

**FEATURES**

- +5V to +48V Output Voltage Range
- 0.9 to 0.95 Power Factor
- No Load Power Consumption < 500 mW
- Comply with CEC, Energy Star, ERP & EISA Efficiency Level V
- Class I with IEC320/C14 AC Inlet

**INPUT & OUTPUT SPECIFICATIONS**

Input Voltage 90 to 264 VAC
 Input Frequency 47 to 63 Hz
 Input Current 2.5A (rms) max. @ 90 VAC;
 1.0A (rms) max. @ 264 VAC
 No Load Power <0.5W
 Output Voltage & Current See table
 Output Voltage Regulation ... $\pm 5\%$ max.
 Ripple and Noise See table
 Earth Leakage Current <300 μ A @ 264 VAC
 Short-Circuit Protection Auto recovery
 Overload Protection Auto recovery
 Overvoltage Protection Latch & shutdown, AC recycle

STANDARDS & COMPLIANCES

EMC Standards EN 60601-1-2, EN 55011 Class B,
 FCC Part 18 Class B
 Safety Standards IEC/EN/UL 60601-1 3rd edition,
 ANSI/AAMI ES 60601-1:2005,
 CSA C22.2 No. 60601-1:08
 Agency Approvals UL, cUL, TUV, CB, CE (LVD)
 Other Compliances RoHS, CEC, Energy Star, ERP &
 EISA efficiency level V

GENERAL SPECIFICATIONS

Switching Frequency 63 KHz
 Efficiency 87% minimum at average load,
 115 VAC/230 VAC input, except 5V
 output model
 Power Factor >0.95 @ 115 VAC, >0.90 @ 230 VAC,
 at full load
 Hold-up Time >16 ms typical at full load, 115 VAC
 Inrush Current 50A peak @ 115 VAC, 100A peak @
 230 VAC, cold start @ 25°C
 Withstand Voltage >5,656 VDC, input to output,
 >2,121 VDC, input to ground
 Operating Temperature 0°C to +70°C ambient
 Derating Derate from 100% at +51°C
 linearly to 50% at +70°C
 Storage Temperature -20°C to +85°C
 Operating Humidity 20% to 90%
 MTBF >183K hours at full load and 25°C
 ambient temperature calculated
 per MIL-HDBK-217F

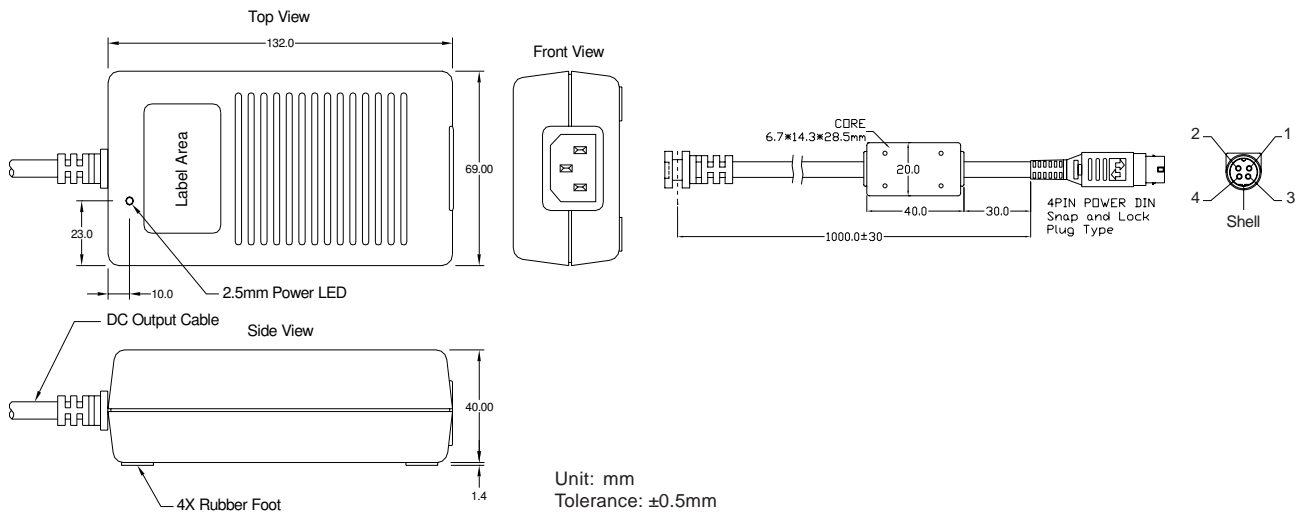
MODELS LIST

Product No.	Output Voltage	Max. Output Current	Output Regulation	Ripple & Noise (Vp-p) ⁽¹⁾	Max. Output Power
TMA65-05	5V	8A	$\pm 5\%$	100mV	40W
TMA65-12	12V	5A	$\pm 5\%$	120mV	60W
TMA65-15	15V	4A	$\pm 5\%$	150mV	60W
TMA65-18	18V	3.6A	$\pm 3\%$	180mV	65W
TMA65-24	24V	2.7A	$\pm 3\%$	240mV	65W
TMA65-36	36V	1.8A	$\pm 3\%$	360mV	65W
TMA65-48	48V	1.35A	$\pm 3\%$	480mV	65W

Notes:

1) Ripple and noise are measured at output within 20 MHz bandwidth with a 10 μ f electrolytic capacitor in parallel with a 0.1 μ F ceramic capacitor.

MECHANICAL SPECIFICATIONS (Unit: mm)



DC OUTPUT CONNECTOR	
PIN	FUNCTION
1	+V
2	RETURN
3	+V
4	RETURN
SHELL	RETURN & AC GND

Standard 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.