SAMA 先马

SAMA G1000

Serial Number -

Lab ID SM10002934

Certification ID 252934

Test Result Report ID: 25PS2934A

Certificate Issue Date: Aug 26, 2025

Scheme: ETA-EMI PSU

115V



230V



Scheme: LAMBDA PSU

115V



230V





Outside Validation Scope



General Information

Test Equipment

Electronic Loads	Chroma 63601-5 x2 Chroma 63600-2 Chroma 63640-80-80 x10 Chroma 63610-80-20
AC Sources	Chroma 6530, APM SP300VAC4000W-P, GW Instek ASR-3500
Power Analyzers	Rohde & Schwarz HMC8015 & NPA701
Oscilloscopes	Picoscope 4444, 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
EMI Analyzer	TekBox TBMR-110M-EU
Isolation Transformer	4kVA
UPS	FSP Champ Tower 3kVA, CyberPower OLS3000E 3kVA
Testing Methodology	Cybenetics PSU Test Protocol

DUT Information
(Non-accredited measurements)

Product Identification Details	
Brand	SAMA
Model	G1000
OEM/ODM	RSY
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	8-15
Rated Frequency (Hz)	50-60
Rated Power (W)	1000
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	140mm Fluid Dynamic Bearing Fan (RL4ZS1402512HH)
Semi-Passive Operation	✓
Cybenetics Testing Information	
Lab ID	SM10002934
Date of receipt	Jul 29, 2025
Testing Date	Aug 19, 2025
Report Issued Date	Aug 26, 2025
DUT Notes	Inrush current was retested and updated on November 6, 2025.
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors
(Non-accredited measurements)

Modular Cables				
Description	**Cable Count**	**Connector Count (Total)**	**Gauge**	Cable Type
ATX connector 24 pin (600mm)	1	1	18-22AWG	Tinned Copper
4+4 pin ATX12V (700mm)	2	2	18AWG	Tinned Copper
6+2 pin PCIe (600mm)	3	3	18AWG	Tinned Copper
12+4 pin PCIe (610mm) (600W)	1	1	16-24AWG	Tinned Copper

SATA (450mm+150mm+150mm+150mm)	2	8	18AWG	Tinned Copper
4-pin Molex (400mm+150mm+150mm+150mm)	1	4	18AWG	Tinned Copper
AC Power Cord (1380mm) - C13 coupler	1	1	17AWG	-

Protection Features

Under Voltage Protection	✓
Over Power Protection	✓
Over Current (+12V) Protection	✓
Over Temperature Protection	✓
Short Circuit Protection	✓
Surge Protection	✓
Inrush Current Protection	✓
Fan Failure Protection	✗

Power Specifications

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	20	20	83.3	3	0.4
	Watts	100		999.6	15	4.8
Total Max. Power (W)		1000				

Parts Description

Manufacturer (OEM)	RSY
PCB Type	Double-Sided
Transient Filter	6x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor 5D-20 (5 Ohm @ 25°C) & Relay
Brigde Rectifier	1x
APFC MOSFETs	2x Way-On WML28N60C4 (600V, 13A @ 100°C, Rds(on): 0.16Ohm)
APFC Boost Diode	DSC10A065 (650V, 10A @ 25°C)

Bulk Cap(s)	Rubycon (420V, 560uF, 2000h @ 105°C, MXE)
Main Switchers	4x Shenzhen SI SIF26N50F (500V, 26A @ 25°C, Rds(on): 0.21mOhm)
APFC Controller	Texas Instrument UCC28180 & Sync Power SPN5003 (reducing no-load consumption)
Resonant Controller	Texas Instrument UCC25600
Topology	Primary side: APFC, Full-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
+12V MOSFETs	4x Huayi Microelectronics HYG020N04NR1P (40V, 160A @ 100°C, Rds(on): 2.5mOhm)
5V & 3.3V	DC-DC Converters: 4x Infineon BSC0906NS (30V, 40A @ 100°C, Rds(on): 4.5mOhm) PWM Controller(s): 2x ANPEC APW7160A
Filtering Capacitors	Electrolytic: 15x Teapo (1-5,000 @ 105°C, SJ) 12x Teapo (2-6,000 @ 105°C, SY) 3x Teapo (1-3,000 @ 105°C, SC) Polymer: 11x NJcon
Supervisor IC	INFSitronix IN1S313I-SAG
Fan Model	Globe Fan RL4Z S142512HH (140mm, 12V, 0.5A, Fluid Dynamic Bearing Fan)
Rectifier(s)	Shenzhen Foster Semiconductor FIR4N70BLG (700V, 2.5A @ 100°C, Rds(on): 3mOhm) & PingWei PS1060L (60V, 10A)
Standby PWM Controller	INFSitronix IN2P070C

Test Results

Temperature & Compliance Info

Temperature Range (°C /°F)	28-32 / 82.4-89.6
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓
ALPM (Alternative Low Power Mode) compatible	✓

ATX v3.1 PSU Power Excursion	✓

Performance Summary

115V

Accredited	
Average Efficiency (>1450 load combinations)	89.439%
Average Noise Output (>1450 Load Combinations)	30.44dBA
Average PF (>1450 Load Combinations)	0.990
Efficiency With 10W (≤500W) or 2% (>500W) Load	75.137%
Standby Power Consumption	0.0559W
Non-Accredited	
12V Ripple (Full Load)	25.01mV
5V Ripple (Full Load)	15.53mV
3.3V Ripple (Full Load)	19.09mV
5VSB Ripple (Full Load)	12.30mV
12V Load Regulation	1.16%
5V Load Regulation	2.53%
3.3V Load Regulation	3.51%
5VSB Load Regulation	4.49%
Inrush Current	32.200A

230V

Accredited	
Average Efficiency (>1450 load combinations)	91.560%
Average Noise Output (>1450 Load Combinations)	28.92dBA
Average PF (>1450 Load Combinations)	0.953
Efficiency With 10W (≤500W) or 2% (>500W) Load	75.790%
Standby Power Consumption	0.1423W
Non-Accredited	
12V Ripple (Full Load)	25.77mV

