Power For The New Technology

PS2300

Compact PCI Power Supply

Total Power	350 Watts
Input Voltages	36-72 VDC
Outputs	Four

SPECIAL FEATURES

- Power density 3.8W/ cu in.
- UL, CSA, TUV Recognized
- NEBS compliant
- FCC Class A, CISPR Class A conducted EMC compliance
- Efficiency > 73%
- PCI 38 PIN positronic connector

ENVIRONMENTAL

Ambient Operating Temperature: -5 to +50°C incoming air.

Humidity: Up to 95% non-condensing

Storage Temperature: -20° to +85°C

Temperature coefficient: ±0.01% / °C

Cooling: System provided fans with minimum 400 LFM.

ELECTRICAL SPECIFICATIONS

Input

Input……36 -72 VDC; 14A Max current;
Inrush Current (72 Vac)……>20 Amps peak
Isolation……..1000VDC (Input to Output)

Susceptibility specifications:
Complies with EN55022 & FCC Class A with minimum 6 dB margin

Efficiency……> 73% typical at full load
Input over and under voltage protection
Primary power limiting

Output

DC Output…….Maximum continuous output power 350 Watts with system cooling. See Voltage/Current Rating Chart.

Load Regulation……..1% (total)
Ripple and Noise < 1% of output voltage

Transient Response…4% Maximum deviation;
Third Wire Current Sharing for 5V and 3.3V outputs.
Droop current sharing for +12V and –12V outputs

MECHANICAL

6.5” L X 1.5” H X 9” W (165 mm X 37 mm X 228 mm)

Status signals and indicators

PS Present
DC Power Good
Output enable control
Output inhibit control

Visual LED indicators identify power supply failure for replacement. The indicators are:
DC Good
Power Supply Fail

MARTEK POWER

Output

Over and under voltage protection – (Latching)
Over current protection (Hiccup)

Self recovery over temperature protection.

Short Circuit Protection…..Will withstand a continuous short without damage.

Minimum Load Rqmt……See voltage/current rating chart.

No Load Operation……..No damage to supply when operating at no load.

OVP……110 – 120% of output voltage

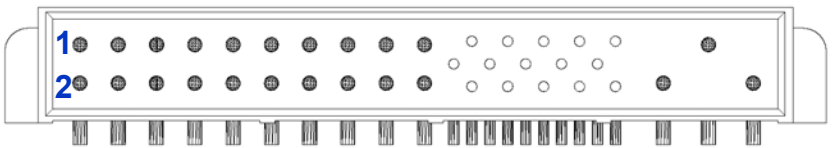
Voltage/Current Rating Chart

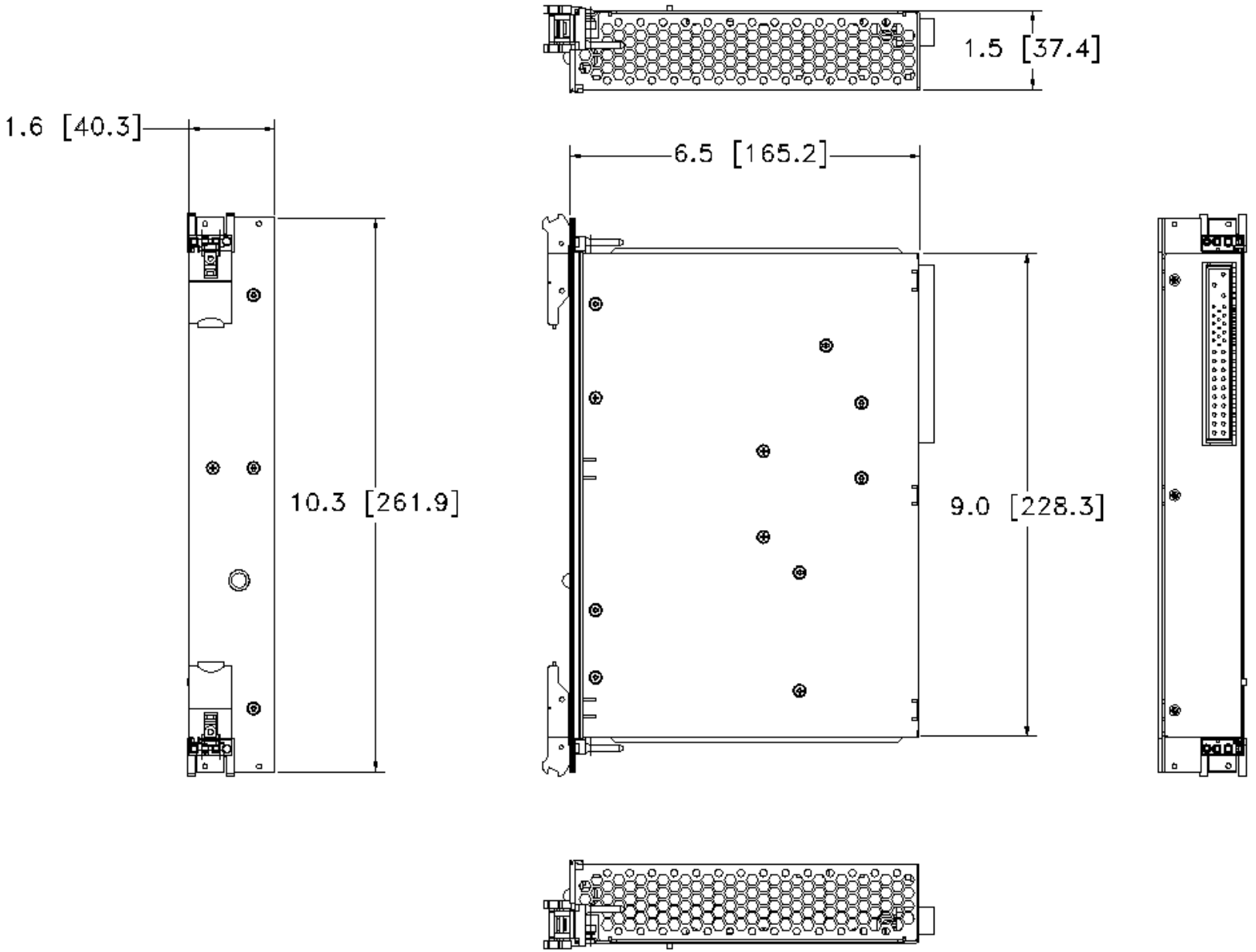
Voltage	5.069V	5.074V
Current	40A	3A
Voltage	3.307V	3.313V
Current	32A	2A
Voltage	11.94V	12.19V
Current	10A	0.1A
Voltage	-11.97	-12.1V
Current	4A	0A

OUTPUT CONNECTOR PIN ASSIGNMENT

PIN #	Description	PIN #	Function
1	+5V	20	Not Used
2	+5V	21	-12V
3	+5V	22*	GND
4	+5V	23	GND
5	GND	24	+5V Sense
6	GND	25*	Enable
7	GND	26	Sense Return
8	GND	27	+3.3V Sense
9	GND	28*	Not Used
10	GND	29	DEG#
11	GND	30	+12V Sense
12	GND	31	Inhibit
13	+3.3V	32	+5V Share
14	+3.3V	33	+3.3V Share
15	+3.3V	34	Not Used
16	+3.3V	35	Fail #
17	GND	36**	Safety Ground
18	+12V	37	-48V Input Return
19	Not Used	38	-48V DC Input

* Pins 22, 25 and 28 are last mate, first break pins.
** Pin 36 is a first mate, last break pin.

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