80 PLUS Verification and Testing Report

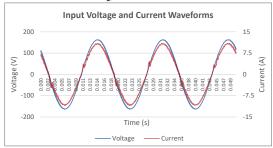
TYPICAL EFFICIENCY (50% Load):	94.03%
AVERAGE EFFICIENCY :	90.73%
80 PLUS COMPLIANT:	Titanium

ID Number	7090
Manufacturer	Be Quiet
Model Number	P13-PRO-1600W
Serial Number	N/A
Year	2023
Туре	ATX12V
Test Date	6/29/23

Rated Specifications	Value	Units
Input Voltage	115-240	Volts
Input Current	15-9	Amps
Input Frequency	50-60	Hz
Rated Output Power	1600	Watts

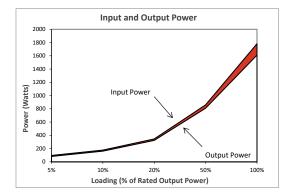
Note: All measurements were taken with input voltage at 115 V nominal at 60 Hz.

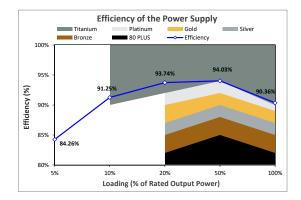




Input AC Current Waveform (ITHD = 4.36%, 50% Load)

I _{RMS (A)}	PF	1	Load	Input	DC Terminal Voltage (V)/ DC Load Current (A)				Output	Efficiency													
	PF	THD (%)		Load	Load	Load	Load	Load	Luau	LUau	Luau	Luau	Luau	LUau	Loau	LUau	LUAU	Watts	12V (cumulative of 12V1, 12V2, etc.)	-12V	3.3V	5V	5Vsb
0.194	0.6371	19.59	0%	14.23	No-Load																		
0.871	0.9580	11.89	5%	96.00	12.11/6.02	12.25/0.02	3.35/0.82	5.05/0.82	5.05/0.16	80.88	84.26%												
1.556	0.9898	12.46	10%	177.18	12.1/12.03	12.25/0.06	3.37/1.63	5.08/1.63	5.07/0.32	161.69	91.25%												
3.021	0.9943	9.94	20%	345.59	12.08/24.15	12.26/0.09	3.42/3.26	5.13/3.26	5.12/0.63	323.96	93.74%												
7.487	0.9986	4.36	50%	859.61	12.03/60.24	12.28/0.23	3.56/8.14	5.27/8.14	5.25/1.58	808.29	94.03%												
15.534	0.9974	4.57	100%	1782.01	11.94/120.19	12.31/0.45	3.8/16.19	5.52/16.27	5.45/3.16	1610.28	90.36%												







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/