5V Ripple (Full Load)		15.06mV
3.3V Ripple (Full Load)		18.97mV
5VSB Ripple (Full Load)		12.99mV
12V Load Regulation		1.03%
5V Load Regulation		2.54%
3.3V Load Regulation		3.35%
5VSB Load Regulation		4.29%
Inrush Current		70.390A
12V Transient Response (200%)		11.24V
5V Transient Response (200%)		4.880V
3.3V Transient Response (200%)		3.130V
5VSB Transient Response (200%)		4.920V
Hold-Up Time & PWR_OK Signal		16.90ms
AC Loss to PWR_OK Hold Up Time		15.80ms
PWR_OK Inactive to DC Loss Delay		1.10ms
PSU Timings: T1 (20% / 100%)	109.0ms	109.0ms
PSU Timings: T3 (20% / 100%)	124.0ms	124.0ms
12V OCP (31.5°C / 43.9°C)	123.00A (147.66%), 11.870V	107.60A (129.17%), 11.922V
5V OCP (31.5°C / 43.9°C)	31A (155.00%), 4.918V	30.3A (151.50%), 4.928V
3.3V OCP (31.5°C / 43.9°C)	34.9A (174.50%), 3.27V	34.2A (171.00%), 3.274V
5VSB OCP (31.5°C / 43.9°C)	3.8A (126.67%), 4.971V	3.8A (126.67%), 4.973V
OPP (30.95°C / 43.99°C)	121.79%	118.11%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	16.9
AC Loss to PWR_OK Hold Up Time (ms)	15.8
PWR_OK Inactive to DC Loss Delay (ms)	1.1

Vampire Power

Tables

115V

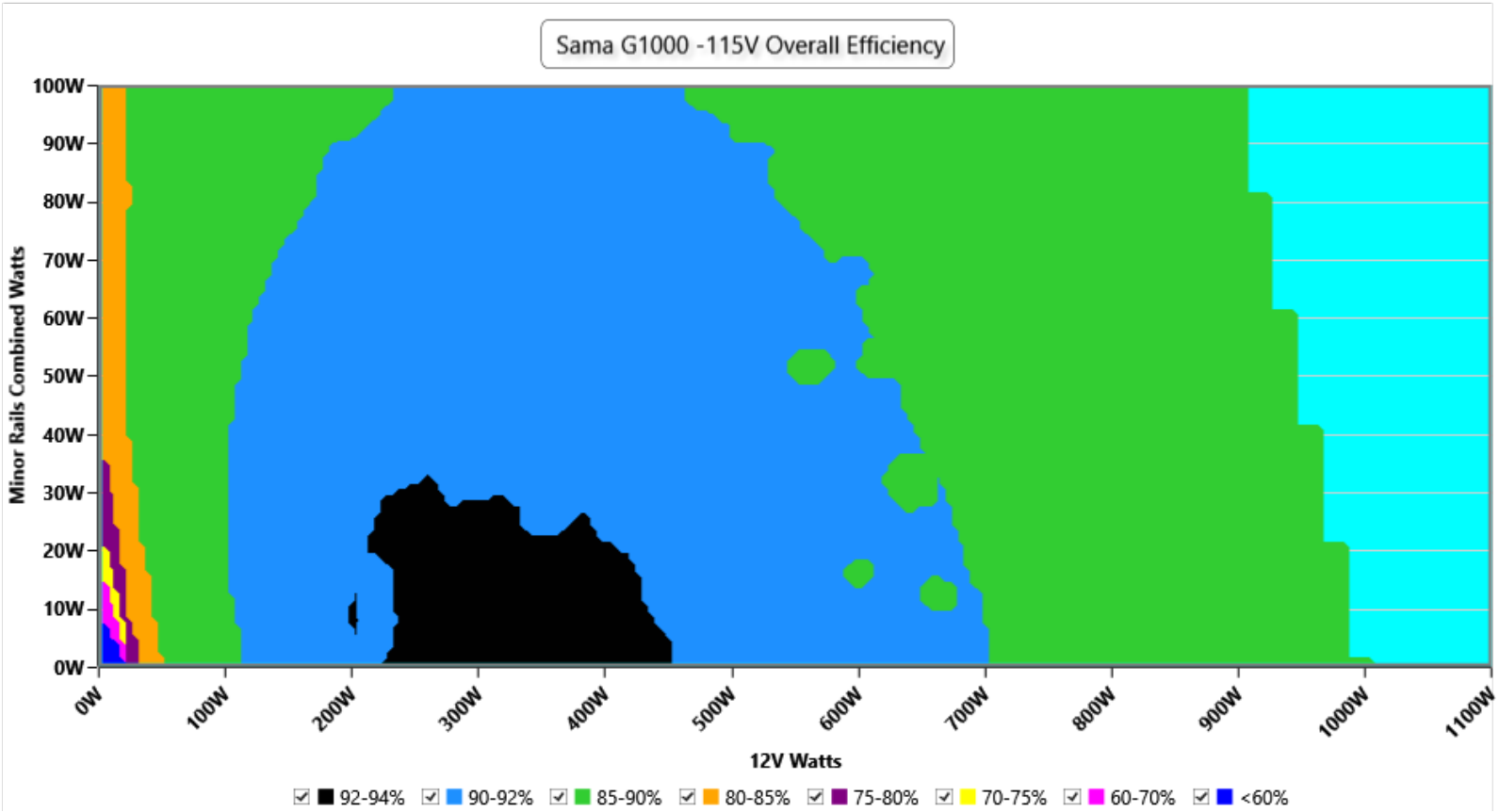
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.08 V	115.04 V	113.85 V	115.13 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.99 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.09 %	N/A	0.19 %	2.00 %	PASS
Real Power:	0.056 W	0.009 W	N/A	0.094 W	N/A	N/A
Apparent Power:	11.583 W	10.800 W	N/A	12.414 W	N/A	N/A
Power Factor:	0.006	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	231.05 V	230.94 V	227.70 V	231.12 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	49.99 Hz	49.50 Hz	50.01 Hz	50.50 Hz	PASS
Mains Voltage CF:	1.417	1.416	1.340	1.419	1.490	PASS
Mains Voltage THD:	0.17 %	0.14 %	N/A	0.26 %	2.00 %	PASS
Real Power:	0.142 W	0.105 W	N/A	0.197 W	N/A	N/A
Apparent Power:	36.102 W	35.137 W	N/A	37.134 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

