

Power Supply
Dual Input: AC and DC
1 or 2 Outputs
Low-Profile 1.68"



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

DC Input

Nominal Input Voltage Options	24V	28V	48V
Input Voltage Range	18-36V	10-36V	36-75V
Output Power	Based on specific module used		

AC 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 Power	850W max – Outputs A and B combined. See derating curve.

Output *

	A	B
Maximum Output Current (Connector Limit)	49A	49A
Output Voltage (Factory configurable)	1.8 to 52 V	1.8 to 52 V
Module Size Options (AC side)	Maxi or Mini	Mini
Module Size Options (DC side)	Maxi or Mini	Maxi or Mini
Output Voltage Set point (50% load)	±1.2%	±1.2%
Load Regulation, No load to full load (max.)	±0.2%	±0.2%
Line Regulation, Low Line to High Line (max.)	±0.2%	±0.2%
Maximum Output Power DC Input 48Vin; Output 12V	500W	500W
Remote Sense	Yes	Yes
Output Trim	±10%	±10%
Output Ripple and Noise	Vicor module specification	Vicor module specification
(*) Outputs A and B can be connected in parallel (with current sharing) or in series.		

Environmental

Operating Temperature Range	-20°C to 70°C
Storage Temperature Range	-40°C to 70°C
Relative Humidity	5% -95% non-condensing

Mechanical

Dimensions	10.5" x 7" x 1.68"
Cooling	Internal Fans
Outline Drawing	Available on www.npi-inc.com
Weight (Typical, depends on configuration)	6.6 lb. (3 kg)

AC Input Connector		Molex Sabre 43160-3103
Pin	Signal Description	Details
1	L1	AC Line Connection
2	Chassis	Chassis Connection
3	L2/N	AC Line or Neutral Connection

DC Input Connector		Molex MFS 42820-2212
Pin	Signal Description	Details
1	+IN	Positive Input Terminal
2	-IN	Negative Input Terminal

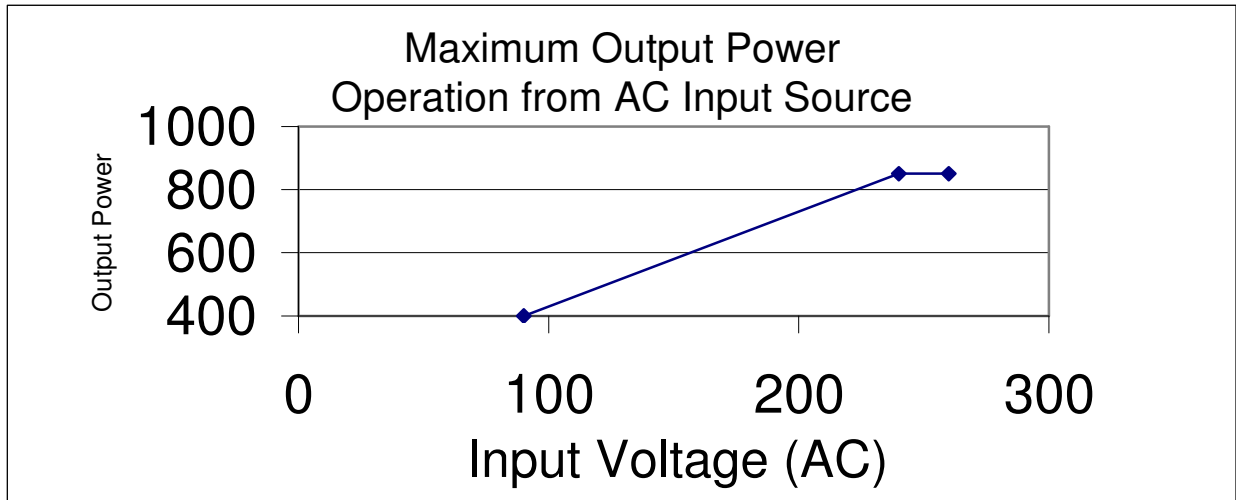
Outputs A and B		Molex MFS 42820-4212
Pin	Signal Description	Details
1	+	Output B Positive Terminal, 49A max
2	+	Output A Positive Terminal, 49A max
3	-	Output B Negative Terminal, 49A max
4	-	Output A Negative Terminal, 49A max

Trim/Remote Sense Connections for Channels A and B		(AMP 102617-1)
Pin	Signal Description	Details
1	+Sense A	Positive Sense Connection (Internally connected to positive output through 50 Ω resistor fused by 0.17A Polyfuse)
2	Trim A	Connect this pin with a resistor to Pin 1 for trim up, or to Pin 3 for trim down.
3	- Sense A	Negative Sense Connection (Internally connected to negative output through 50 Ω resistor)
4	+Sense B	Positive Sense Connection (Internally connected to positive output through 50 Ω resistor fused by 0.17A Polyfuse)
5	Trim B	Connect this pin with a resistor to Pin 4 for trim up, or to Pin 6 for trim down.
6	- Sense B	Negative Sense Connection (Internally connected to negative output through 50 Ω resistor)

I/O Connections		Molex 70555-0040
All control signals are isolated from AC and DC; Input - 3,000 Vrms; Output - 250 Vrms; Chassis - 250 Vrms		
Pin	Signal Description	Details
1	Inhibit DC-A	Apply 24V** to inhibit Output B running from DC input
2	Inhibit DC-B	Apply 24V** to inhibit Output A running from DC input
3	Inhibit AC-A	Apply 24V** to inhibit Output A running from AC input
4	Inhibit AC-B	Apply 24V** to inhibit Output B running from AC input
5		Not Connected
6	Control Return	Reference for all signals on I/O connector.
(**) Contact factory for other control voltage options.		

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

Output Power Derating



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