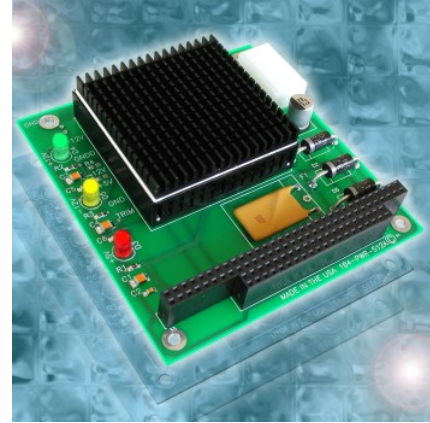


104-PWR-500A

Wide Range DC/DC PC/104 Power Module

FEATURES

- PC/104 Bus 30/40Watt DC/DC Power Supply
- Up to 84% Efficiency
- Three Wide Input Voltage Ranges:
 - 12V Nominal, 9VDC-18VDC(30W)
 - 24V Nominal, 18VDC-36VDC(40W)
 - 48V Nominal, 36VDC-75VDC(40W)
- Output Voltage and Current:
 - +12V Input: +5VDC at 6A Max
 - +24V Input: +5VDC at 8A Max
 - +48V Input: +5VDC at 8A Max
- Voltage Status LEDs
- Reverse Power Protection on Inputs
- Resettable Fused Input Line
- Fully Protected Outputs
- Can be populated on either side of the board to allow for heat-sinking in fanless application requirements
- Temperature range with heatsink -40 to +65°C, up to 105°C with derating of 2% per °C (no air flow)



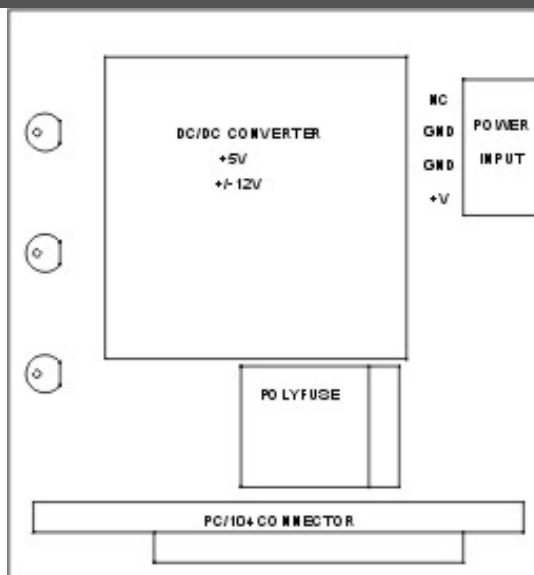
FUNCTIONAL DESCRIPTION

The design incorporates a 16-bit pass through PC/104 connector, molex type power input connector and voltage status LED's. Since heat is always a factor to consider in any system design project, this module can be populated on either side of the board to facilitate heat sinking to one end of an enclosure, with the CPU heat sinking to the other end of the enclosure.

This single output version can be ordered with or without a heatsink. At up to 84% efficiency, a dynamic input range and full protection on inputs and outputs, this power supply is very versatile and appropriate for many PC/104 based applications.

The Input Power Connector is a Four-pin standard Molex type connector at the edge of the board. It's the same connector as used on a CD-ROM so it's easy to set up and test a system with a local +12V Computer type power supply.

Specifications



[Return to Product Description](#)

Output Characteristics

- Output Voltage Set Point on 5V: $\pm 1\%$, Factory set
- Load Regulation: $\pm 0.5\%$, Measured from Full Load to 10% load
- Temperature Coefficient: $\pm 0.01\%/^{\circ}\text{C}$
- Ripple/Noise on 5V: 60mV P-P measured at 20MHz bandwidth
- Short Circuit Protection: Indefinite, Automatic Recovery
- Overvoltage Protection: 120% Clamp type

Input Characteristics

Input Characteristics	12	24	48	Unit/Comments
Input Voltage	9-18	18-36	36-75	VDC
Under Voltage Shut Down	8	16	33	VDC (min)
Over Voltage Shut Down	20	40	80	VDC (max)
Minimum Input Current	0	0	0	A (min)
Full Load Input Current	3.2	2.0	1.0	A (max)
Efficiency by Model	81	83	84	%
Switching Frequency	360 to 440			KHz, Factory set
Operating Temperature	-40 to +65			$^{\circ}\text{C}$, up to 105°C with derating of 2% per $^{\circ}\text{C}$ (no air flow)
Storage Temperature	-55 to +125			$^{\circ}\text{C}$
Relative Humidity	5 to 95			%, non-condensing



CE testing & approval must be done at the system level, in the designed enclosure, and is not done on individual boards.