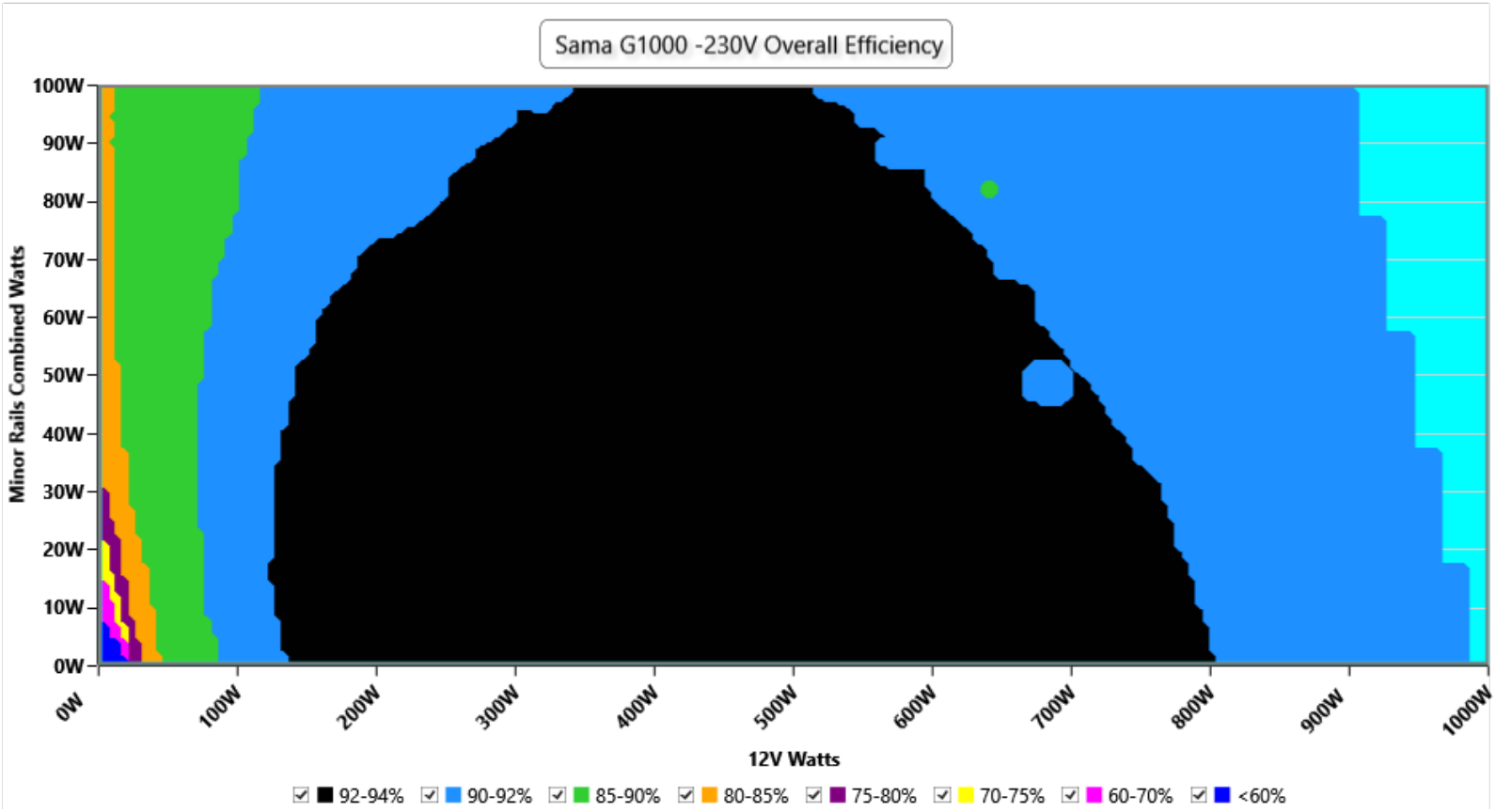
115V



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

230V

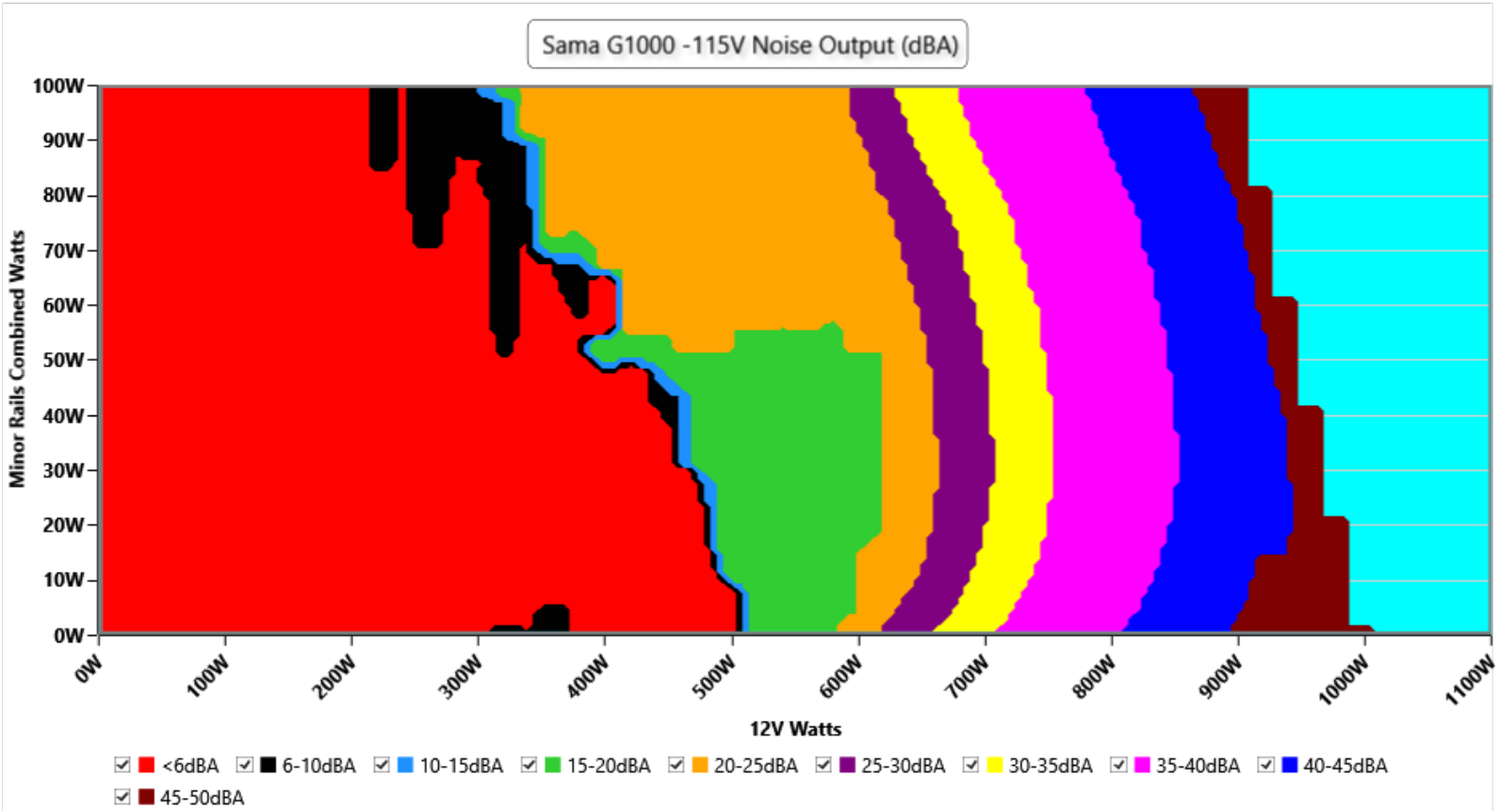


INFO

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

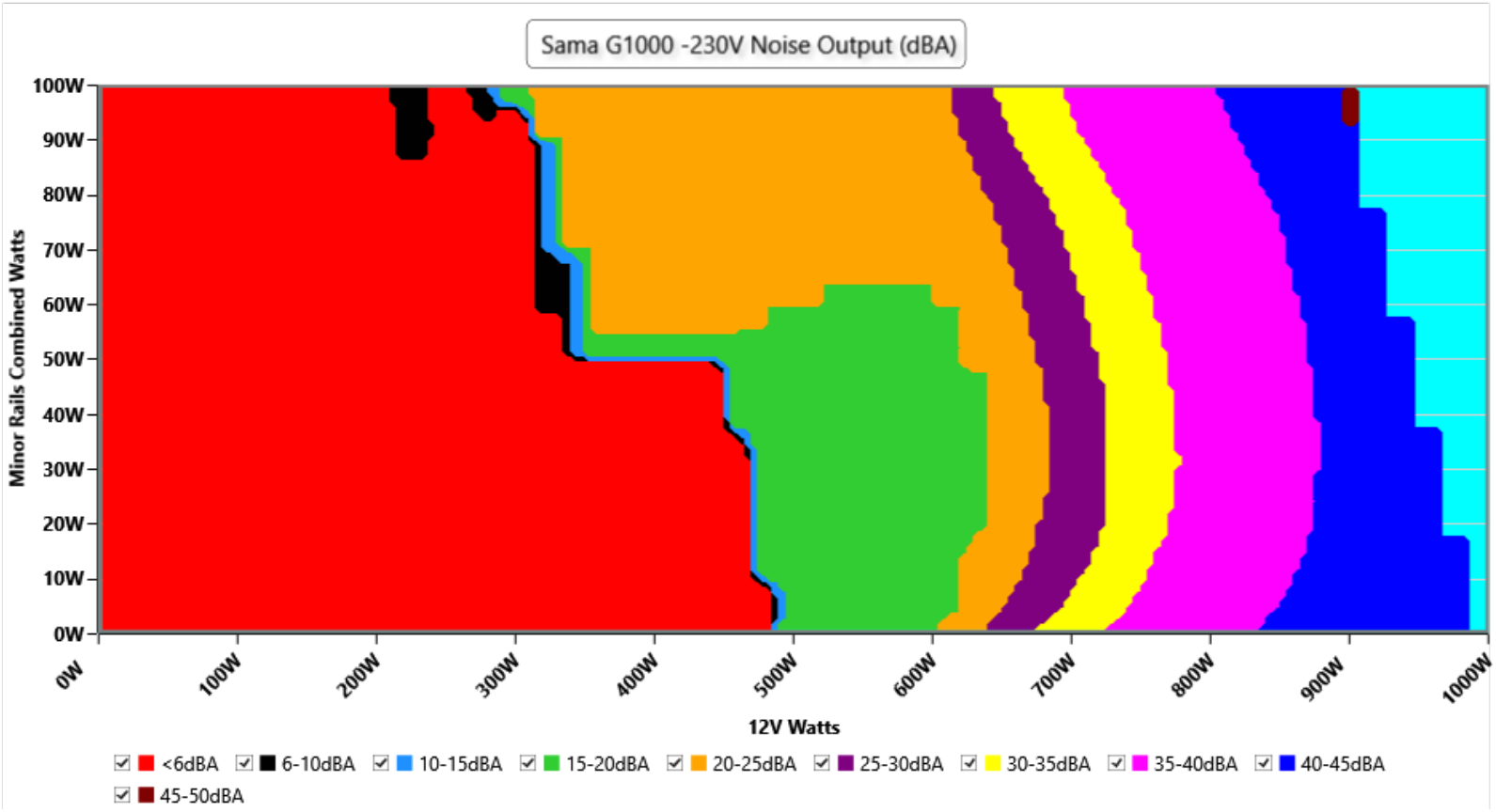
115V



INFO

The PSU`s noise in its entire operational range and under 30-32 °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

230V



INFO

The PSU`s noise in its entire operational range and under 30-32 °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

Noise under high ambient temperature (indicative)

115V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 36.0 °C	0 RPM · <6.0 dB(A) · 50.3 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 38.8 °C	0 RPM · <6.0 dB(A) · 51.4 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 45.2 °C	718 RPM · 16.2 dB(A) · 42.4 °C	fan starts (<6.0 → 16.2)
100%	1864 RPM · 45.4 dB(A) · 30.6 °C	1895 RPM · 45.5 dB(A) · 45.3 °C	**+0.1 dB(A)**

