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

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



0.012

0.015

6

4

2

-4

-6

3 0 Current (

Ecos ID #	SO-235.2				
Manufacturer	Super Micro Computer, Inc.				
Model Number	PWS-1K63S-1R				
Serial Number	N/A				
Year	2011				
Туре	1U				
Test Date	1/21/2011				

100-240	Volts
12-8	Amps
50-60	Hz
1,620	Watts
	12-8 50-60



Time (s)

0.006

Input Current and Voltage Waveforms

9,003

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

Input AC Current Waveform (ITHD = 4.59%, 50% Load)

RMS	PF	I <sub>тнD</sub> (%)	Load	Fraction	Input	External	DC Terminal Voltage (V)/ DC Load Current (A)		Output			
Α			(%)	of Load	Watts	Fan (W)**	12V	5Vsb	Watts	Efficiency %		
0.92	0.87	12.27	*10%	Low	185	0.96	12.03/13.32	5.06/0.4	162	87.62%		
1.64	0.94	6.41	20%	Light	354	7.20	12.03/26.68	5.05/0.79	325	91.92%		
3.82	0.98	4.59	50%	Typical	864	1.20	12.03/66.67	5.05/1.98	812	94.00%		
7.76	0.99	3.11	100%	Full	1775	2.16	12.02/133.36	5.04/3.95	1623	91.43%		

94.00% 92.45% YES

400

300

200

 $\mathrm{S}^{\mathrm{100}}$ 

0 0 100-100 -200 0

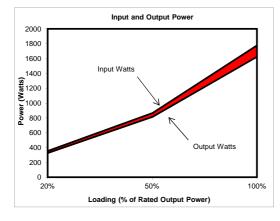
-300

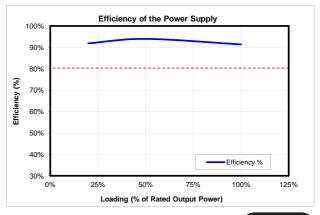
-400

0.003

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

\*\* Fan power is not included in the efficiency calculations







PLUG LOAD SOLUTIONS 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/

