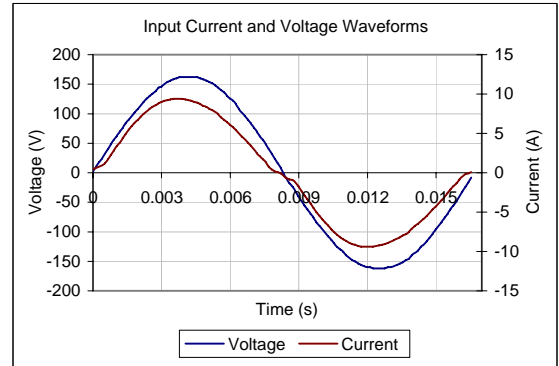


80 PLUS Verification and Testing Report



TYPICAL EFFICIENCY (50% Load):	89.01%
AVERAGE EFFICIENCY :	87.10%
80 PLUS COMPLIANT:	YES

Ecos ID #	965
Manufacturer	FSP
Model Number	FSP650-90TSN
Serial Number	NA
Year	2008
Type	ATX12V
Test Date	9/30/2008

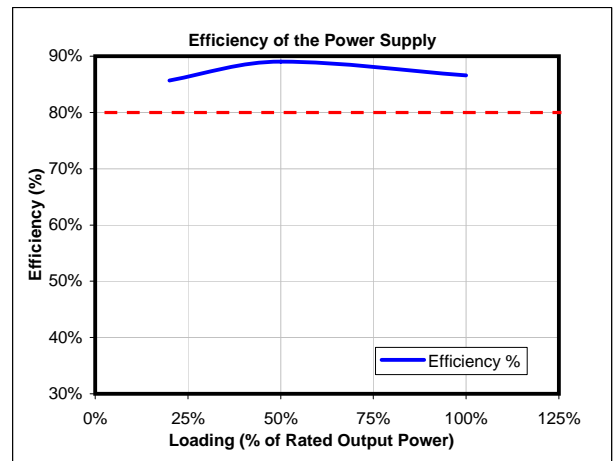
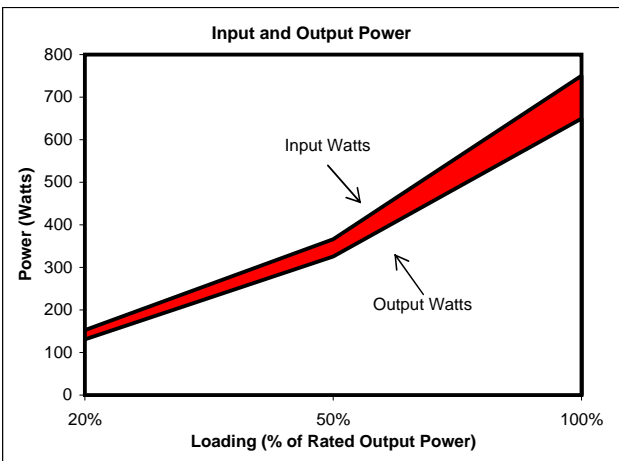


Input AC Current Waveform (ITHD = 10.16%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	12	Amps
Input Frequency	50-60	Hz
Rated Output Power	650	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	3.3V	5V*			5VSB
1.36	0.98	15.7%	20%	Light	153	12.1/8.3	12/0.1	3.3/2.8	5.1/3.5	5/0.5	131	85.68%
3.22	0.99	10.2%	50%	Typical	366	12/20.8	12.1/0.2	3.3/7.1	5/8.8	5/1.1	326	89.01%
6.56	0.99	7.5%	100%	Full	750	12/41.6	12.1/0.4	3.3/14.1	5/17.7	5/2.3	650	86.60%



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.