230V

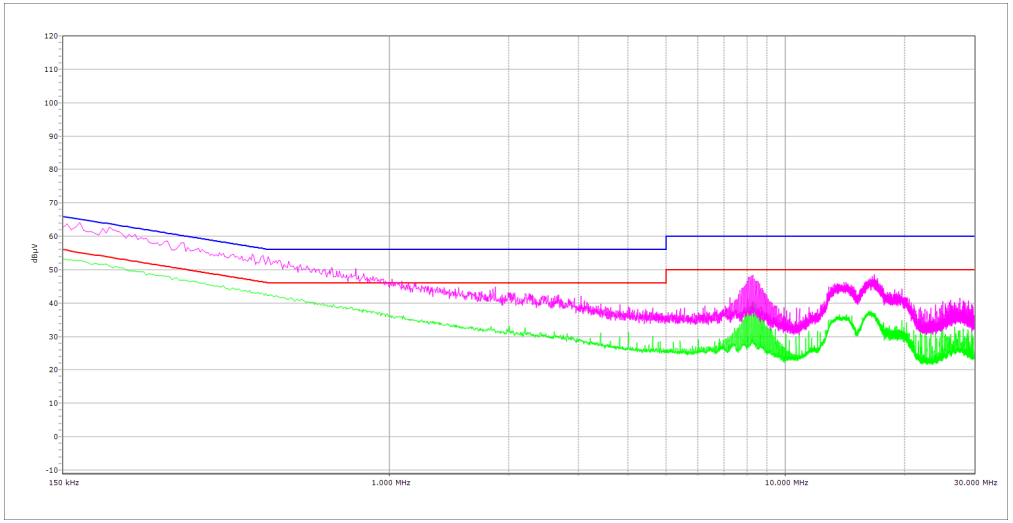
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 37.5 °C	0 RPM · <6.0 dB(A) · 46.2 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 40.0 °C	0 RPM · <6.0 dB(A) · 46.8 °C	fan off in both
50%	467 RPM · 8.3 dB(A) · 30.3 °C	682 RPM · 14.9 dB(A) · 42.2 °C	**+6.6 dB(A)**
100%	1869 RPM · 45.4 dB(A) · 30.3 °C	1896 RPM · 45.5 dB(A) · 46.0 °C	**+0.1 dB(A)**

INFO

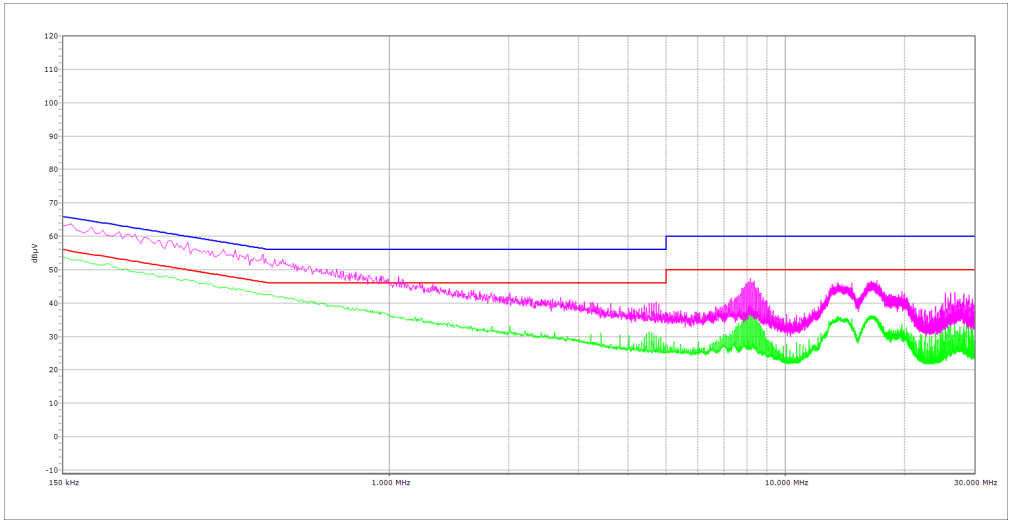
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative of how the fan behaves when it is hot. "<6.0" is the floor of our sound meter: the fan is stopped or too quiet to measure (the fan speed column says which); with the fan stopped, the intake sensor can read higher than the chamber air.

Informational. Not part of the ETA or LAMBDA rating.

