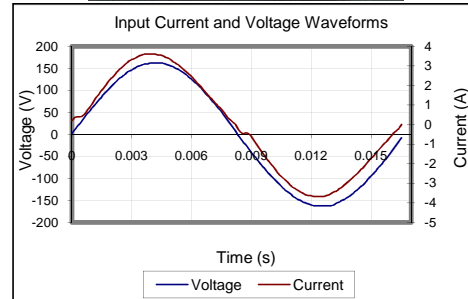


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	90.01%
AVERAGE EFFICIENCY :	89.34%
80 PLUS COMPLIANT:	YES



Ecos ID #	1589
Manufacturer	HEWLETT PACKARD
Model Number	HP-D3201E0
Serial Number	5ALUL0AM5XO05A
Year	2009
Type	CUSTOM
Test Date	8/19/2009

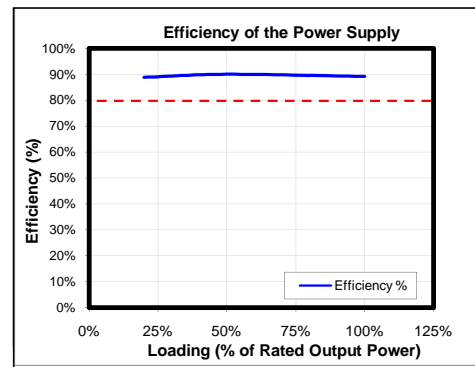
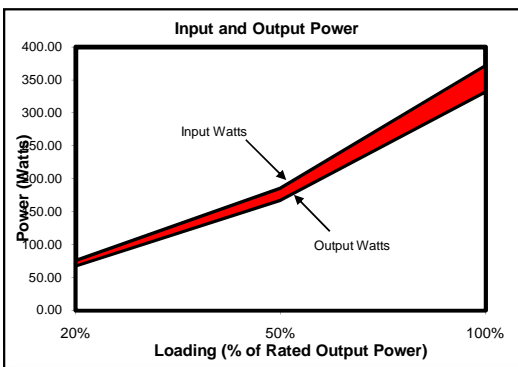


Input AC Current Waveform (ITHD = 5.54%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	5.5	Amps
Input Frequency	50-60	Hz
Rated Output Power	320	Watts

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

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	12VSB		
0.68	0.9740	15.27%	20%	Light	75.76	12.3/5.2	12/0	11.4/0.3	67.30	88.84%
1.63	0.9948	5.54%	50%	Typical	186.01	12.2/13	12/0.1	11.3/0.6	167.42	90.01%
3.25	0.9973	5.08%	100%	Full	372.20	12.1/26.1	12/0.1	11.3/1.3	331.88	89.17%



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.