

80 PLUS Verification and Testing Report

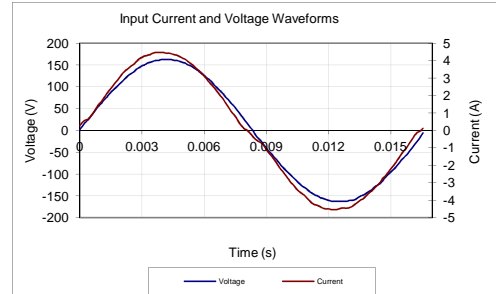
TYPICAL EFFICIENCY (50% Load):	91.07%
AVERAGE EFFICIENCY :	89.58%
80 PLUS COMPLIANT:	YES



Ecos ID #	3299.3
Manufacturer	Antec, Inc
Model Number	TP-650C
Serial Number	CR08A80840025
Year	2012
Type	ATX12V,EPS12V
Test Date	10/2/12

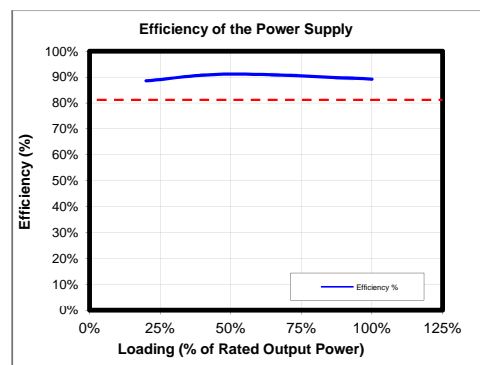
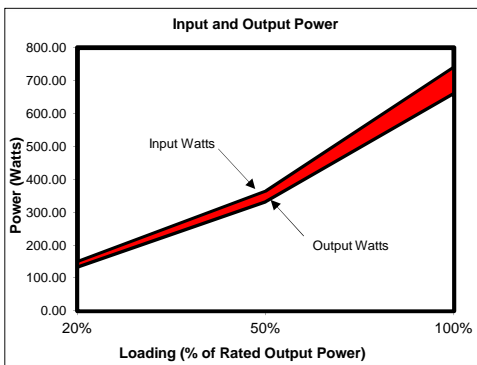
Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	9-4.5	Amps
Input Frequency	50-60	Hz
Rated Output Power	650	Watts

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



Input AC Current Waveform (ITHD = 5.14%, 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		
0.71	0.98	8.41%	10%	79.77	12.3/4.6	11.7/0	3.4/1	5.1/1	5/0.2	66.72	83.65%
1.32	0.99	6.47%	20%	150.55	12.3/9.2	11.7/0.1	3.4/2	5.1/2	5/0.4	133.24	88.50%
3.18	1.00	5.14%	50%	364.60	12.2/23	11.9/0.1	3.4/5.1	5.1/5.1	5/1.1	332.03	91.07%
6.46	1.00	5.17%	100%	741.50	12.2/46.1	12.3/0.3	3.4/10.2	5.1/10.2	5/2.1	661.18	89.17%



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/>

