80 PLUS Verification and Testing Report

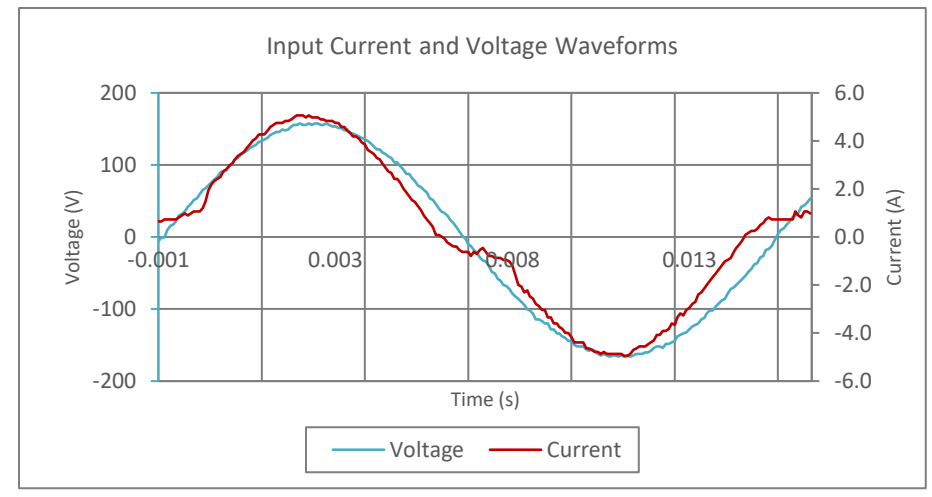
TYPICAL EFFICIENCY (50% Load):	**90.77%**
AVERAGE EFFICIENCY :	**89.29%**
80 PLUS COMPLIANT:	**YES**



ID Number	6414
Manufacturer	COUGAR
Model Number	GES
Serial Number	N/A
Year	2021
Type	ATX12V
Test Date	2/12/21

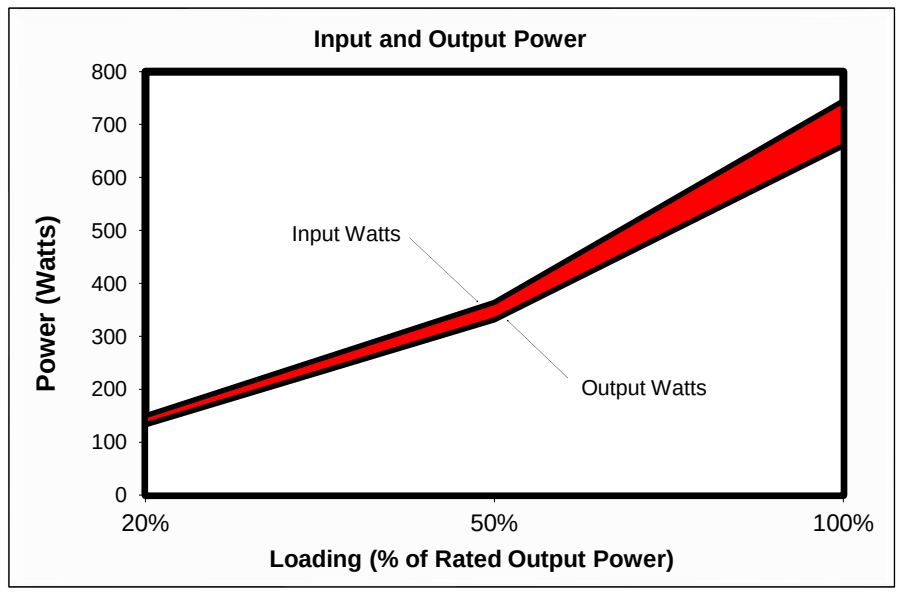
Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	10-5	Amps
Input Frequency	50-60	Hz
Rated Output Power	**650**	**Watts**

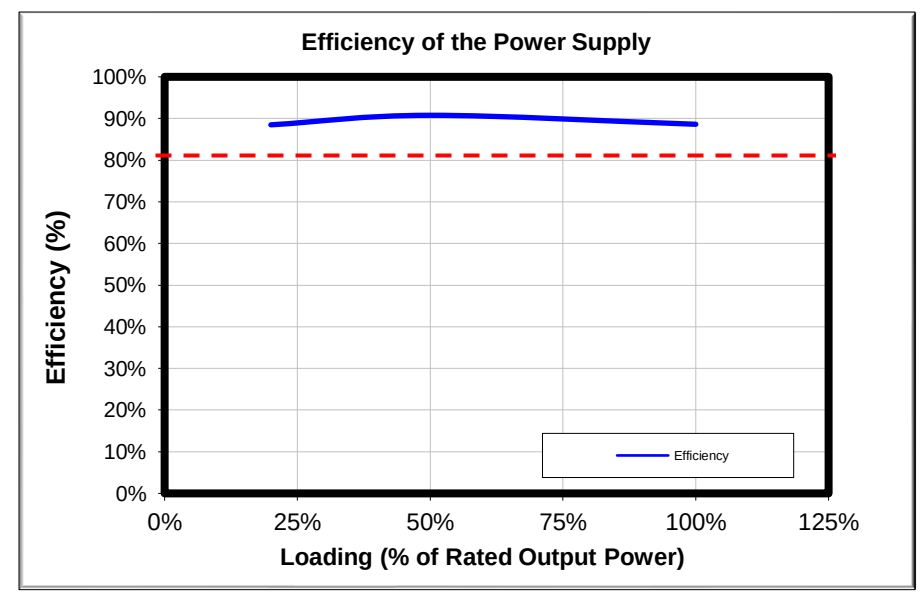
Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.



Input AC Current Waveform (ITHD = 15.38%, 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		
0.72	0.97	13.86%	10%	80.10	12.17/4.6	11.65/0.03	3.35/1.02	5.06/1.02	5.11/0.25	66.19	**82.64%**
1.33	0.98	15.74%	20%	149.55	12.17/9.2	11.67/0.05	3.34/2.04	5.06/2.03	5.09/0.51	132.31	**88.47%**
3.22	0.98	15.38%	50%	364.40	12.19/23.01	11.79/0.13	3.32/5.09	5.03/5.06	5.05/1.27	330.75	**90.77%**
6.54	0.99	11.91%	100%	744.80	12.2/45.97	12.13/0.25	3.27/10.21	4.99/10.1	4.98/2.54	660.00	**88.61%**





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/*