

Lab ID#: SL10002140  
Receipt Date: Dec 24, 2022  
Test Date: Feb 22, 2023

Report: 23PS2140A  
Report Date: Feb 22, 2023

DUT INFORMATION		DUT SPECIFICATIONS	
Brand	SilverStone	Rated Voltage (Vrms)	100-240
Manufacturer (OEM)	Enhance Electronics	Rated Current (Arms)	12-6
Series	SFX-L Series	Rated Frequency (Hz)	60-50
Model Number	SST-SX1000-LPT	Rated Power (W)	1000
Serial Number		Type	SFX-L
DUT Notes		Cooling	120mm Double Ball Bearing Fan (B1201512HB)
		Semi-Passive Operation	✓
		Cable Design	Fully Modular

TEST EQUIPMENT	
Electronic Loads	Chroma 63601-5 x2 Chroma 63600-2 63640-80-80 x10 63610-80-20
AC Sources	Chroma 6530, APM SP300VAC4000W-P
Power Analyzers	RS HMC8015, N4L PPA1530, N4L PPA5530
Oscilloscopes	Picoscope 4444, Rigol DS7014, Siglent SDS2104X PLUS
Sound Analyzer	Bruel & Kjaer 2270 G4
Microphone	Bruel & Kjaer Type 4955-A
Temperature Logger	Picoscope TC-08
Tachometer	UNI-T UT372
Multimeters	Keysight 34465A, Keithley 2015 - THD
UPS	FSP Champ Tower 3kVA, CyberPower OLS3000E 3kVA
Isolation Transformer	4kVA

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## RESULTS

Temperature Range (°C /°F)	30-32 / 86-89.6 (+-2°C / +- 3.6°F)
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓
ALPM (Alternative Low Power Mode) compatible	✓
ATX v3.0 PSU Power Excursion	✓

### 115V

Average Efficiency	90.435%
Efficiency With 10W (≤500W) or 2% (>500W)	70.003
Average Efficiency 5VSB	84.669%
Standby Power Consumption (W)	0.0735000
Average PF	0.989
Avg Noise Output	33.91 dB(A)
Efficiency Rating (ETA)	PLATINUM
Noise Rating (LAMBDA)	Standard++

### 230V

Average Efficiency	92.553%
Average Efficiency 5VSB	84.208%
Standby Power Consumption (W)	0.1330000
Average PF	0.941
Avg Noise Output	35.52 dB(A)
Efficiency Rating (ETA)	PLATINUM
Noise Rating (LAMBDA)	Standard+

## POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	25	25	83.3	3	0.3
	Watts	125		999.6	15	3.6
Total Max. Power (W)		1000				

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## CABLES AND CONNECTORS

### Modular Cables

Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors
ATX connector 20+4 pin (300mm)	1	1	16-22AWG	No
4+4 pin EPS12V (410mm)	2	2	16AWG	No
6+2 pin PCIe (410mm+155mm)	2	4	16-18AWG	No
12+4 pin PCIe (400mm) (600W)	1	1	16-24AWG	No
SATA (300mm+195mm+95mm+95mm)	2	8	18AWG	No
4-pin Molex (300mm+200mm+200mm) / FDD (+100mm)	1	3 / 1	18-22AWG	No

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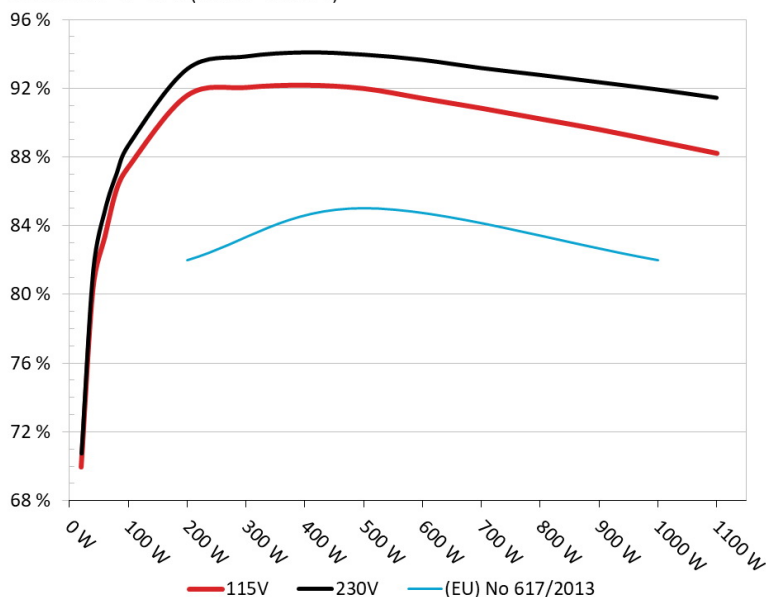
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## EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE

