

# PowerBank PBC1002AC(-G)

**AC/DC Power Supply**  
**2 Outputs**  
**1000W**  
**Conduction Cooled**



## Specifications

All specifications are at nominal input, 50% load, 25°C unless otherwise noted.

### Input

Nominal Input Voltage, Autoranging	115/230VAC
Input Voltage Range	95-132VAC or 180-264VAC
Input Frequency	47-400 Hz
Inrush Current (264 VAC peak line, cold start.)	30 Apk, max
Internal Input Fuse <sup>1</sup>	None
Power Factor (typ.)	0.60
Hold-Up Time (typical, at nominal input voltage)	16 ms (Power Fail Warning 4 ms minimum)

### Output

Output	A or B
Maximum Output Current (Connector Limit)	80A
Output Voltage Vout (Factory configurable)	1.8 to 52 V
Output Voltage Setpoint – Non-Trimmed Outputs, 50% Load	± 1.2%
Output Voltage Setpoint – Trimmed Outputs, 50% Load	± 2%
Load Regulation, No load to full load (max.)	± 0.2%
Line Regulation, Low Line to High Line (max.)	± 0.2%
Maximum Output Power, 12V and higher	500W
Maximum Output Power, 5V or less	80A x Vout
Remote Sense	Yes
Output Ripple and Noise	See individual Vicor modules specifications.

### Environmental

Minimum Operating Ambient/Baseplate Temperature <sup>2</sup>	-20°C
Maximum Operating Ambient Air Temperature	70°C
Maximum Operating Baseplate Temperature	90°C
Storage Temperature Range	-40°C to 70°C
Relative Humidity	5% -95% non-condensing

<sup>1</sup> External input fuse may be required to meet certain safety regulations. See Safety section.

<sup>2</sup> Unit will start up and operate down to -40°C with some performance degradation. Please contact factory for details.

<b>Safety</b>			
Agency Approvals <sup>3</sup>	cTUVus, CE		
Safety Standard Compliance	EN60950, CE		
Isolation, Primary-to-Secondary	3,000 Vrms		
Isolation, Primary-Earth	1,500 Vrms		
Isolation, Secondary-Earth	250 Vrms		
	PBC1002AC	PBC1002AC-G	PBC1002AC-G
Input Fuse Required (See Safety Approval Files)	20A	20A	15A
Approved Input Voltage Range	115/230Vac	<b>115Vac only</b>	115/230Vac

<b>EMI and EMC</b>	
Conducted Noise	EN55022 Class A (150kHz-30MHz)

