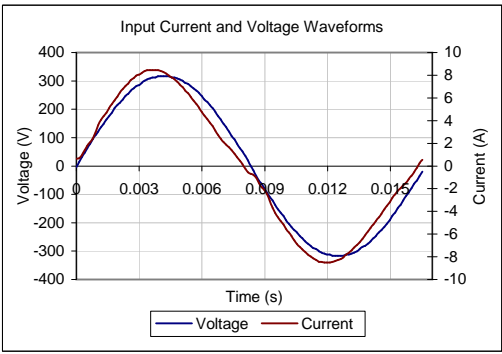


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	91.75%
AVERAGE EFFICIENCY :	89.93%
80 PLUS COMPLIANT:	YES



Ecos ID #	SO-53
Manufacturer	HEWLETT-PACKARD COMPANY
Model Number	438203-001
Serial Number	0837000174
Year	2009
Type	1U
Test Date	3/21/2009



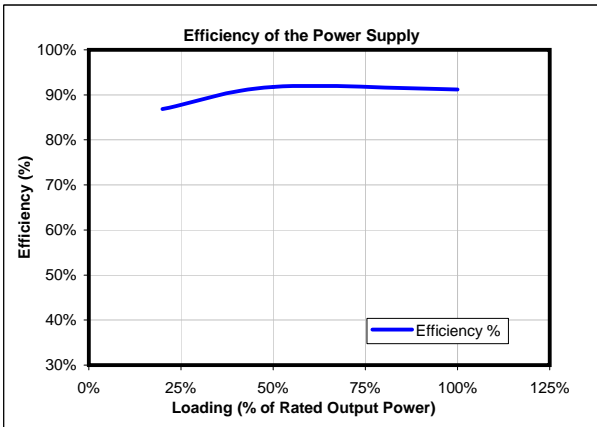
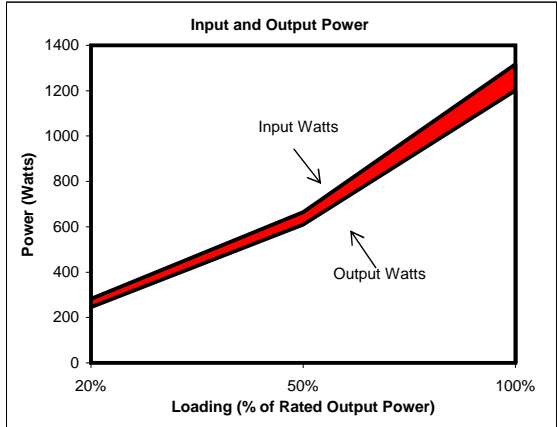
Rated Specifications	Value	Units
Input Voltage	100/240	Volts
Input Current	10/7.8	Amps
Input Frequency	50/60	Hz
Rated Output Power	1,200	Watts

Note: All measurements were taken with input voltage at 230 V nominal and 60 Hz.

Input AC Current Waveform (ITHD = 8.28%, 100% Load)

I _{RMS} A	PF	I _{THD} (%)	Load (%)	Fraction of Load	Input Watts	External Fan (W)**	DC Terminal Voltage (V)/ DC Load Current (A)			Output Watts	Efficiency %
							12V	12Vsb	0V		
0.87	0.78	28.50	*10%	Low	157	0.50	12.28/9.77	12/0.24	0/0	123	78.43%
1.36	0.90	18.90	20%	Light	282	0.63	12.26/19.53	11.97/0.49	0/0	245	86.84%
2.98	0.97	12.48	50%	Typical	664	0.76	12.19/48.8	11.97/1.22	0/0	609	91.75%
5.80	0.99	8.28	100%	Full	1317	3.28	12.01/97.58	11.9/2.45	0/0	1201	91.19%

* 10% load results are for informative purposes only and not included in certification requirements.
 ** Fan power is not included in the efficiency calculations



Tested by Electric Power Research Institute, Knoxville, TN.