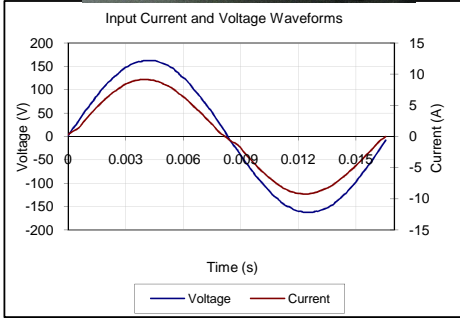


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	85.55%
AVERAGE EFFICIENCY :	83.44%
80 PLUS COMPLIANT:	YES



Ecos ID #	1462
Manufacturer	ZALMAN USA, INC.
Model Number	ZM600-RS
Serial Number	S915000007
Year	2009
Type	ATX12V & EPS12V
Test Date	6/2/2009

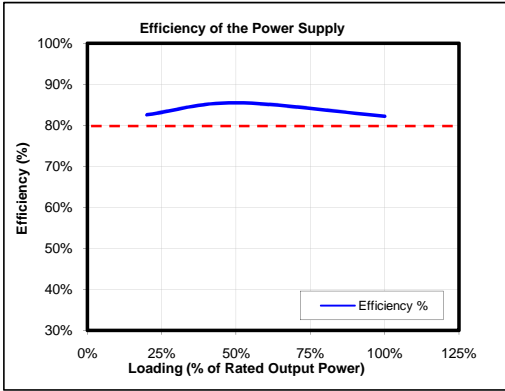
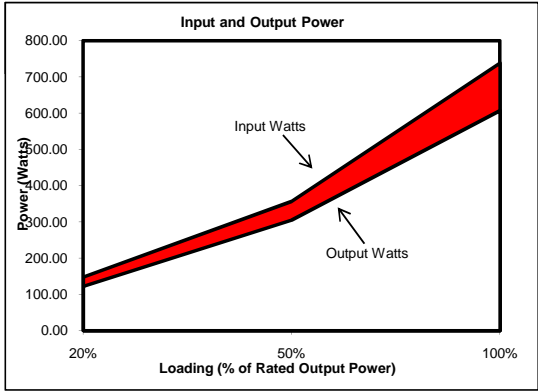


Input AC Current Waveform (ITHD = 5.6%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	11-6	Amps
Input Frequency	50-60	Hz
Rated Output Power	600	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		
1.07	0.9909	6.70%	20%	Light	148.13	12.2/7.8	12.4/0.1	3.4/2.7	5.1/2.7	5.1/0.5	122.31	82.57%
3.11	0.9975	5.60%	50%	Typical	356.90	12.2/19.6	12.6/0.2	3.4/6.9	5.1/6.8	5/1.2	305.32	85.55%
6.43	0.9982	5.17%	100%	Full	738.60	12.1/39.2	12.6/0.4	3.4/13.7	5.1/13.7	5/2.4	607.09	82.20%



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/>

