

# 80 PLUS Verification and Testing Report

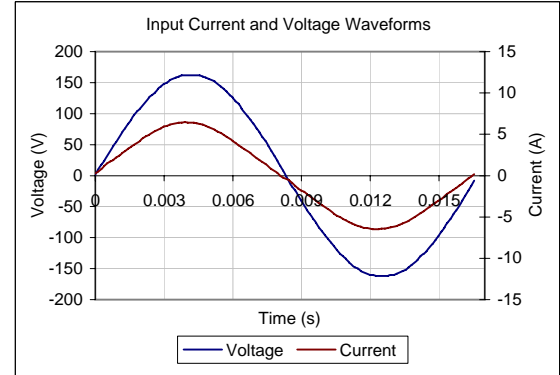


<b>TYPICAL EFFICIENCY (50% Load):</b>	<b>84.22%</b>
<b>AVERAGE EFFICIENCY :</b>	<b>82.40%</b>
<b>80 PLUS COMPLIANT:</b>	<b>YES</b>

<b>Ecos ID #</b>	582
<b>Manufacturer</b>	2THEMAX
<b>Model Number</b>	GPA-420
<b>Serial Number</b>	NA
<b>Year</b>	2008
<b>Type</b>	ATX12V
<b>Test Date</b>	3/3/2008

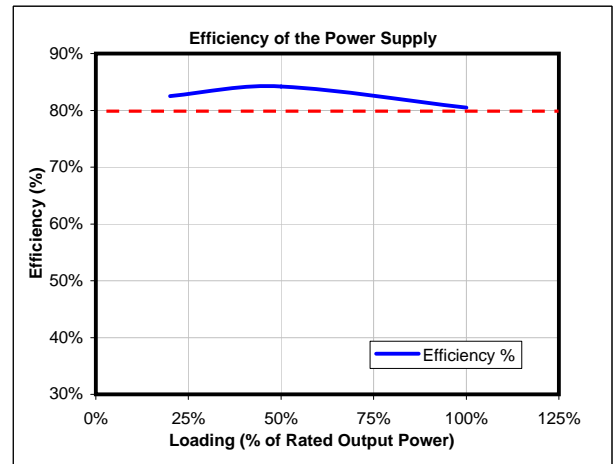
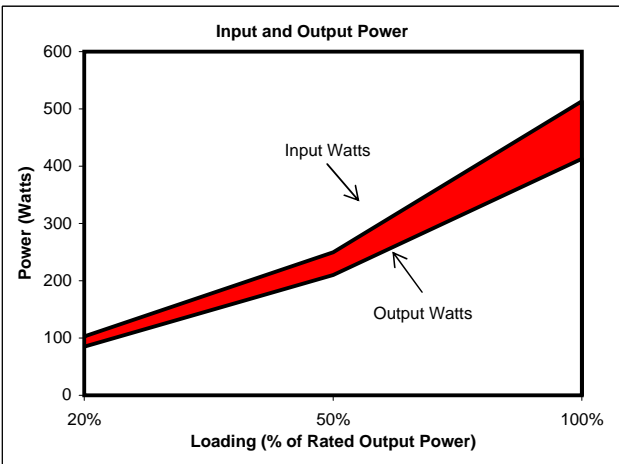
Rated Specifications	Value	Units
Input Voltage	115/230	Volts
Input Current	5	Amps
Input Frequency	50/60	Hz
<b>Rated Output Power</b>	<b>420</b>	<b>Watts</b>

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



Input AC Current Waveform (ITHD = 6.34%, 50% Load)

I <sub>RMS</sub> A	PF	I <sub>THD</sub> (%)	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		
0.91	0.98	6.0%	20%	Light	103	12.1/5	12.2/0.1	3.3/3	5/2.1	5.1/0.6	85	82.53%
2.18	0.99	6.3%	50%	Typical	249	12/12.5	12.3/0.1	3.2/7.5	5/5.3	5/1.5	210	84.22%
4.48	1.00	5.0%	100%	Full	513	11.8/25	12.4/0.3	3.2/14.9	4.9/10.7	4.9/3	413	80.45%



These tests were conducted as a part of the 80 PLUS program. 80 PLUS is a computer buy-down program to promote high-efficiency power supplies (greater than 80% efficiency in the active mode) in desktop computers and desktop-derived servers.



Tested by Electric Power Research Institute, Knoxville, TN.