### Efficiency: Silverstone SX1000R Platinum

Ambient: 37°C - 47°C (98.6°F - 116.6°F)



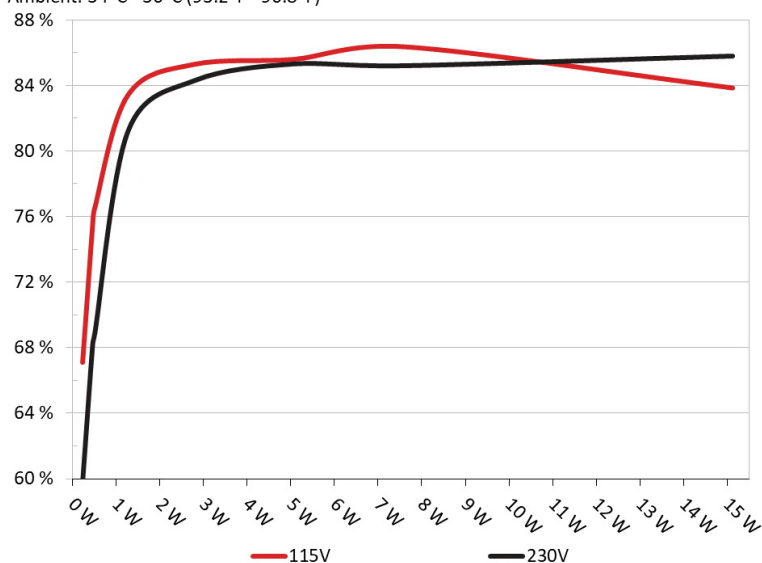
### INFO

The PSU's efficiency under high ambient temperatures with 115V and 230V input. For this graph the results of the 10-110% load regulation table are used

## 5VSB EFFICIENCY

### 5VSB Efficiency: Silverstone SX1000R Platinum

Ambient: 34°C - 36°C (93.2°F - 96.8°F)



### INFO

This graph depicts the efficiency levels of the 5VSB rail with 115V and 230V input

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### 5VSB EFFICIENCY -115V (ERP LOT 3/6 & CEC)

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.229W	67.116%	0.02
	5.099V	0.342W		115.13V
2	0.09A	0.459W	75.512%	0.035
	5.098V	0.608W		115.14V
3	0.55A	2.799W	85.275%	0.175
	5.089V	3.282W		115.14V
4	1A	5.08W	85.574%	0.277
	5.079V	5.937W		115.14V
5	1.5A	7.605W	86.336%	0.348
	5.069V	8.809W		115.14V
6	3A	15.115W	83.83%	0.456
	5.038V	18.032W		115.14V

### 5VSB EFFICIENCY -230V (ERP LOT 3/6 & CEC)

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.229W	59.825%	0.007
	5.099V	0.385W		230.36V
2	0.09A	0.459W	68.21%	0.012
	5.098V	0.673W		230.37V
3	0.55A	2.799W	84.327%	0.057
	5.088V	3.318W		230.36V
4	1A	5.08W	85.339%	0.101
	5.079V	5.952W		230.37V
5	1.5A	7.605W	85.227%	0.145
	5.069V	8.922W		230.37V
6	3A	15.115W	85.813%	0.249
	5.038V	17.614W		230.37V

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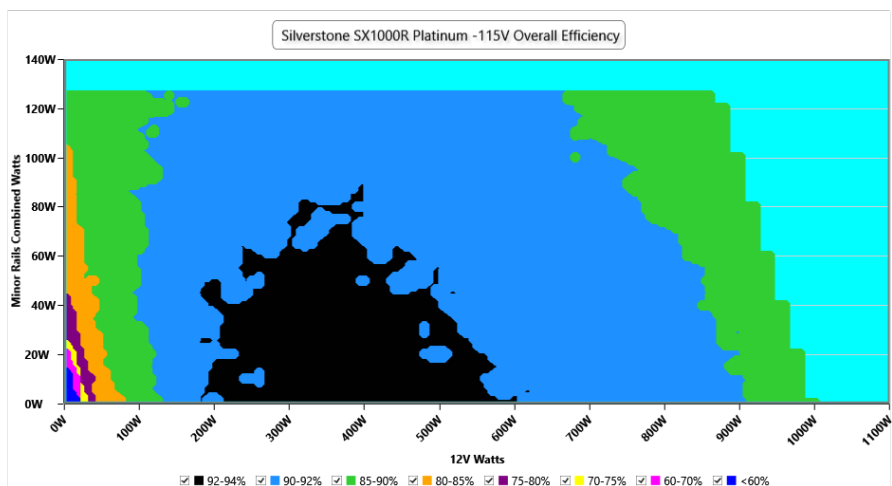
# 115V

