



FEATURES

- 90~264 VAC Input, Soft Start
- 0.98 Power Factor
- 87% to 91% Efficiency
- High Peak Power
- Low Safety Ground Leakage Current
- Class I & Class II Models Available
- Compliant with CEC & Energy Star Level V



INPUT SPECIFICATIONS

Input Voltage Range	90~264 VAC
Input Frequency	47~63Hz
Input Current	1.4A rms @ 115 VAC 0.7A rms @ 230 VAC
Inrush Current	80A @ 115 VAC or 120A @ 230 VAC, at 25°C cold start
Soft Start	Yes
Earth Leakage Current	200µA max. @ 264 VAC, 63Hz
Touch Current	100µA max. @ 264 VAC, 63Hz

OUTPUT SPECIFICATIONS

Output Power Ratings	See table
Minimum Load	Not required
Tolerance	±5%
Ripple and Noise*	1% peak to peak max. at full load
Overvoltage Protection	Set at 115-140% of its nominal output voltage
Overcurrent Protection	Protected to short-circuit conditions
Temperature Coefficient	±0.04%/°C max.
Transient Response	Max. excursion of 4% or better on all models, recovering to 1% of final value within 500 µs after a 25% step load change

* Measured with 20MHz bandwidth at rated line voltage and output load ranges, with a 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor in parallel across the output.

GENERAL SPECIFICATIONS

Power Factor	0.98 typical @ 115 VAC
Efficiency	87% minimum at full load
Hold-up Time	10 ms at 110 VAC
Switching Frequency	70~140KHz
Operating Temperature	0°C to +60°C
Derating	Derate from 100% at +40°C linearly to 50% at +60°C
Storage Temperature	-40°C to +85°C
Relative Humidity	5°C to +95°C non-condensing
Withstand Voltage	5,656 VDC from input to output (4,000 VAC for Class II models) 2,121 VDC from input to ground 707 VDC from output to ground
MTBF	150K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

MODELS LIST

Product No. ⁽¹⁾	Output Voltage	Maximum Current	Peak ⁽²⁾ Current	Maximum Power
TMP105-12	12V	7.5A	15A	90W
TMP105-13	13V	6.93A	13.8A	90W
TMP105-15	14~16V	6.79A	13.58A	95W
TMP105-18	18~19V	5.84A	11.6A	105W
TMP105-20	20~21V	5.25A	10.5A	105W
TMP105-24	24~25V	4.38A	8.7A	105W
TMP105-28	28~29V	3.75A	4.5A	105W
TMP105-30	30~32V	3.5A	4.2A	105W
TMP105-36	36~38V	2.92A	3.5A	105W
TMP105-48	46~50V	2.29A	2.7A	105W

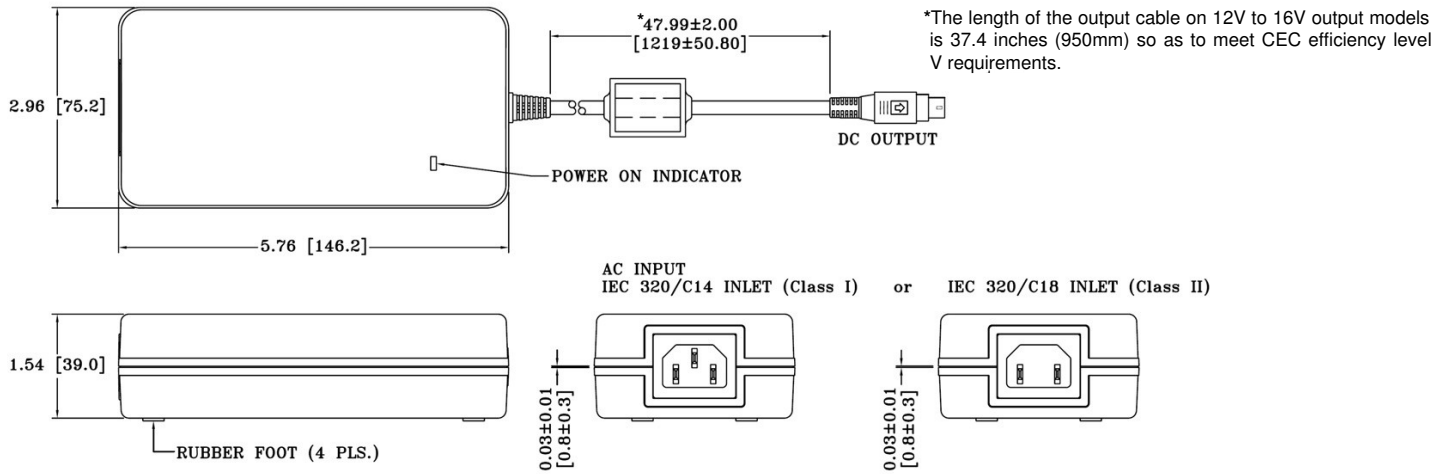
Notes:

- 1) The listed P/N's are for Class I models equipped with IEC 320/C14 AC inlet. Add suffix "C2" to order Class II models equipped with IEC 320/C18 AC inlet. When ordering 14-50V output units, specify the requested voltage, e.g. use P/N TMP105-18.5-C2 to order 18.5V Class II model.
- 2) The peak current is for 10 seconds maximum with the average power not over the maximum power.

STANDARDS & COMPLIANCES

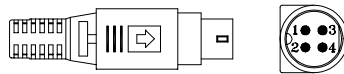
IEC/EN 61000-1-2	EMC & Immunity Performance
EN 55011, EN 55022	Class B, conducted & radiated
FCC, VCCI	Class B, conducted & radiated
EN 61000-3-2	Harmonic distortion, Class A & D
EN 61000-3-3	Line flicker
EN 61000-4-2	ESD, ±8 KV air and ±6 KV contact
EN 61000-4-3	Radiated immunity, 3V/m
EN 61000-4-4	Fast transient/burst, ±2 KV
EN 61000-4-5	Surge, ±1 KV diff., ±2 KV com.
EN 61000-4-6	Conducted immunity, 3 Vrms
EN 61000-4-8	Magnetic field immunity, 3A/m
EN 61000-4-11	Voltage dip immunity, 30% reduction for 500ms, 60% reduction for 100ms, >95% reduction for 10ms
Safety Standards	IEC/EN/UL 60601-1 (3rd Ed.), ANSI/AAMI ES 60601-1 (1st Ed.), CSA C22.2 No. 60601-1 (2nd Ed.), IEC/EN 60950-1 (2nd Ed.)
Agency Approvals	UL, cUL, TUV, CE, CB
Other Compliances	RoHS, CEC & Energy Star Level V

MECHANICAL SPECIFICATIONS



Unit: inch [mm]
Tolerance: 0.02 [0.5] maximum

DC OUTPUT CONNECTOR	
PIN	FUNCTION
1	RETURN
2	+V
3	RETURN
4	+V
SHELL	AC GND/*NC
*Shell is NC on class II models	



Output connector: Kycon P/N KPPX-4P 4-pin circular DIN or equivalent.
Mating connector: Kycon P/N KPJX-4S-S or equivalent
Contact TRUMPower for output connector options.