Conducted Emissions EN 55032 & CISPR 32



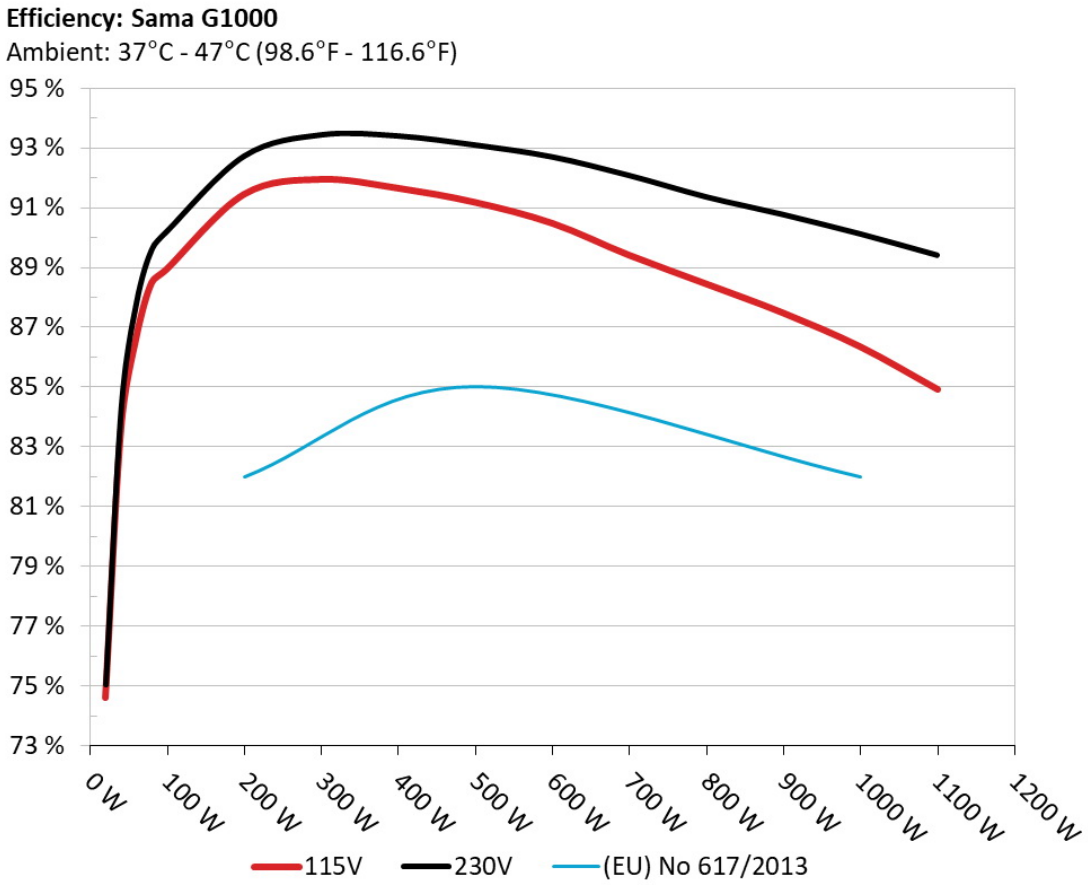
NEUTRAL



PHASE

Indicative Performance

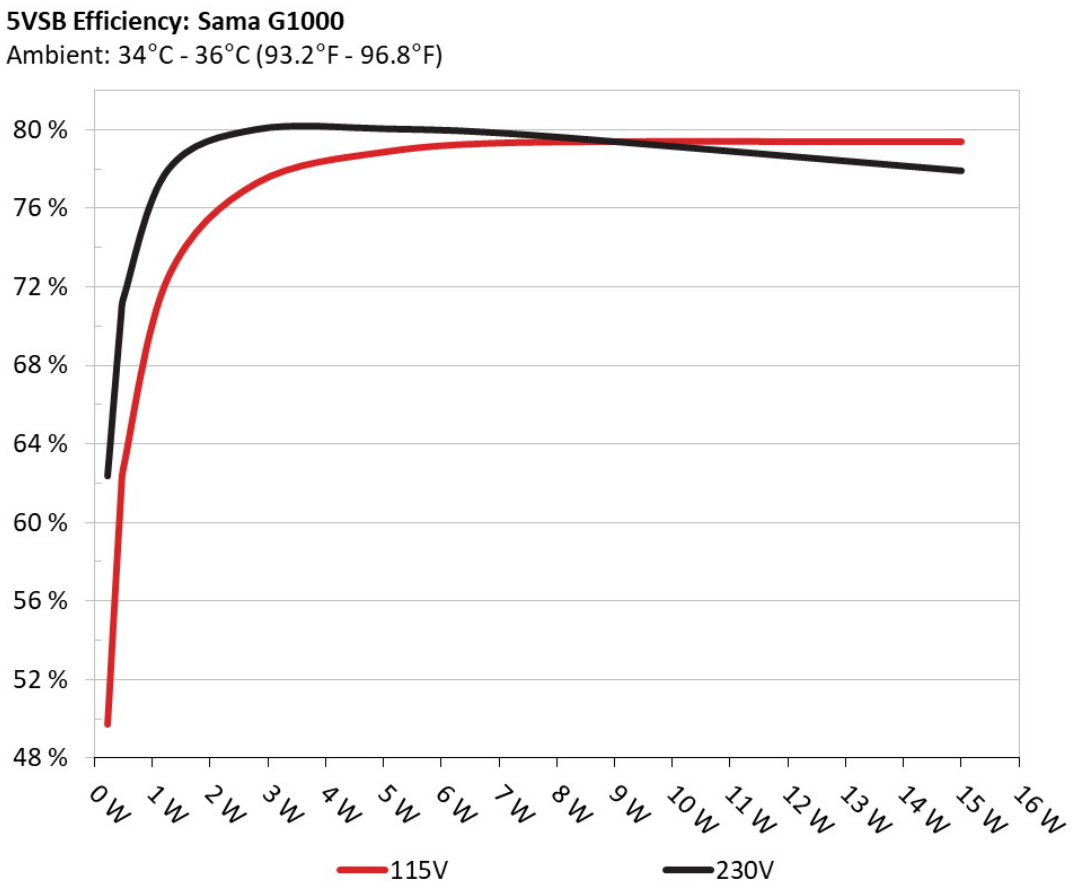
Efficiency under high ambient temperature



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



INFO

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

5VSB Efficiency (ERP LOT 3/6 & CEC)

115V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.23W	62.368%	0.035
	5.112V	0.369W		114.94V
2	**0.09A**	0.46W	70.427%	0.062
	5.11V	0.653W		114.94V
3	**0.55A**	2.801W	79.998%	0.261
	5.093V	3.501W		114.93V
4	**1A**	5.077W	80.027%	0.36
	5.076V	6.344W		114.93V
5	**1.5A**	7.587W	79.703%	0.411
	5.057V	9.519W		114.93V
6	**3A**	14.999W	77.895%	0.483
	5V	19.255W		114.92V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.23W	49.692%	0.014
	5.117V	0.462W		230.05V
2	**0.09A**	0.46W	61.382%	0.022
	5.113V	0.749W		230.05V
3	**0.55A**	2.802W	77.301%	0.104
	5.094V	3.625W		230.06V
4	**1A**	5.078W	78.92%	0.17
	5.077V	6.435W		230.06V
5	**1.5A**	7.589W	79.389%	0.229
	5.058V	9.557W		230.06V
6	**3A**	15.001W	79.42%	0.33
	5V	18.888W		230.05V

Protection Features

OCP (Normal @ 31.5°C)	12V: 123A (147.66%), 11.87V 5V: 31A (155%), 4.918V 3.3V: 34.9A (174.5%), 3.27V 5VSB: 3.8A (126.67%), 4.971V
OCP (Hot @ 43.9°C)	12V: 107.6A (129.17%), 11.922V 5V: 30.3A (151.5%), 4.928V 3.3V: 34.2A (171%), 3.274V 5VSB: 3.8A (126.67%), 4.973V
OPP (Normal @ 30.9°C)	1217.92W (121.79%)
OPP (Hot @ 44°C)	1181.12W (118.11%)
OTP	✓ (122°C @ Heat Sink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Proper Operation
UVP (Full Load @ 90V)	✓
UVP (No Damage @ 80V)	✓
Conducted Emissions EN55032 & CISPR 32	✓
NLO	✓
Fan Failure Protection	✗
SIP	Surge: MOV Inrush: NTC & Bypass Relay

Supplementary Tests (For Reference)