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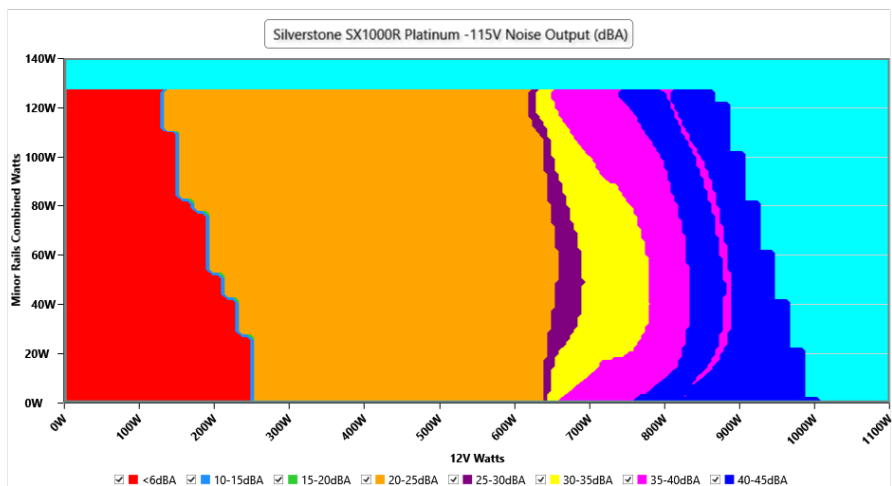
## EFFICIENCY GRAPH 115V



### INFO

This graph depicts the PSU's efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

## NOISE GRAPH 115V



### INFO

The PSU's noise in its entire operational range and under 30-32 °C (+2 °C) ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

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## VAMPIRE POWER -115V

### Detailed Results

	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.15 V	115.14 V	113.85 V	115.17 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.93 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.13 %	0.11 %	N/A	0.15 %	2.00 %	PASS
Real Power:	0.073 W	0.066 W	N/A	0.082 W	N/A	N/A
Apparent Power:	17.063 W	17.059 W	N/A	17.067 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

### INFO

This graph is generated by the PPA Standby Power Analysis software which takes full control of the power analyzer during the whole procedure. This application features all of the EN50564 & IEC62301 test limits for standby power software testing

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COMMISSION REGULATION (EU) NO 617/2013 TESTING 115V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
10%	6.494A	1.97A	1.971A	0.986A	99.998	87.426%	0	<6.0	44.35°C	0.979
	12.071V	5.076V	3.348V	5.072V	114.389				40.09°C	115.12V
20%	14.016A	2.961A	2.963A	1.186A	199.947	91.603%	0	<6.0	44.86°C	0.973
	12.061V	5.067V	3.341V	5.06V	218.284				40.34°C	115.1V
50%	37.254A	4.959A	4.967A	1.792A	499.325	92.015%	1010	22.7	42.23°C	0.997
	12.048V	5.042V	3.322V	5.023V	542.619				48.16°C	115.06V
100%	75.962A	9.005A	9.033A	3.028A	999.438	88.935%	2191	47.0	45.4°C	0.999
	11.977V	4.997V	3.287V	4.954V	1123.799				55.48°C	114.95V

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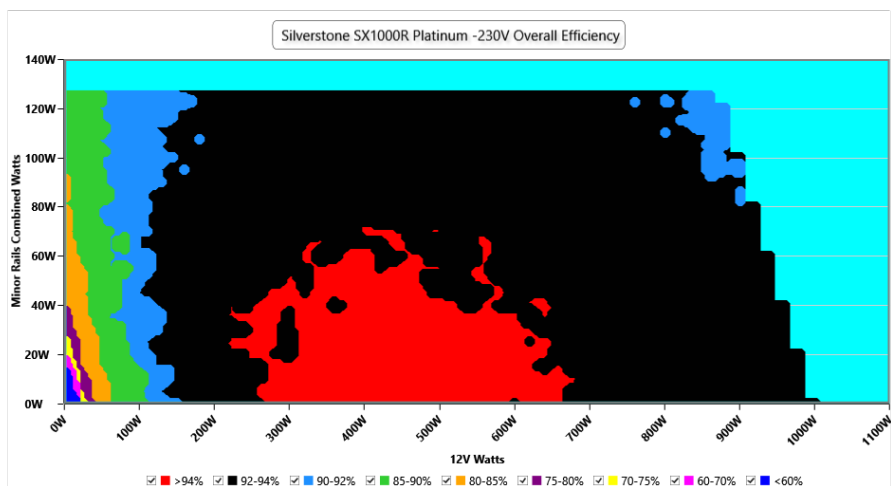
# 230V

