80 PLUS Verification and Testing Report

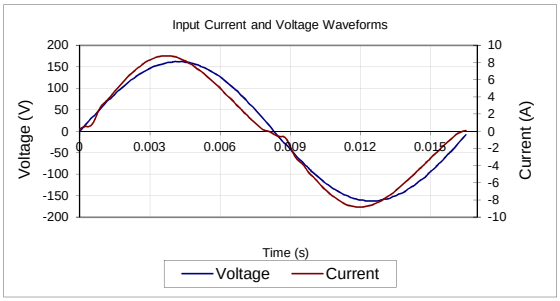


TYPICAL EFFICIENCY (50% Load):	**90.95%**
AVERAGE EFFICIENCY :	**89.55%**
80 PLUS COMPLIANT:	**YES**

Ecos ID #	4441
Manufacturer	Zalman Tech Co., Ltd
Model Number	ZM1200-EBT
Serial Number	N/A
Year	2015
Type	ATX12V,EPS12V
Test Date	9/9/15

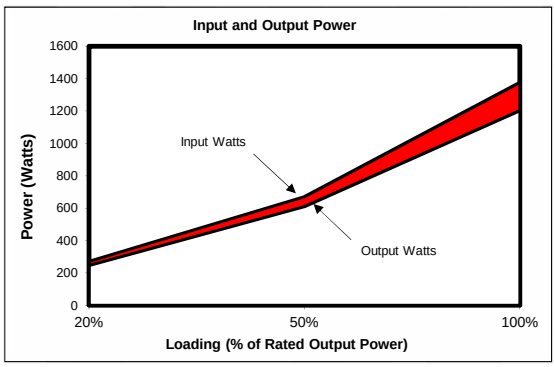
Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	15	Amps
Input Frequency	50-60	Hz
Rated Output Power	**1200**	**Watts**

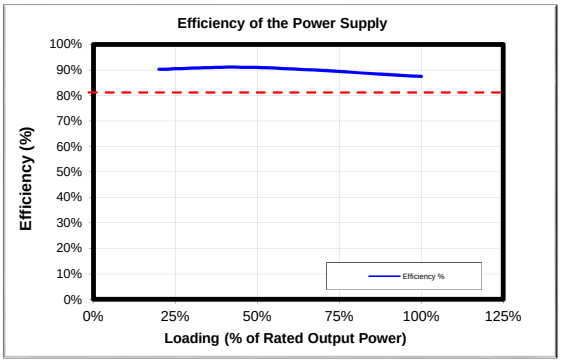
Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.



Input AC Current Waveform (ITHD = 11.17%, 50% Load)

I_{RMS} A	PF	I_{THD} (%)	Load (%)	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)					Output Watts	Efficiency %
A					12V (cumulative of 12V1, 12V2, etc.)	-12V	3.3V	5V	5Vsb		
1.32	0.93	29.34%	10%	142.22	12.26/8.9	11.89/0.03	3.37/1.39	5.15/1.39	5.14/0.35	123.06	**86.53%**
2.45	0.96	20.57%	20%	271.90	12.24/17.79	11.88/0.05	3.36/2.78	5.14/2.76	5.12/0.71	245.42	**90.26%**
5.90	0.99	11.17%	50%	670.30	12.18/44.4	11.88/0.13	3.35/6.94	5.12/6.89	5.07/1.77	609.64	**90.95%**
12.03	0.99	7.37%	100%	1375.30	12.07/88.33	12/0.27	3.32/13.84	5.08/13.76	4.98/3.55	1202.67	**87.45%**





PLUG LOAD solutions

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/

80 PLUS