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| Electrical Specification for: | CPCI-3U-DC-200W 200W DC Input 3U CompactPCI Power Supply |
| Advice Part Number: | 900-3011-01 |

Input:

Input Voltage: 18-36Vdc
 Inrush Current: 16A max. @ 24Vdc
 Efficiency: Full rated load 81% @ 24Vdc
 Input Protection: Non-User Serviceable Fuse

Output Voltages & Currents:

| Output | Output Voltage | Adjustment Range | Output Current | Min Load |
|---------------|-----------------------|-------------------------|-----------------------|-----------------|
| V1 | +5V | 4.8 ± 5.4 | 25A | 0 |
| V2 | +3.3V | 3.1 ± 3.5 | 36A | 0 |
| V3 | +12V | 0 | 3A | 0 |
| V4 | -12V | 0 | 1A | 0 |

Note: 1) Maximum output power at any combination within this table is 200W

Output Power: 200W with 250LFM forced air cooling
 Line Regulation: ±0.5%
 Load Regulation:
 V1, V2 ±1%
 V3, V4 ±4%
 Ripple & Noise: 20 MHz bandwidth measured across 1uF ceramic and 120uF electrolytic. Capacitor in paralleled.
 V1, V2 60mV p-p
 V3 & V4 120mV p-p
 Overload & Short Circuit Protection: Fully protected against output overload and short circuit. Automatic recovery upon removal of overload condition
 V1 & V2 135% max
 V3 & V4 150% max
 Initial Set Point Tolerance: ±1%
 Overshoot & Undershoot: 0% at turn ON
 Turn On Delay: 1 sec. Maximum.
 Rise Time: 30mSec from 10% to 90% of its final value.
 Over-voltage Protection: 110 to 130% with latched shut down (V1, V2, V3)
 Temperature Protection: System shutdown due to excessive internal temperature, automatic reset

| <u>Monitoring Command & Control</u> | |
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| Remote Sense | Available on V1 & V2. Maximum voltage compensation for cable losses 200mV |
| Inhibit (INH#) | TTL –compatible signal inhibited with GND or TTL “0” |
| Enable (EN#) | Contact closure to external ground to start unit. On shortest pin (last make, first break) |
| Power Fail (FAL#) | TTL compatible signal, open collector active low signal. Indicates one or more outputs below 90% of specified rate. |
| Current Share | Accuracy of current share $\pm 10\%$ between units with up to 6 parallel units. Single wire current share on V1 & V2 for 50% to 100% load. |
| Hot Swap | Internal O-ring Diode |
| Over Temperature Warning (DEG#) | Open collector active low 10°C before power supply shut down. |
| I2C - Option | I ² C Passive data: s/n, model no., revision, and/or user defined data |
| <u>Operation Status Indicators</u> | |
| Input Voltage OK | Green LED - indicates when mains input voltage is present. |
| Output Failure | Red LED - Indicates one or more outputs below 90% of specified rate. |
| <u>Environmental Specification:</u> | |
| Operating Temperature | Operation: -20°C to +55°C full load with 250LFM Forced Air Cooling and de-rating linearly above 55°C by 2.5% per °C. |
| Storage Temperature | -40°C to +85°C. |
| Humidity | Up to 95% RH non-condensing. |
| Shock: | Peak acceleration 20GPK max. |
| Vibration | Random vibration, 10Hz to 500Hz, 3 axis 1.9GRMS max. |
| Altitude | Operation 6K ft Non operation 40K ft. |
| MTBF | 300,000 hours per Bellcore standard B332 Gb 30°C |

| Safety Regulatory & EMC Specifications: | |
|---|--|
| Fully compliance to PICMG 2.11 CompactPCI Specification | |
| Meet Safety Agency Compliance | UL 62368, EN-62368, CE - MARK |
| ESD susceptibility | EN61000-4-2 level 4 8KV air |
| Conducted & radiated emission | EN55022/CISPR22 Class B with an external TBD line filter |
| Surge | EN6100 -4-5 level 3 line-to-line 1KV line to chassis 2KV |
| Radiated susceptibility | EN61000-4-3 level 3 10V/m |
| EFT/Burst | EN61000-4-4 level 3 ±2KV |
| Conducted disturbance | EN61000-4-6 level 2 3Vrms |
| Power frequency magnetic field | EN61000-4-8 3A/m |
| Dielectric Withstand | |
| Input to Case: | 1500VDC. |
| Input to Output: | 1500VDC |
| Output to Case: | 100VDC. |

| Mechanical Dimensions | |
|------------------------------|--|
| Size | 5.07"H X 1.60"W X 6.40"D 128.7mm x 40.6mm x 162.5mm) |
| Weight | 800 gr. |

INPUT/OUTPUT CONNECTOR - Positronic-PCIH47M400A1/AA
PIN ASSIGNMENT

| Pin | Pin Type | Signal Name. | Description |
|-------|----------|--------------|-------------------------------|
| 1-4 | Normal | V1 | V1 Output |
| 5-12 | Normal | RTN | V1 and V2 Return |
| 13-18 | Normal | V2 | V2 Output |
| 19 | Normal | RTN | V3 Return |
| 20 | Normal | V3 | V3 Output |
| 21 | Normal | V4 | V4 Output |
| 22 | Normal | RTN | Signal Return |
| 23 | Normal | RTN | Signal Return |
| 24 | Normal | RTN | V4 Return |
| 25 | Normal | GA-0 | Geographic ADD-0 (option) |
| 26 | Normal | Reverse | Reverse |
| 27 | Short | EN# | Enable |
| 28 | Normal | GA-1 | Geographic ADD-1 (option) |
| 29 | Normal | NC | Not Connected |
| 30 | Normal | V1 Sense | V1 Remote Sense |
| 31 | Normal | GA-2 | Geographic ADD-2 (option) |
| 32 | Normal | NC | Not Connected |
| 33 | Normal | V2 Sense | V2 Remote Sense |
| 34 | Normal | S RTN | Sense Return |
| 35 | Normal | V1 Share | V1 Current Share |
| 36 | Normal | NC | Not Connected |
| 37 | Normal | IPMB_SCL | System Manager Bus (option) |
| 38 | Normal | DEG# | Degrade Signal |
| 39 | Normal | INH# | Open – ON Low - OFF |
| 40 | Normal | IPMB_SDA | System Manager Bus (option) |
| 41 | Normal | V2 Share | V2 Current Share |
| 42 | Normal | FAL# | Fail Signal |
| 43 | Normal | IPMB_PWR | Power–System Manager (option) |
| 44 | Normal | NC | Not Connected |
| 45 | Long | Chassis GND | Chassis GND |
| 46 | Long | DC Positive | DC Input |
| 47 | Long | DC Negative | DC Input |