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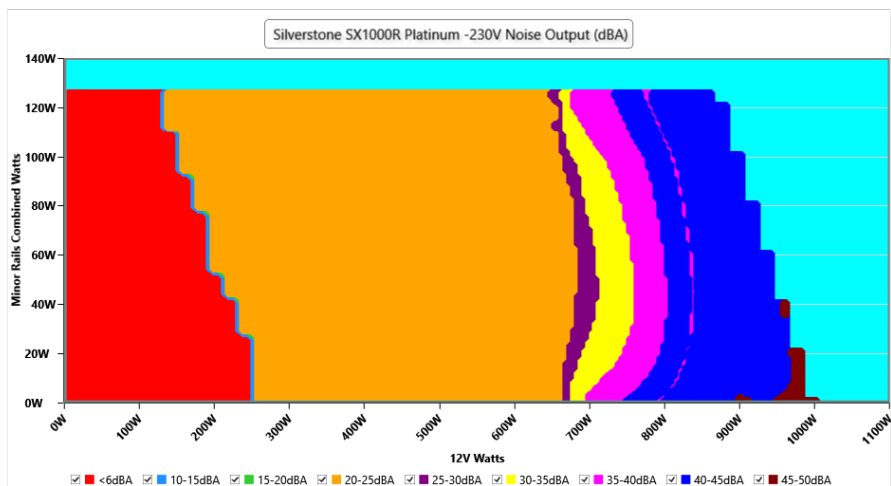
## EFFICIENCY GRAPH 230V



### INFO

This graph depicts the PSU's efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

## NOISE GRAPH 230V



### INFO

The PSU's noise in its entire operational range and under 30-32 °C (+2 °C) ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

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## VAMPIRE POWER -230V

### Detailed Results

	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	230.37 V	230.35 V	227.70 V	230.39 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	50.00 Hz	49.50 Hz	50.00 Hz	50.50 Hz	PASS
Mains Voltage CF:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.15 %	0.13 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.133 W	0.120 W	N/A	0.147 W	N/A	N/A
Apparent Power:	56.961 W	56.948 W	N/A	56.967 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

### INFO

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COMMISSION REGULATION (EU) NO 617/2013 TESTING 230V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
10%	6.494A	1.97A	1.972A	0.986A	100.014	88.715%	0	<6.0	44.87°C	0.825
	12.075V	5.077V	3.348V	5.071V	112.766				40.55°C	230.38V
20%	14.010A	2.961A	2.964A	1.186A	199.966	93.143%	0	<6.0	45.86°C	0.913
	12.067V	5.068V	3.341V	5.059V	214.7				41.24°C	230.37V
50%	37.261A	4.959A	4.968A	1.792A	499.449	93.975%	1010	22.7	42.26°C	0.959
	12.048V	5.043V	3.322V	5.023V	531.479				48.23°C	230.35V
100%	75.966A	9.007A	9.035A	3.029A	999.563	91.942%	2193	47.1	45.1°C	0.982
	11.978V	4.997V	3.287V	4.953V	1087.191				55.13°C	230.3V

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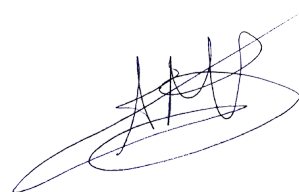


Top side

					
<b>Product Number : SST-SX1000R-PL</b> <b>Model (型號)(型号) : SST-SX1000-LPT</b> <b>1000W Active PFC SWITCH POWER SUPPLY (電源供應器 / 开关电源供应器)</b>					
<b>AC INPUT</b> <b>100-240V~ / 12-6A / 60-50Hz</b> (用于中国以外国家) (交流輸入) (交流輸入) <b>200-240V~ / 6A / 60-50Hz</b> (仅用于中国)					
<b>DC OUTPUT</b> <b>+3.3V   +5V   +12V   -12V   +5VSB</b> (直流輸出) (直流輸出) <b>25A   25A   83.3A   0.3A   3A</b>					
<b>MAX. POWER</b> <b>125W   999.6W   3.6W   15W</b> (最大總功率) (最大總功率) <b>1000W</b>					
製造商 銀欣科技股份有限公司			執行標準 : GB4943.1		
製造商 銀欣科技股份有限公司			仅适用于海拔2000米以下		

Power specifications label

## CERTIFICATIONS 115V

**Aristeidis Bitziopoulos**  
Lab Director

## CERTIFICATIONS 230V



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