TIPC460BE
460W PS/2 ATX IPC Power Supply

FEATURES

• PS/2 ATX Form Factor
• Complies with ATX12V Standard
• Meets 80PLUS Bronze Efficiency Level
• Active PFC meets EN 61000-3-2 Standard
• Remote ON/OFF Function
• Approved to UL/IEC/EN 60950-1 2nd Edition

INPUT SPECIFICATIONS

Input Voltage Range .................... 90-264 VAC
Input Frequency .......................... 47-63 Hz
Input Current .............................. 8A rms max. @ 115 VAC
Earth Leakage Current .................. 350µA max. @ 264 VAC, 63Hz

OUTPUT SPECIFICATIONS

Output Power Ratings .................. See rating chart
Load Regulation ......................... See rating chart
Ripple & Noise* ......................... See rating chart
Hold-up Time .............................. 17ms min. @ 115/230 VAC
Rise Time ................................. 20ms max. @ 115/230 VAC
Over Voltage Protection, +3.3V, 3.5-4.5V
+5V .......................... 5.5-6.82V
+12V .......................... 13.4-15.6V
Over Current Protection, +3.3V, 50mV p-p
+5V .......................... 50mV p-p
+12V .......................... 120mV p-p
-12V .......................... 120mV p-p
+5Vsb .......................... 50mV p-p
-5V .......................... 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

<table>
<thead>
<tr>
<th>Output Voltage</th>
<th>Minimum Load</th>
<th>*Maximum Load</th>
<th>Load Regulation</th>
<th>Ripple &amp; Noise VP-P Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>+3.3V</td>
<td>0.1A</td>
<td>24A</td>
<td>±5%</td>
<td>50mV</td>
</tr>
<tr>
<td>+5V</td>
<td>0.2A</td>
<td>20A</td>
<td>±5%</td>
<td>50mV</td>
</tr>
<tr>
<td>+12V1</td>
<td>0.1A</td>
<td>16A</td>
<td>±5%</td>
<td>120mV</td>
</tr>
<tr>
<td>+12V2</td>
<td>0.5A</td>
<td>16A</td>
<td>±5%</td>
<td>120mV</td>
</tr>
<tr>
<td>-12V</td>
<td>0A</td>
<td>0.5A</td>
<td>±10%</td>
<td>120mV</td>
</tr>
<tr>
<td>+5Vsb</td>
<td>0A</td>
<td>3A</td>
<td>±5%</td>
<td>50mV</td>
</tr>
<tr>
<td>-5V</td>
<td>0A</td>
<td>0.3A</td>
<td>±10%</td>
<td>50mV</td>
</tr>
</tbody>
</table>

* The overall output power is 460W maximum.
* The total output power for +3.3V & +5V is 150W maximum.

GENERAL SPECIFICATIONS

Efficiency ......................... 85% 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 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, CB, CE, CCC
Other Compliance .......... 80PLUS, RoHS

MECHANICAL SPECIFICATIONS

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