHz
Efficiency	87% minimum
Hold-up Time	10ms minimum at 110 VAC
Line Regulation	±0.5% maximum at full load
Inrush Current	40 A @ 115 VAC or 80 A @ 230 VAC, at 25°C cold start
Withstand Voltage	4000 VDC from input to output (2 MOPP) 1500 VDC from input to ground (1 MOPP) For Class-II models, 4000 VAC from input to output.
MTBF	150,000 hours minimum at full load at 25 ambient, calculated per MIL-HDBK-217F Manufactured to meet Ingress Protection: IP22 Compliance

Diagrams



Notes:
1. Dimensions shown in inches [mm]
2. Tolerance 0.02[0.5] maximum
3. Weight: 340 grams (0.749 lbs.) approx.