

80 PLUS Verification and Testing Report

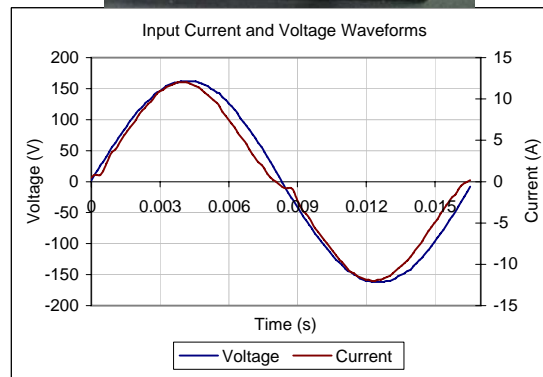
TYPICAL EFFICIENCY (50% Load):	87.29%
AVERAGE EFFICIENCY :	85.18%
80 PLUS COMPLIANT:	YES



Ecos ID #	911
Manufacturer	Hiper
Model Number	HPU-4M780
Serial Number	NA
Year	2008
Type	EPS12V
Test Date	9/18/2008

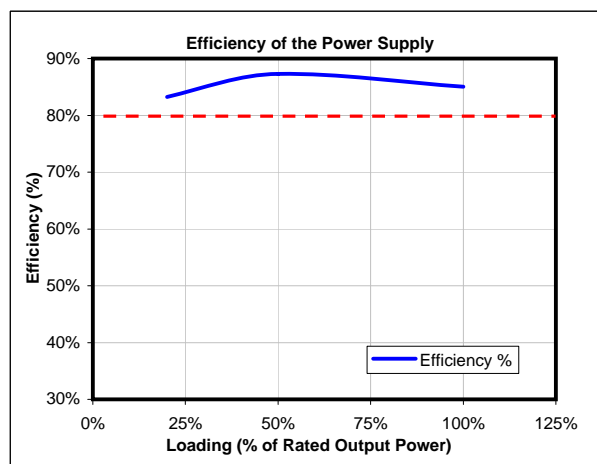
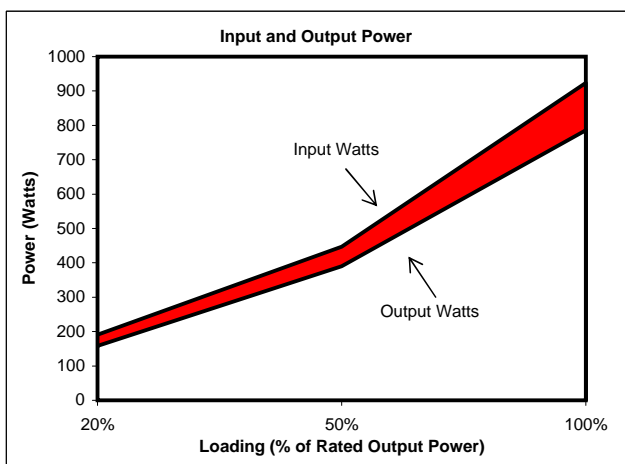
Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	10-5	Amps
Input Frequency	47-63	Hz
Rated Output Power	780	Watts

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



Input AC Current Waveform (ITHD = 12.2%, 50% Load)

I_{RMS} A	PF	I_{THD} (%)	Load (%)	Fraction of Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)					Output Watts	Efficiency %
						12V (cumulative of 12V1, 12V2, etc.)	-12V	3.3V	5V*	5VSB		
1.71	0.97	17.0%	20%	Light	191	12.1/10.1	12/0.2	3.4/3.8	5.1/3.5	5.2/0.6	159	83.25%
3.94	0.99	12.2%	50%	Typical	447	12.1/25.3	12/0.4	3.4/9.4	5.1/8.8	5.2/0.4	390	87.29%
8.09	0.99	9.7%	100%	Full	924	12.1/50.5	12/0.8	3.3/18.7	5.1/17.6	5.1/3.0	786	85.02%



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/>

