80 PLUS Verification and Testing Report

TYPICAL EFFICIENCY (50% Load):	92.40%
AVERAGE EFFICIENCY:	91.10%
80 PLUS COMPLIANT:	YES



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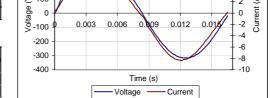
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Ecos ID #	SO-62
Manufacturer	SUPER MICRO COMPUTER INC.
Model Number	PWS-1K21P-1R
Serial Number	N/A
Year	2009
Туре	1U
Test Date	4/17/2009

Rated Specifications	Value	Units
Input Voltage	100-240	Volts
Input Current	8-5	Amps
Input Frequency	50/60	Hz
Rated Output Power	1,200	Watts



Input Current and Voltage Waveforms

400

300

200

€ 100

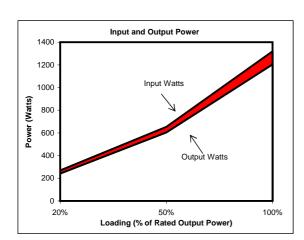
Note: All measurements were taken with input voltage at 230 V nominal and 60 Hz.

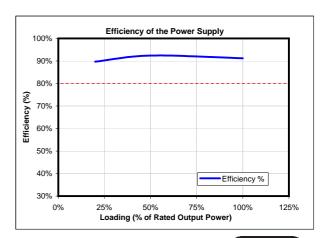
Input AC Current Waveform (ITHD = 5.3%, 100% Load)

I _{RMS}	PF	I _{THD} (%)	Load	Fraction Input		External	DC Terminal Voltage (V)/ DC Load Current (A)			Output	
Α			(%)	of Load	Watts	Fan (W)**	12V	5Vsb	0V	Watts	Efficiency %
0.78	0.80	26.54	*10%	Low	143	19.00	12.09/9.86	5.08/0.39	0/0	121	84.71%
1.27	0.92	15.65	20%	Light	270	18.88	12.09/19.69	5.07/0.79	0/0	242	89.67%
2.90	0.98	8.56	50%	Typical	654	18.88	12.07/49.2	5.04/1.98	0/0	604	92.40%
5.78	0.99	5.30	100%	Full	1320	18.88	12.04/98.39	4.98/3.94	0/0	1204	91.22%

^{* 10%} load results are for informative purposes only and not included in certification requirements.

 $[\]ensuremath{^{**}}$ Fan power is not included in the efficiency calculations







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/