Typical Load Tests

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%	**6.493A**	**1.982A**	**1.986A**	**0.985A**	100.005	88.954%	0	<6.0	50.27°C	0.972
	12.075V	5.045V	3.323V	5.076V	112.423				40.04°C	114.9V
20%	**14.015A**	**2.981A**	**2.989A**	**1.186A**	199.959	91.449%	0	<6.0	51.43°C	0.987
	12.063V	5.033V	3.312V	5.058V	218.659				40.94°C	114.87V
30%	**21.907A**	**3.484A**	**3.499A**	**1.389A**	300.016	91.948%	0	<6.0	56.4°C	0.992
	12.049V	5.023V	3.302V	5.041V	326.288				41.06°C	114.84V
40%	**29.781A**	**3.991A**	**4.011A**	**1.593A**	399.59	91.652%	478	8.8	41.54°C	0.994
	12.034V	5.012V	3.291V	5.022V	435.987				45.13°C	114.8V
50%	**37.346A**	**5.003A**	**5.032A**	**1.799A**	499.308	91.181%	718	16.2	42.44°C	0.995
	12.018V	4.998V	3.279V	5.003V	547.596				46.27°C	114.76V
60%	**44.987A**	**6.021A**	**6.062A**	**2A**	599.806	90.478%	1062	27.9	42.55°C	0.995
	12.004V	4.984V	3.267V	4.983V	662.933				46.83°C	114.72V
70%	**52.580A**	**7.044A**	**7.099A**	**2.217A**	699.555	89.412%	1435	37.7	43.31°C	0.996
	11.990V	4.97V	3.255V	4.963V	782.391				46.47°C	114.68V
80%	**60.262A**	**8.07A**	**8.142A**	**2.325A**	799.561	88.449%	1761	43	43.9°C	0.996
	11.975V	4.955V	3.242V	4.947V	903.976				46.91°C	114.64V
90%	**68.296A**	**8.595A**	**8.665A**	**2.433A**	899.326	87.478%	1891	45.5	44.76°C	0.996
	11.961V	4.944V	3.232V	4.932V	1028.063				47.86°C	114.59V
100%	**76.149A**	**9.122A**	**9.223A**	**3.065A**	999.362	86.349%	1895	45.5	45.31°C	0.996
	11.946V	4.932V	3.22V	4.895V	1157.356				49.92°C	114.54V
110%	**83.947A**	**10.164A**	**10.38A**	**3.072A**	1099.965	84.922%	1897	45.5	46.55°C	0.996
	11.932V	4.918V	3.208V	4.883V	1295.272				53.1°C	114.49V
CL1	**0.116A**	**12.05A**	**12.012A**	**0A**	101.3	82.804%	438	6.6	40.77°C	0.975
	12.073V	4.995V	3.305V	5.105V	122.339				42.91°C	114.89V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL2	**0.116A**	**20.114A**	**0A**	**0A**	101.342	81.348%	300	<6.0	41.97°C	0.975
	12.077V	4.969V	3.313V	5.108V	124.579				46.17°C	114.89V
CL3	**0.115A**	**0A**	**19.93A**	**0A**	67.399	75.601%	369	<6.0	41.2°C	0.971
	12.078V	5.044V	3.312V	5.108V	89.153				45.42°C	114.9V
CL4	**83.708A**	**0A**	**0A**	**0A**	999.94	87.234%	1895	45.5	45.52°C	0.996
	11.945V	4.982V	3.246V	5.031V	1146.282				48.99°C	114.55V

The results above are not used in the certification process

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**	**1.984A**	**1.986A**	**0.986A**	100.013	90.232%	0	<6.0	46.17°C	0.861
	12.074V	5.042V	3.323V	5.073V	110.839				40.19°C	229.99V
20%	**14.016A**	**2.982A**	**2.989A**	**1.187A**	199.967	92.733%	0	<6.0	46.83°C	0.936
	12.063V	5.03V	3.312V	5.056V	215.642				40.58°C	230V
30%	**21.905A**	**3.486A**	**3.498A**	**1.389A**	300.018	93.439%	0	<6.0	48.93°C	0.964
	12.051V	5.02V	3.302V	5.039V	321.082				41.31°C	229.99V
40%	**29.768A**	**3.992A**	**4.009A**	**1.593A**	399.577	93.399%	484	8.9	41.82°C	0.97
	12.039V	5.011V	3.293V	5.021V	427.82				46.34°C	229.99V
50%	**37.328A**	**5.004A**	**5.029A**	**1.799A**	499.303	93.099%	682	14.9	42.19°C	0.974
	12.023V	4.997V	3.281V	5.003V	536.309				44.62°C	229.97V
60%	**44.970A**	**6.022A**	**6.057A**	**2A**	599.805	92.699%	1010	26.9	42.68°C	0.976
	12.009V	4.982V	3.269V	4.983V	647.041				45.16°C	229.96V
70%	**52.558A**	**7.047A**	**7.094A**	**2.216A**	699.556	92.082%	1335	35.2	43.08°C	0.976
	11.995V	4.968V	3.257V	4.963V	759.72				44.62°C	229.94V
80%	**60.235A**	**8.074A**	**8.138A**	**2.324A**	799.572	91.365%	1669	41.5	43.75°C	0.977
	11.981V	4.953V	3.244V	4.948V	875.141				44.18°C	229.93V
90%	**68.260A**	**8.599A**	**8.66A**	**2.433A**	899.345	90.774%	1892	45.5	44.51°C	0.976
	11.967V	4.942V	3.233V	4.933V	990.749				45.7°C	229.91V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**76.092A**	**9.127A**	**9.218A**	**3.064A**	999.371	90.131%	1896	45.5	45.96°C	0.975
	11.955V	4.93V	3.222V	4.896V	1108.804				47.55°C	229.88V
110%	**83.883A**	**10.171A**	**10.377A**	**3.071A**	1099.968	89.416%	1897	45.5	46.71°C	0.974
	11.941V	4.915V	3.209V	4.885V	1230.164				48.68°C	229.86V
CL1	**0.116A**	**12.063A**	**12.022A**	**0A**	101.299	84.213%	380	<6.0	40.36°C	0.87
	12.074V	4.99V	3.303V	5.104V	120.291				43.35°C	230.03V
CL2	**0.116A**	**20.132A**	**0A**	**0A**	101.34	82.483%	252	<6.0	41.35°C	0.873
	12.079V	4.964V	3.314V	5.107V	122.862				44.93°C	230.02V
CL3	**0.115A**	**0A**	**20.031A**	**0A**	67.399	76.495%	345	<6.0	41.47°C	0.812
	12.079V	5.044V	3.295V	5.107V	88.109				44.22°C	230.03V
CL4	**83.650A**	**0A**	**0A**	**0A**	999.946	90.877%	1895	45.5	45.08°C	0.975
	11.954V	4.983V	3.248V	5.032V	1100.324				47.46°C	229.89V

