1. Input Characteristics

1.1 Input Voltage Range: 18Vdc To 32Vdc,

1.2 Input Dc Current (Max): 30.0A Max. Full Load.

2. Output Characteristics

2.1 Static Output Characteristics:

<table>
<thead>
<tr>
<th>Output Voltage</th>
<th>Load Range Min.</th>
<th>Load Range Max.</th>
<th>Regulation Min.</th>
<th>Regulation Max.</th>
<th>Ripple Max. mV P-P</th>
<th>Ripple &amp; Noise Max. mV P-P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. +3.3 V</td>
<td>0.1 A</td>
<td>20.0 A</td>
<td>-5 %</td>
<td>+5 %</td>
<td>50 mV</td>
<td>100 mV</td>
</tr>
<tr>
<td>2. +5.0 V</td>
<td>2.5 A</td>
<td>32.0 A</td>
<td>-5 %</td>
<td>+5 %</td>
<td>50 mV</td>
<td>100 mV</td>
</tr>
<tr>
<td>3. +12.0 V</td>
<td>0.5 A</td>
<td>11.0 A</td>
<td>-5 %</td>
<td>+5 %</td>
<td>100 mV</td>
<td>150 mV</td>
</tr>
<tr>
<td>4. -5.0 V</td>
<td>0.0 A</td>
<td>1.0 A</td>
<td>-5 %</td>
<td>+5 %</td>
<td>150 mV</td>
<td>200 mV</td>
</tr>
<tr>
<td>5. -12.0 V</td>
<td>0.0 A</td>
<td>3.0 A</td>
<td>-5 %</td>
<td>+5 %</td>
<td>150 mV</td>
<td>200 mV</td>
</tr>
<tr>
<td>6. SB +5.0 V</td>
<td>0.0 A</td>
<td>1.0 A</td>
<td>-5 %</td>
<td>+5 %</td>
<td>100 mV</td>
<td>100 mV</td>
</tr>
</tbody>
</table>

Note: 1. Noise Test ----- Noise Bandwidth Is From Dc To 20MHz.

2. Ripple Frequencies Greater Than 1 MHz Shall Be Attenuated By the Measurement System.

3. Add 0.1uF / 10uF Capacitor At Output Connector Terminals For Ripple & Noise Measurements.

4. Combined Total Power From +3.3V And +5V Rails Shall Not Exceed 160W.

5. The Total Output Power Shall Not Exceed 320W.

2.2 Dynamic Output Characteristics:

2.2.1 Rise Time: 100 ms Max. At Nominal Line Full Load.

2.2.2 Turn-on Delay Time: 600mS Max. At Nominal Line Full Load.

2.2.3 Hold-up Time: 16 ms Min. For + 5V Output At Nominal Line Full Load.

2.2.4 Transient Overshoot: 10% Max. Of Delay State After Load Change Of 25% Within The Range Of 50% To 100% Of Full Load.

2.2.5 Temperature Coefficient: 0.03% Per °C Max.
3. Protections

3.1 Over Voltage Protection --- Standard On +3.3V Output Set At 4.10Vdc At +/-0.40Vdc. +5.0V Output Set At 6.25Vdc At +/-0.75Vdc. +12.0V Output Set At 14.6Vdc At +/-1.0Vdc.

3.2 Short Circuit Protection --- A Short Circuit Placed Between Dc Return And Output Shall Cause No Damage And The Power Supply Shall Shutdown.

3.3 Over Power Protection --- The Power Supply Can Use Electronic Circuit To Limit The Output. Power Against Exceeding +150% Of Full Load. Or Protected against Excessive Power Delivery Due To Short Circuit Of Any Output Or Over Total Power.

3.4 No load Operation --- No Parts Damaged On Power Supply.

4. Dielectric Withstand Voltage

4.1 Primary to Secondary --- 1500Vac For 1 Minute. Or 1800Vac For 1 Sec.

4.2 Primary to Safety Ground --- 1500Vac For 1 Minute. Or 1800Vac For 1 Sec.

4.3 Insulation Resistance --- Primary To Safety Ground - 500Vdc, 50M ohms Min.

4. Environment

4.1 Operation Temperature ------------------ Air Temperature 0 °C To 50 °C.

4.2 Operation Relative Humidity -------- 20% To 90%.

4.3 Storage Temperature ------------------- Air Temperature -20 °C To 60 °C.

4.4 Storage Relative Humidity ---------- 5% To 95%.

4.5 Altitude ----------------------------- Operate Properly At Any Altitude Between 0 To 100,000 Feet. Storage 40,000 Feet.

4.6 Vibration --------------------------- 0.38mm. 5-55-5Hz, 1 Minutes Per Cycle; 30 Minutes For Each Axis ( X,Y,Z ).

5. Burn-In

5.1 Burn-In ----------------------------- At 45 °C, Max. Load, 4 Hours.

6. Mean Time Between Failure --------- 150 KHrs Minimum At Full Load For 25 °C Ambient Temperature.
7. Power-Good Signal

- Power Good Signal
- +4.75V
- +5V Output

Note: Tr ≤ 100 ms, T1 ≥ 1 ms, Td = 100 - 500 ms.

8. Dimension

8.1 W x H x D ------------------------------- 150.0 x 86.0 x 140.0 (mm)

Note: See The Mechanical Drawing.