

80 PLUS Verification and Testing Report

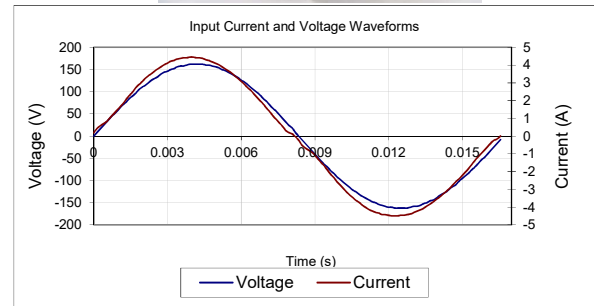
TYPICAL EFFICIENCY (50% Load):	91.11%
AVERAGE EFFICIENCY :	89.71%
80 PLUS COMPLIANT:	YES



Ecos ID #	4502
Manufacturer	FSP Technology Inc.
Model Number	HGX650
Serial Number	N/A
Year	2015
Type	ATX12V
Test Date	12/17/15

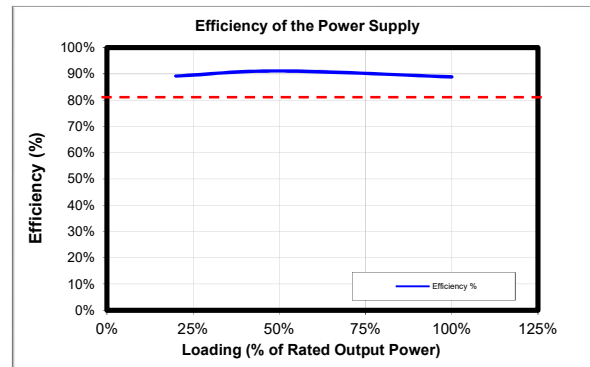
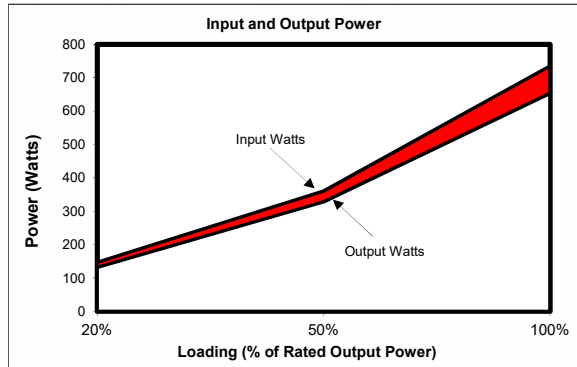
Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	10-5	Amps
Input Frequency	60/50	Hz
Rated Output Power	650	Watts

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



Input AC Current Waveform (ITHD = 4.93%, 50% Load)

I _{RMS} A	PF	I _{THD} (%)	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		
0.70	0.95	15.74%	10%	77.28	12.13/4.49	12.22/0.02	3.36/1.2	5.04/1.2	5.13/0.21	65.82	85.18%
1.30	0.99	7.44%	20%	147.49	12.13/8.98	11.95/0.05	3.36/2.39	5.03/2.38	5.02/0.41	131.51	89.16%
3.15	1.00	4.93%	50%	360.60	12.1/22.49	11.91/0.12	3.34/5.98	5.01/5.93	5.14/1.03	328.56	91.11%
6.40	1.00	4.50%	100%	735.00	12.06/44.85	12.01/0.25	3.31/11.92	4.98/11.86	5.16/2.07	653.06	88.85%



These tests were conducted by a third party independent testing firm on behalf of the 80 PLUS Program. 80 PLUS is a certification program to promote highly-efficient power supplies (greater than 80% efficiency in the active mode) in technology applications.
<http://www.80plus.org/>