The results above are not used in the certification process

Light Load Tests

115V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20W	**1.230A**	**0.494A**	**0.495A**	**0.196A**	20.012	74.606%	0	<6.0	47.33°C	0.832
	12.085V	5.057V	3.333V	5.115V	26.826				36.93°C	114.93V
40W	**2.706A**	**0.692A**	**0.694A**	**0.294A**	40.007	83.541%	0	<6.0	47.24°C	0.925
	12.083V	5.055V	3.331V	5.109V	47.89				37.94°C	114.92V
60W	**4.183A**	**0.89A**	**0.892A**	**0.392A**	60.004	86.657%	0	<6.0	48.14°C	0.954
	12.080V	5.053V	3.329V	5.103V	69.244				38.31°C	114.92V
80W	**5.657A**	**1.089A**	**1.091A**	**0.49A**	79.954	88.488%	0	<6.0	48.39°C	0.97
	12.078V	5.051V	3.327V	5.097V	90.357				39.33°C	114.91V

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20W	**1.230A**	**0.495A**	**0.495A**	**0.196A**	19.998	75.058%	0	<6.0	37.76°C	0.503
	12.077V	5.055V	3.33V	5.106V	26.643				36.57°C	230.05V
40W	**2.706A**	**0.693A**	**0.694A**	**0.294A**	39.999	84.313%	0	<6.0	38.45°C	0.664
	12.078V	5.053V	3.329V	5.102V	47.447				37.71°C	230.03V
60W	**4.184A**	**0.891A**	**0.893A**	**0.392A**	59.999	87.856%	0	<6.0	39.32°C	0.745
	12.077V	5.051V	3.327V	5.097V	68.309				38.01°C	230.03V
80W	**5.658A**	**1.09A**	**1.091A**	**0.491A**	79.949	89.623%	0	<6.0	40.44°C	0.814
	12.075V	5.048V	3.326V	5.093V	89.203				39.11°C	230.03V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	16.88mV	13.64mV	12.94mV	11.97mV	Pass
20% Load	20.41mV	13.44mV	12.74mV	12.07mV	Pass
30% Load	20.77mV	13.69mV	13.50mV	12.17mV	Pass
40% Load	21.23mV	13.54mV	14.68mV	12.84mV	Pass
50% Load	22.71mV	14.66mV	15.30mV	12.79mV	Pass
60% Load	23.07mV	14.15mV	16.06mV	13.50mV	Pass
70% Load	23.48mV	15.53mV	15.55mV	13.45mV	Pass
80% Load	23.84mV	15.99mV	18.47mV	13.61mV	Pass
90% Load	24.45mV	16.20mV	19.03mV	15.91mV	Pass
100% Load	25.01mV	15.53mV	19.09mV	12.30mV	Pass
110% Load	26.08mV	14.48mV	20.19mV	12.83mV	Pass
Crossload1	16.10mV	12.49mV	14.31mV	13.80mV	Pass
Crossload2	18.62mV	16.55mV	13.61mV	14.88mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	17.70mV	13.79mV	16.62mV	15.91mV	Pass
Crossload4	24.50mV	15.79mV	17.78mV	14.03mV	Pass

The results above are not used in the certification process

230V

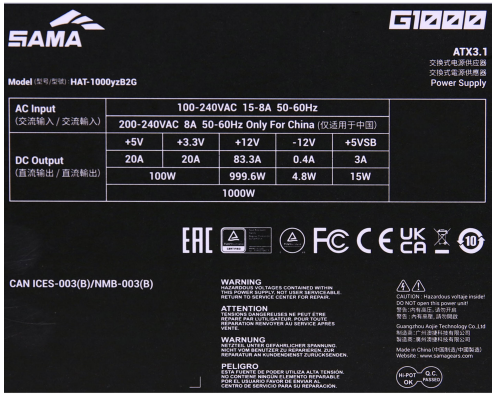
Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	16.63mV	13.49mV	13.20mV	12.12mV	Pass
20% Load	19.03mV	13.23mV	13.81mV	12.48mV	Pass
30% Load	20.11mV	13.28mV	13.40mV	12.17mV	Pass
40% Load	20.36mV	13.95mV	14.94mV	12.23mV	Pass
50% Load	21.44mV	14.36mV	15.55mV	12.63mV	Pass
60% Load	22.00mV	14.30mV	16.06mV	12.89mV	Pass
70% Load	22.82mV	15.17mV	16.42mV	13.86mV	Pass
80% Load	25.22mV	15.63mV	17.95mV	15.14mV	Pass
90% Load	25.28mV	16.55mV	18.57mV	14.58mV	Pass
100% Load	25.77mV	15.06mV	18.97mV	12.99mV	Pass
110% Load	28.49mV	15.39mV	19.68mV	13.26mV	Pass
Crossload1	15.67mV	13.38mV	14.90mV	13.73mV	Pass
Crossload2	18.21mV	16.25mV	13.97mV	15.24mV	Pass
Crossload3	18.37mV	13.39mV	16.11mV	14.94mV	Pass
Crossload4	25.35mV	15.52mV	16.83mV	13.56mV	Pass

The results above are not used in the certification process

SAMA G1000



Top side



Power specifications label



Fan



PSU Internals

All data and graphs included in this test report can be used by any individual on the following conditions:

› It should be mentioned that the test results are provided by Cybenetics

› The link to the original test results document should be provided in any case

Cybenetics runs voluntary certification programs for power supplies - ETA for efficiency, LAMBDA for noise and SAFE for safety and correct operation - and for cooling products, with DELTA for chassis soundproofing and PHI for fan airflow and static pressure. THETA rates cooler performance on AMD AM5 and Intel LGA1851 outside ISO 17065 and accreditation scope

CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus

www.cybenetics.com - info@cybenetics.com