



TRUMPower

TIPC500P

500W High Efficiency PS/2 ATX IPC Power Supply

## FEATURES

- PS/2 ATX Form Factor
- Complies with ATX12V Standard
- Meets 80PLUS Platinum Efficiency Level
- Active PFC meets EN 61000-3-2
- 5,000 Meters Operating Altitude
- Approved to UL/IEC/EN 60950-1 2nd Edition

## INPUT SPECIFICATIONS

Input Voltage Range .....	90-264 VAC
Input Frequency .....	47-63Hz
Input Current .....	8A rms max. @ 115 VAC 4A rms max. @ 230 VAC
Inrush Current .....	50A @ 115 VAC, 100A @ 230 VAC, at 25°C cold start
Earth Leakage Current .....	350µA max. @ 264 VAC, 50Hz

## OUTPUT SPECIFICATIONS

Output Power Ratings .....	See rating chart
Load Regulation .....	See rating chart
Ripple & Noise* .....	See rating chart
Hold-up Time .....	12ms min. @ 115 VAC, 60 Hz 16ms min. @ 230 VAC, 50 Hz
Rise Time .....	20ms max. @ 115/230VAC
Over Voltage Protection, +3.3V ..	3.5-4.8V +5V ..... 5.5-7V +12V ... 13.4-16V
Over Current Protection, +3.3V ..	35-60A +5V ..... 30-45A +12V ... 22-30A
Short Circuit Protection .....	Shut down & Latch off on +3.3V/+5V/+12V; No damage on -12V/-5V
Temperature Coefficient .....	±0.04%/°C max.

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

OUTPUT VOLTAGE & CURRENT RATING CHART				
Ouput Voltage	Minimum Load	*Maximum Load	Load Regulation	Ripple & Noise VP-P Max.
+3.3V	0.3A	24A	±5%	50mV
+5V	0.3A	20A	±5%	50mV
+12V1	0.3A	18A	±5%	120mV
+12V2	0.3A	18A	±5%	120mV
-12V	0A	0.5A	±10%	120mV
+5Vsb	0A	3A	±5%	50mV
*-5V	0A	0.2A	±10%	100mV

\* The overall output power is 500W maximum.  
 \* The total output power for +3.3V & +5V is 120W maximum.  
 \* -5V output is optional.



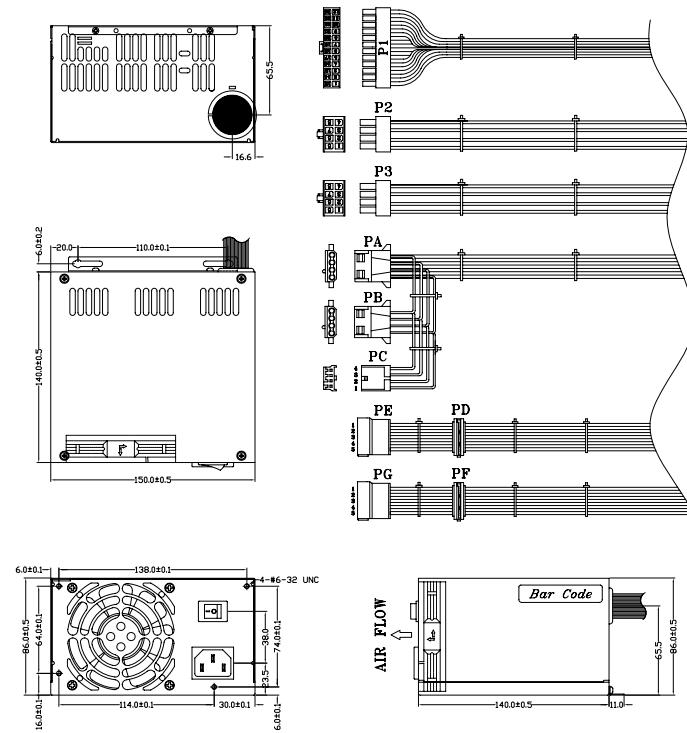
## GENERAL SPECIFICATIONS

Efficiency .....	92% typ. @ full load
Operating Altitude .....	5,000 meters max.
Operating Temperature .....	0°C to +50°C
Storage Temperature .....	-20°C to +80°C
Relative Humidity .....	5% to 95% non-condensing
Withstand Voltage .....	1,800 VAC, input-ground
MTBF .....	150K hours minimum at full load & 25°C ambient, calculated per MIL-HDBK-217F

## STANDARDS & COMPLIANCES

EMI/EMC .....	FCC & CISPR 22, Class B conducted FCC & EN 55022, Class B radiated
Safety Standards .....	UL/IEC/EN 60950-1 2nd Edition
Agency Approvals .....	UL, cUL, TUV, CCC, CB, CE
Other Compliance .....	80PLUS, RoHS, EuP Lot 6:2013

## MECHANICAL SPECIFICATIONS



### Notes:

1. Dimensions in mm.
2. Power switch is optional.
3. Customized cable sets available upon request.