

80 PLUS Verification and Testing Report

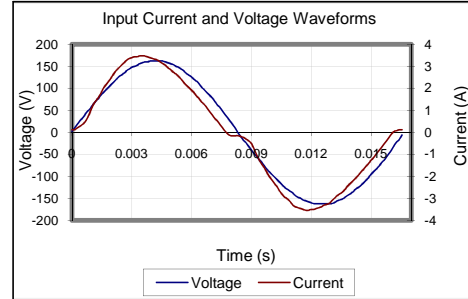
TYPICAL EFFICIENCY (50% Load):	90.39%
AVERAGE EFFICIENCY :	88.88%
80 PLUS COMPLIANT:	YES



Ecos ID #	1692
Manufacturer	DELL
Model Number	D235ES-00
Serial Number	N/A
Year	2009
Type	CUSTOM
Test Date	9/23/2009

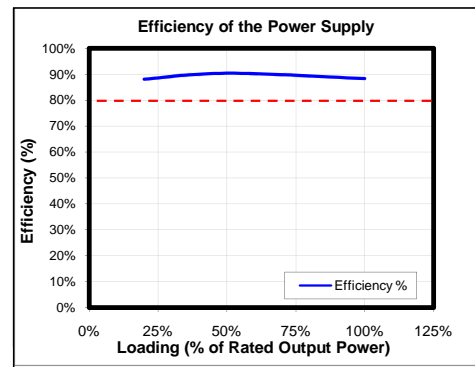
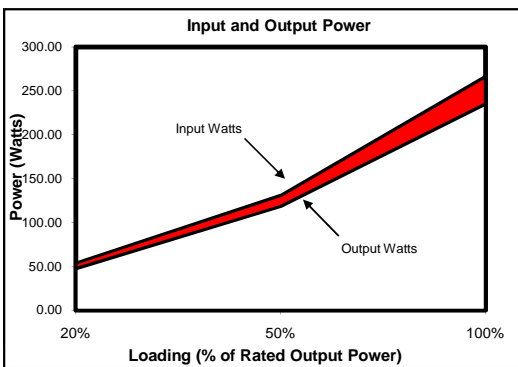
Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	5	Amps
Input Frequency	50-60	Hz
Rated Output Power	235	Watts

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



Input AC Current Waveform (ITHD = 18.85%, 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.)						
0.49	0.9534	24.00%	20%	Light	53.88	12/2.5	11.7/0.1	3.4/0.7	5.1/2.1	5.1/0.6	47.41	87.99%
1.17	0.9744	18.85%	50%	Typical	130.95	12/6.3	11.7/0.2	3.4/1.7	5.1/5.4	5/1.5	118.37	90.39%
2.35	0.9835	13.14%	100%	Full	266.50	12/12.6	11.8/0.4	3.3/3.4	5.1/10.7	5/3	235.19	88.25%



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.