TIPC220-FXS

220W FlexATX IPC Power Supply

FEATURES

- Complies with Flex ATX Standard
- Meets 80PLUS Silver Efficiency Level
- Active PFC meets EN 61000-3-2 Standard
- Remote ON/OFF Function
- 2,000 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 ..... 4A rms max. @ 115 VAC
2A rms max. @ 230 VAC
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 ..... 16ms min. @ 115/230 VAC
Rise Time ..... 20ms max. @ 115/230 VAC
Over Voltage Protection, +3.3V .. 3.7-4.8V
+5V 5.7-7V
+12V ... 13.3-14.8V
Over Current Protection, +3.3V .. 50mV p-p
+5V ..... 50mV p-p
+12V ... 120mV p-p
-12V .... 120mV p-p
+5Vsb . 50mV p-p
Short Circuit Protection ..... On all outputs, Load of less than 0.1 ohm
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

Ouptut Voltage	Minimum Load	*Maximum Load	Load Regulation	Ripple & Noise VP-P Max.
+3.3V	0.1A	10A	±5%	50mV
+5V	0.2A	14A	±5%	50mV
+12V	0.6A	14A	±5%	120mV
-12V	0A	0.3A	±10%	120mV
+5Vsb	0A	2.5A	±5%	50mV

* The overall output power is 220W maximum.
* The total output power for +3.3V & +5V is 80W maximum.

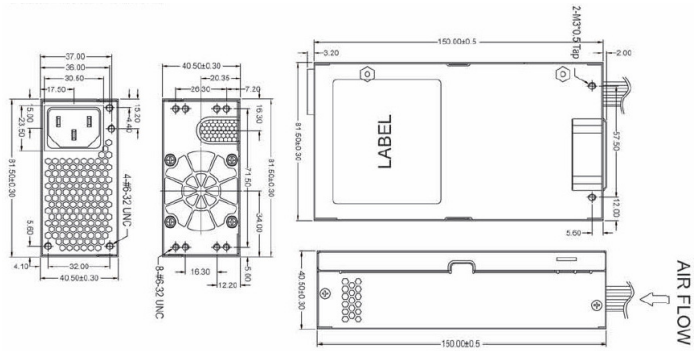
GENERAL SPECIFICATIONS

Efficiency ..... 90% typ. @ full load
Operating Altitude ..... 2,000 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 mininum 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, CB, CE, CCC
Other Compliance ..... 80PLUS, RoHS, EuP Lot 6:2013

MECHANICAL SPECIFICATIONS



Notes:
1. Dimensions in mm.
2. Customized cable set available upon request.

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