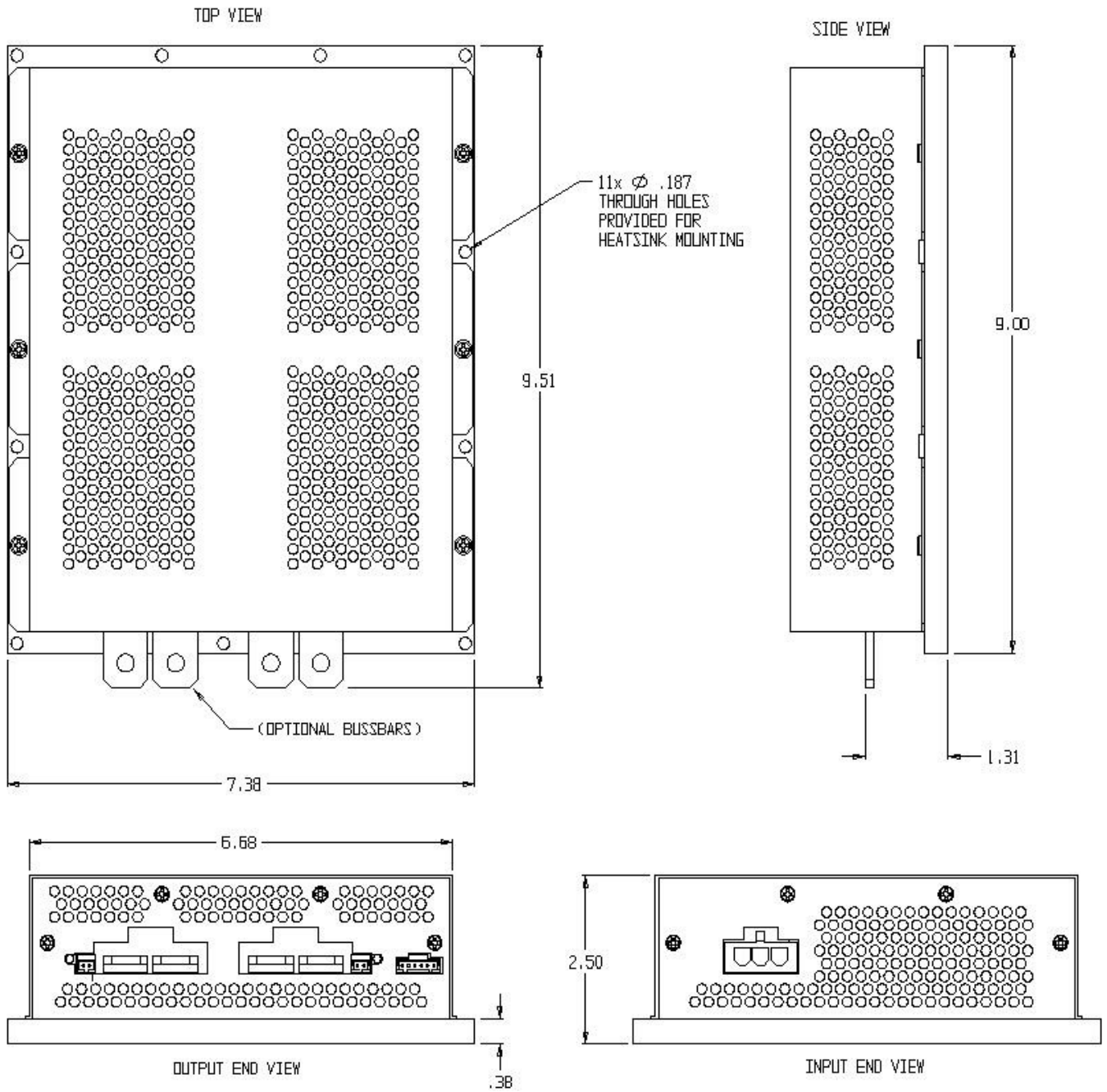
<b>Mechanical</b>	
Dimensions (not including output bussbars)	9.00" x 7.38" x 2.50 "
Cooling	Conduction Cooled to the Baseplate
Weight (Typical, depends on configuration)	6.25 lb.


<b>Maximum Output Power</b>	
Input Range	Max. Output Power <sup>4</sup>
115 VAC	800 W
230VAC	1000 W

<sup>3</sup> Pending for Model (-G)

<sup>4</sup> Output power must be limited as needed to not exceed the input fuse rating

# Mechanical Drawing



Input Connections		
Pin	Signal Description	Details
1	L1	AC Line 1
2		Safety Ground
3	L2 / N	AC Line 2 or Neutral

Output Connections			
Pin	Signal Description	Details	
		Option -M	Option -B
1	-	Negative Terminal, 49A max	Negative Terminal, 1/4" hole, 100A max
2	-	Negative Terminal, 49A max	
3	+	Positive Terminal, 49A max	Positive Terminal, 1/4" hole, 100A max
4	+	Positive Terminal, 49A max	

Outputs A and B - Remote Sense Connectors		
Pin	Signal Description	Details
1	+	Positive Sense Connection
2	-	Negative Sense Connection

I/O Connections			Note: All control signals are isolated; Input - 3,000 Vrms; Output - 250 Vrms; Chassis - 250 Vrms	
Pin	Signal Description	Details		
1	Output A Power Good	Open Collector, 60V/1mA, Active Low = Power Good		
2	Output B Power Good	Open Collector, 60V/1mA, Active Low = Power Good		
3	Not Connected	Reserved for future use.		
4	Output Inhibit or Enable	<b>Option -N</b>		<b>Option -E</b>
		Application of 5V/25mA signal inhibits all outputs. Optoisolator input with 200Ω series resistor.		Application of 5V/25mA signal enables all outputs. Optoisolator input with 200Ω series resistor.
5	AC Power Fail Warning	Open Collector, 60V/1mA, Active Low = Power Fail Warning		
6	I/O Control Signal Return	All I/O control signals on pins 1-7 are referenced to this pin.		

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Northwest Power Integrations, Inc. ♦ 4211 SE International Way, Suite F ♦ Milwaukie, OR, USA  
Tel: 503-652-6161 ♦ Fax: 503-652-6868 ♦ www.npi-inc.com