

Data Sheet

PowerBank PB1004PFC

AC/DC Power Supply 4 Outputs, 1000W Low-Profile 1.75" (1U) SEMI F47 Compliant



All specifications are at nominal input, full load, 25°C, unless otherwise noted.

Input	
Input Voltage (nominal)	115/230Vac
Input Voltage Range	90-264Vac
Input Frequency	47-63 Hz
Inrush Current (cold start.)	<20 A at 115Vac, <40A at 230Vac
Input Fuse (internal)	20A
Power Factor (minimum)	0.95
Input Harmonics	EN 61000-3-2 Compliant
Line dropout	SEMI F47 Compliant when operated at 180-264Vac

Output					
Output	Α	В	С	D	
Maximum Output Current (Connector Limit)	80A	80A	40A		
Output Voltage (Factory configurable)	1.8 to 52 V	1.8 to 52 V	1.8 to 52 V		
Module Size	Maxi M	lini Micro	ı	Micro	
Output Voltage Setpoint (50% load)	±1.2% ±1	.2% ±1.2%	±1.2%		
Load Regulation, No load to full load (max)	±0.2% ±0.2% ±0.5%		<u>+</u>	0.5%	
Line Regulation, Low Line to High Line (max)	±0.2% ±0.2% ±0.5%		<u>+</u>	0.5%	
Remote Sense	Yes Yes No			No	
Output Trim	Yes Yes Yes			Yes	
Output Ripple and Noise	See individual Vicor module specifications.		cations.		
Maximum Output Power (Individual output)	600W 300W 150W 150		50 W		
Maximum Output Power (Total all outputs)	1000W, See output power derating chart on page 2.				

Environmental		
Operating Temperature Range	-20°C to 50°C	
(see output power derating on page 2)	-20 0 10 50 0	
Thermal Shutdown	100°C internal module shutdown, non-latching	
Storage Temperature Range	-40°C to 70°C	
Relative Humidity	5% -95% non-condensing	

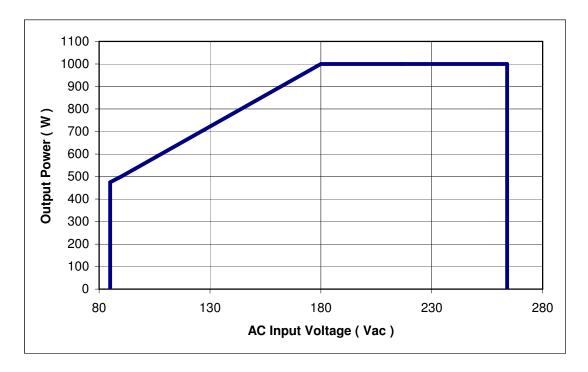
Safety	
Agency Approvals	cTUVus, CE
Safety Standard Compliance	EN 60950
Isolation, Primary-to-Secondary	3000Vrms
Isolation, Primary-Earth	1500Vrms
Isolation, Secondary-Earth	250Vrms



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Output Power Derating



At 25°C. Output power may be further limited at higher ambient temperature. Contact factory for details.

EMI and EMC	
Conducted Noise	EN55022 Class A (150kHz-30MHz)

Mechanical	
Dimensions (Approximate. See Mechanical Drawing for details.)	10.28" x 8.08" x 1.74"
Mounting Options (contact factory for details)	Universal Mounting Brackets Short Front Panel or Full 19" Front Panel
Cooling	Internal Fans
Weight (Typical, depends on configuration)	5.5 lb. (2.5 kg)

Input Power Connections					
Connector	Details				
IEC320	Standard pin configuration				
Optional Cord Retainer	Long Wire Bail	Short Wire Bail			
	NPI P/N 4340, Qualtek #730B-00/05	NPI P/N 4013, Qualtek #730B-00/00			

Front Par	nel LEDs One Red/Green LED fo	r each main output
Color	Signal Description	Details
Green	Output OK	Corresponding output voltage is correct, i.e. sufficiently high if output is populated or zero if output is not populated.
Red	Output Not OK	Corresponding output voltage is too low.



Output	Output Power Connections for Channels A and B				
		Details			
Pin Signal Description		Molex Minifit Sr. Connector (Option -M) (Molex 42820-4212)	Straight Bus Bar (Option -B)	Right-Angle Bus Bar (Option -R)	
1	+	Positive Terminal, 49A max	Positive Terminal, 1/4" Positive Terminal, Tapped 1/4-20 hole,		
2	+			100A max	
3	-			Negative Terminal, Tapped 1/4-20 hole,	
4	-	Negative Terminal, 49A max	1/4" hole, 100A max 100A max 100A max		

Output	Output Power Connections for Channels C and D (Molex 42820-4212)		
Pin Signal Description Details		Details	
1	+	Output D, Positive Terminal, 49A max	
2	-	Output D, Negative Terminal, 49A max	
3	+	Output C, Positive Terminal, 49A max	
4	-	Output C, Negative Terminal, 49A max	

Trim/R	Trim/Remote Sense Connections for Channels A and B (AMP 102617-1)			
(Remo	(Remote sense is active only if Maxi or Mini size module is installed.)			
Pin	Signal Description	Details		
1	+Sense B	Positive Sense Connection		
	+361136 D	(Internally connected to positive output through 50 Ω resistor fused by 0.17A Polyfuse)		
2	Trim B	Connect this pin with a resistor to Pin 1 for trim up, or to Pin 3 for trim down.		
3	- Sense B	Negative Sense Connection		
3	- Selise b	(Internally connected to negative output through 50 Ω resistor)		
4	+Sense A	Positive Sense Connection		
4	+SCIISC A	(Internally connected to positive output through 50 Ω resistor fused by 0.17A Polyfuse)		
5	Trim A	Connect this pin with a resistor to Pin 1 for trim up, or to Pin 3 for trim down.		
6	- Sense A	Negative Sense Connection		
0	- Selise A	(Internally connected to negative output through 50 Ω resistor)		

I/O Connections (Molex 70555-0038)		Note: All contr	rol signals are isolated; Input - 3,000 Vrms; Output - 250 Vrms; Chassis - 250 Vrms
Pin	Signal Desci	ription	Details
1	12V Au	X	12V/100mA Auxiliary Stand-By Output
2	Pgood		Open Collector, 40V/5mA, Active Low = Power Good
3	Inhibit		Connect to Pin 4 (Control Return) to inhibit all outputs, except 12V Aux.
4	Control Return		Reference for all signals on I/O connector. Return for 12V Aux.

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