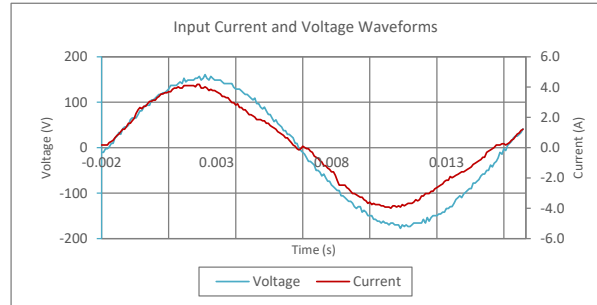


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	90.56%
AVERAGE EFFICIENCY :	89.40%
80 PLUS COMPLIANT:	YES



ID Number	6231
Manufacturer	HUNTKEY ELECTRIC CO.,LTD.
Model Number	HK650-51PP
Serial Number	N/A
Year	2020
Type	ATX12V
Test Date	12/11/20

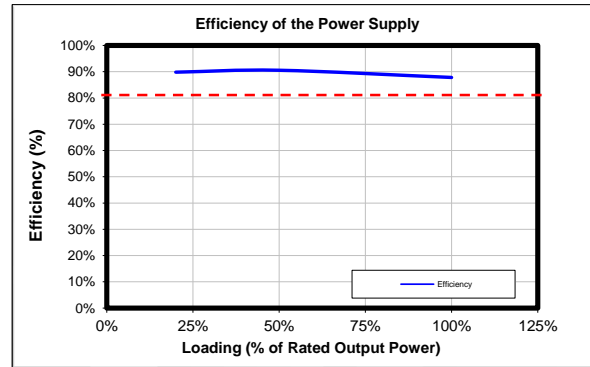
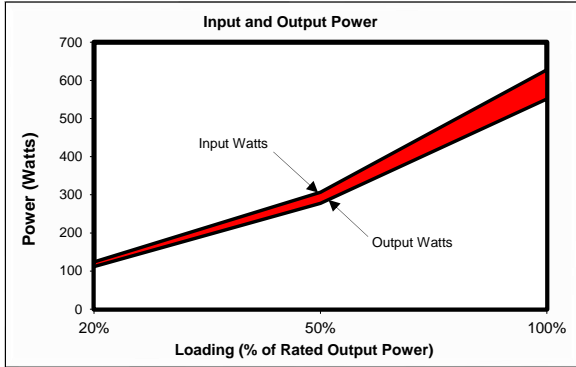


Input AC Current Waveform (ITHD = 9.47%, 50% Load)

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	8.3-3.3	Amps
Input Frequency	50-60	Hz
Rated Output Power	550	Watts

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

I _{RMS}	PF	I _{THD}	Load	Input Watts	DC Terminal Voltage (V)/ DC Load Current (A)					Output Watts	Efficiency
					12V (cumulative of 12V1, 12V2, etc.)						
0.60	0.94	14.08%	10%	65.68	12.13/3.67	-12V	3.3V	5V	5Vsb	56.03	85.31%
1.10	0.98	9.48%	20%	124.20	12.15/7.32	12.09/0.05	3.35/2.33	5.07/2.32	5.02/0.5	111.57	89.83%
2.69	0.99	9.47%	50%	306.70	12.08/18.33	12.01/0.13	3.33/5.84	5.02/5.78	4.96/1.26	277.73	90.56%
5.50	0.99	7.14%	100%	627.70	12.04/36.6	12.27/0.25	3.27/11.68	4.93/11.55	4.87/2.52	551.21	87.81%



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/>

