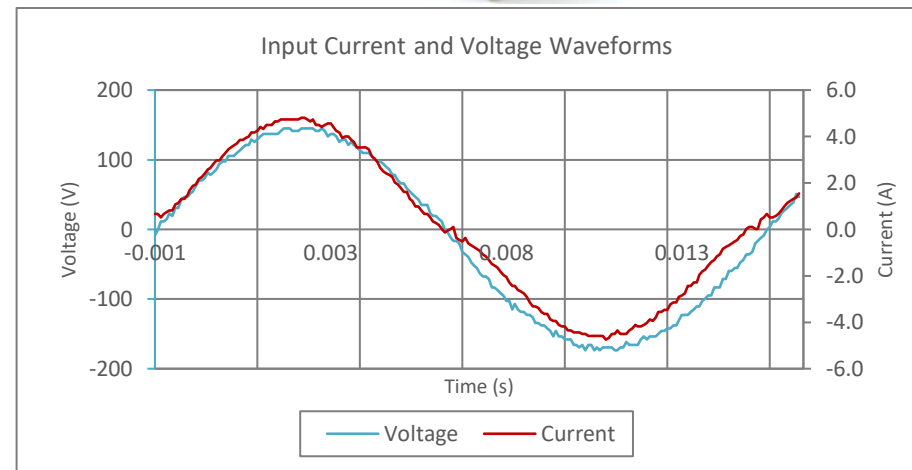


80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	91.49%
AVERAGE EFFICIENCY :	90.34%
80 PLUS COMPLIANT:	YES



ID Number	5579
Manufacturer	HIGH POWER ELECTRONIC CO., LTD.
Model Number	HP1-J650GD-F12S (C)
Serial Number	N/A
Year	2019
Type	ATX12V
Test Date	6/20/19

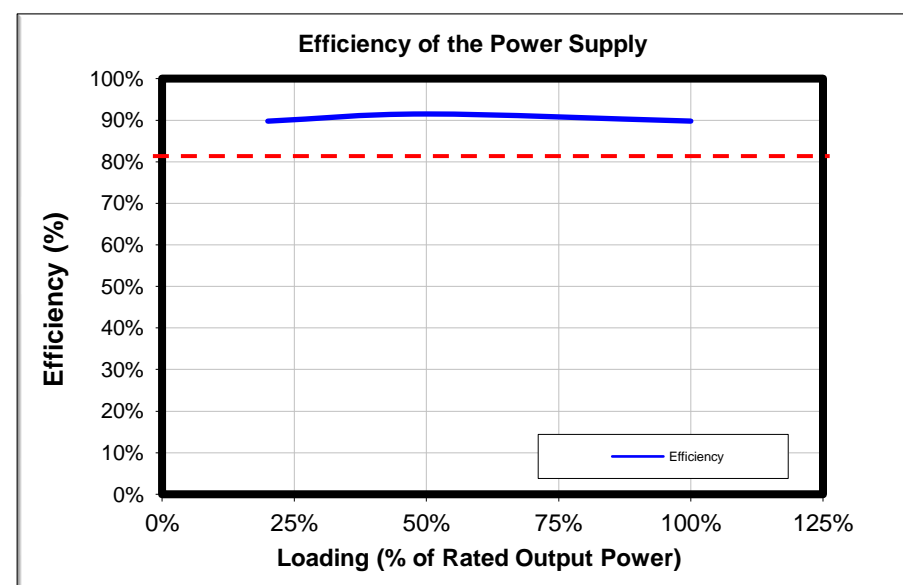
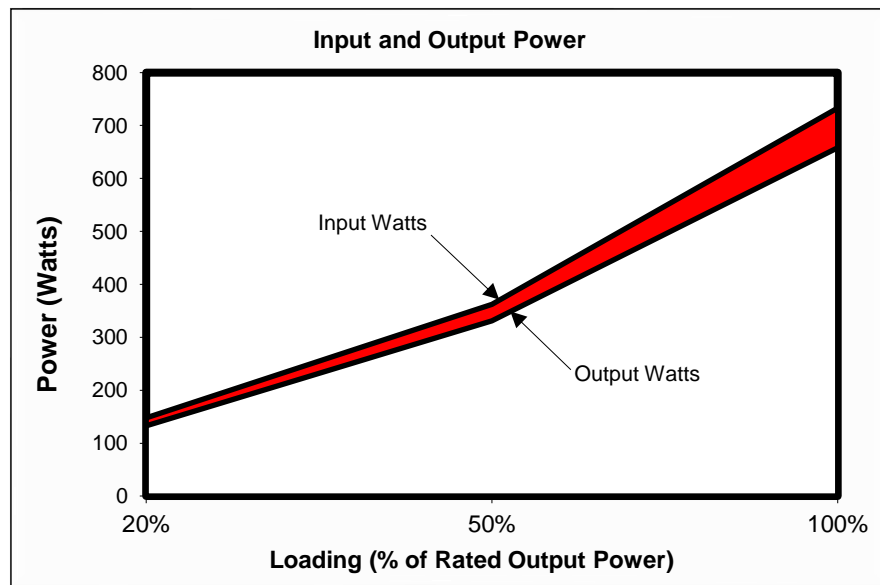


Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	10	Amps
Input Frequency	50-60	Hz
Rated Output Power	650	Watts

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

Input AC Current Waveform (ITHD = 8.32%, 50% Load)

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.)	-12V	3.3V	5V	5Vsb		
0.70	0.97	14.84%	10%	77.90	12.26/4.47	11.87/0.02	3.36/1.19	5.06/1.19	5.13/0.25	66.35	85.17%
1.30	0.99	12.32%	20%	147.90	12.25/8.96	11.82/0.05	3.35/2.38	5.05/2.37	5.11/0.49	132.75	89.76%
3.16	1.00	8.32%	50%	361.90	12.21/22.43	11.64/0.12	3.32/5.97	5.02/5.91	5.06/1.24	331.10	91.49%
6.39	1.00	6.99%	100%	733.10	12.16/44.82	11.84/0.25	3.28/11.94	4.97/11.8	4.98/2.47	658.17	89.78%



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/>

