

OWER SUPPLIES

JUPITER-MM

50 WATTS, DUAL OR QUAD OUTPUTS, RUGGED DESIGN



- 50 watts output power
- Dual output version: +5V, +12V
- Quad output version: ±5V, ±12V
- 7-30VDC input range
- Shutdown control
- Current limiting and short-circuit protection
- ◆ ±3% load regulation
- Rugged SMT design
- Slim heat sink conforms to PC/104 mechanical limits
- ◆ -40 to +85°C operation

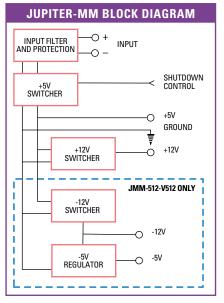
ORDERING GUIDE

JMM-512 50 Watts, +5V, +12V outputs
JMM-512-V512 50 Watts, ±5V, ±12V outputs
For cables and accessories, see pages 46-47.

Jupiter-MM provides competitively-priced, stable DC power for mobile PC/104 systems. The small magnetics and SMT components combined with slim heat sink design create a fully PC/104-compliant module that can be stacked above or below other boards. The dual-output JMM-512 has +5V and +12V outputs, while the quad-output JMM-512-V512 adds -5V and -12V outputs.

The input is protected against transients, and the outputs have built-in protection against short circuits. Power circuits are cascaded, allowing all power to be utilized on the +5V output (10A) or shared across multiple outputs. A shutdown control input is provided to enable remote shutdown of the supply.

Power I/O connections are through convenient detachable screw terminals. All output voltages are also routed to their respective PC/104 bus pins. Power output LEDs provide a convenient indication of power supply operation.



The cascade configuration of the power conversion circuitry enables the full output power (5 or 10 Amps) to be supplied to the +5V line if needed. The +12 and -12 outputs derive from the +5 output, and the -5 line derives from the -12. The total power available on any output is the difference between that output's maximum rating and any power consumed by outputs further down the chain.

SPECIFICATIONS		
INPUT		
Input voltage	7-30VDC	
Transient protection	1500W transient voltage suppressor	
Transient cutoff	31V nominal	
OUTPUT		
Output voltage/current	See configuration table	
Output protection	Current limit / short circuit protection	
Output ripple	<50mV RMS (+5V output, 50% load)	
Load regulation	±3%	
Efficiency	80% to 92%, varies with load and input voltage	
MECHANICAL/ENVIRONMENTAL		
Size	3.55" x 3.775"	
PC/104 bus	J1 (64 pins) and J2 (40 pins) stackthrough connectors installed	
Operating temperature	-40 to +85°C	
Weight	5.0oz / 142g	

OUTPUT POWER		
JUPITER-MM-512		
+5V	10A	
+12V	2A	
JUPITER-MM-512-V512		
+5V	10A	
+12V	2A	
-5V	0.15A	
-12V	0.8A	

PC/104 BUS	POWER PINS
Ground	A32, B1, B31, B32, C0, D0, D18, D19
+5V	B3, B29, D16
+12V	B9
-12V	B7
-5V	B5

POWER SUPPLIES tel: 510-456-7800 w