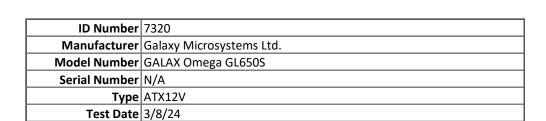
## **80 PLUS Verification and Testing Report**

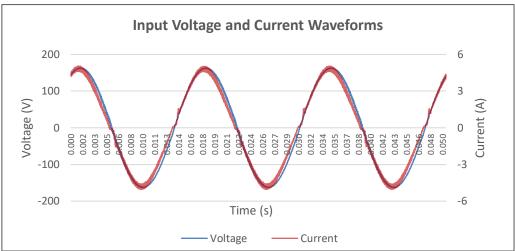
TYPICAL EFFICIENCY (50% Load):	87.75%
AVERAGE EFFICIENCY:	83.79%
80 PLUS COMPLIANT:	Bronze



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

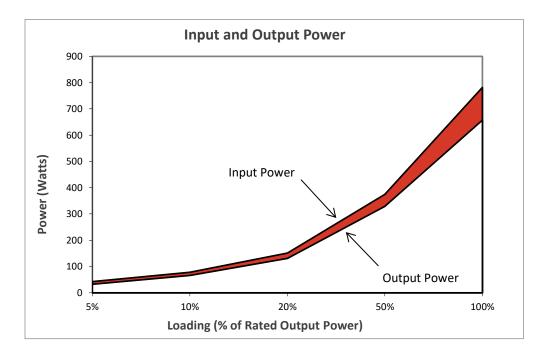
Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.

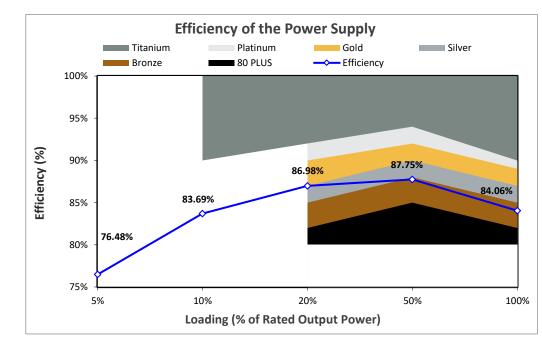




Input AC Current Waveform (ITHD = 5.01%, 50% Load)

	PF	= I <sub>THD (%)</sub>	Load	Input	DC Terminal Voltage (V)/ DC Load Current (A)				Output	Efficiency	
IRMS (A)				Watts	12V (cumulative of 12V1, 12V2, etc.)	-12V	3.3V	5V	5Vstb	Watts	Efficiency
0.105	0.4528	25.08	0%	5.46	No-Load No-Load						
0.396	0.9430	11.83	5%	42.95	12.11/2.3	12.02/0.013	3.38/0.51	5.09/0.51	5.16/0.106	32.85	76.48%
0.698	0.9776	8.45	10%	78.52	12.11/4.6	12.08/0.025	3.38/1.02	5.09/1.02	5.15/0.212	65.71	83.69%
1.327	0.9905	6.58	20%	151.13	12.12/9.19	12.17/0.051	3.37/2.04	5.08/2.04	5.13/0.424	131.45	86.98%
3.273	0.9953	5.01	50%	374.67	12.14/22.99	12.44/0.127	3.34/5.11	5.05/5.11	5.06/1.06	328.76	87.75%
6.815	0.9980	3.79	100%	781.90	12.16/45.97	12.91/0.254	3.3/10.22	5.01/10.22	4.95/2.119	657.25	84.06%







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. <a href="http://www.80plus.org/">http://www.80plus.org/</a>