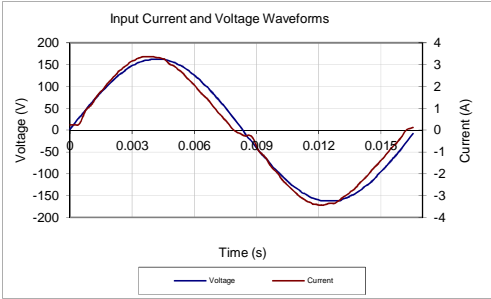


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	85.94%
AVERAGE EFFICIENCY :	84.29%
80 PLUS COMPLIANT:	YES



Ecos ID #	4081.3
Manufacturer	DELTA ELECTRONICS INC
Model Number	GPS-450EB E
Serial Number	VPF450SN1419000032
Year	2014
Type	ATX12V,EPS12V
Test Date	9/16/14

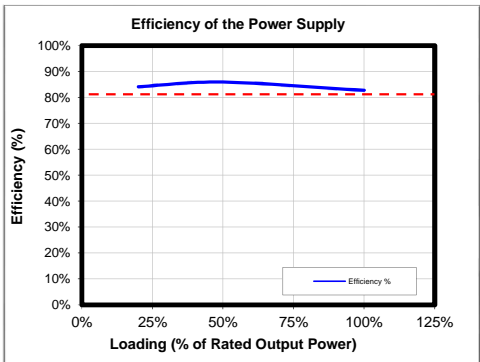
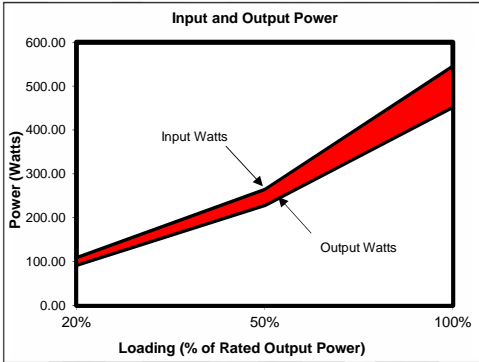


Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	8-4	Amps
Input Frequency	47-63	Hz
Rated Output Power	450	Watts

Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.

Input AC Current Waveform (ITHD = 9.21%, 50% Load)

I _{RMS} A	PF	I _{THD} (%)	Load (%)	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)					Output Watts	Efficiency %
					12V (cumulative of 12V1, 12V2, etc.)						
0.52	0.97	13.01%	10%	58.11	12.2/3	12.1/0	3.4/1	5.1/0.9	5.1/0.2	45.67	78.59%
0.96	0.98	11.71%	20%	108.59	12.1/6	12.1/0.1	3.4/2.1	5.1/1.9	5.1/0.4	91.40	84.17%
2.32	0.99	9.21%	50%	264.60	12.1/14.8	12.2/0.1	3.4/5.2	5.1/4.6	5/1.1	227.39	85.94%
4.76	1.00	7.16%	100%	545.70	12.1/29.6	12.3/0.3	3.3/10.3	5.1/9.2	5/2.1	451.62	82.76%



These tests were conducted by a third party independent testing firm on behalf of the 80 PLUS Program. 80 PLUS is a certification program to promote highly-efficient power supplies (greater than 80% efficiency in the active mode) in technology applications. <http://www.80plus.org/>

