SAMA 先马

SAMA P1200 (China: XP1200)

Serial Number -

Lab ID SM12002928

Certification ID 252928

Test Result Report ID: 25PS2928A

Certificate Issue Date: Aug 12, 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	P1200 (China: XP1200)
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)	1200
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	140 mm Fluid Dynamic Bearing Fan (S1402512HH)
Semi-Passive Operation	✓
Cybenetics Testing Information	
Lab ID	SM12002928
Date of receipt	Jul 22, 2025
Testing Date	Aug 9, 2025
Report Issued Date	Aug 12, 2025
DUT Notes	This product is sold as XP1200 in the Chinese Market. 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 20+4 pin (600mm)	1	1	16-22AWG	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 (600mm) (600W)	2	2	16-24AWG	Tinned Copper

SATA (460mm+150mm+150mm+150mm)	3	12	18AWG	Tinned Copper
4-pin Molex (450mm+150mm+150mm+150mm)	1	4	18AWG	Tinned Copper
AC Power Cord (1385mm) - 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	100	3	0.4
	Watts	100		1200	15	4.8
Total Max. Power (W)		1200				

Parts Description

Manufacturer (OEM)	RSY
PCB Type	Double-Sided
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor SCK-0512 (5 Ohm @ 25°C) & Relay
Bridge Rectifier	2x
APFC MOSFETs	3x Way-On WML28N60C4 (600V, 13A @ 100°C, Rds(on): 0.16Ohm)
APFC Boost Diode	2x Maplesemi MSP06065G1 (650V/6A @ 150℃)

Bulk Cap(s)	2x Rubycon (420V, 470uF each or 940uF combined, 2000h @ 105°C,MXE)
Main Switchers	4x Infineon IPA60R125P6 (650V, 30A @ 25°C, Rds(on): 0.125Ohm)
APFC Controller	Texas Instrument UCC28180 & Sync Power SPN5003 (reducing no-load consumption)
Resonant Controller	Texas Instrument UCC25600
IC Driver	2x Silicon Labs Si8233BD
Topology	Primary side: Bridgeless PFC, Full-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
+12V MOSFETs	8x Huayi Microelectronics HYG020N04NR1P (40V, 160A @ 100°C, Rds(on): 2.5mOhm)
5V & 3.3V	DC-DC Converters: 6x Infineon BSC0906NS (30V, 40A @ 100°C, Rds(on): 4.5mOhm) PWM Controller(s): 2x ANPEC APW7160A
Filtering Capacitors	Electrolytic: 5x Rubycon (3-6,000 @ 105°C, YXS) 2x Rubycon (4-10,000 @ 105°C, YXJ) 1x Rubycon (4-10,000 @ 105°C, YXM) 29x UNICON (2-5,000 @ 105°C, KXM) Polymer: 14x Nippon Chemi-con, 11x UNICON (UPB)
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 PS10U60S (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)	90.893%
Average Noise Output (>1450 Load Combinations)	17.94dBA
Average PF (>1450 Load Combinations)	0.991
Efficiency With 10W (≤500W) or 2% (>500W) Load	75.419%
Standby Power Consumption	0.0428W
Non-Accredited	
12V Ripple (Full Load)	19.60mV
5V Ripple (Full Load)	18.47mV
3.3V Ripple (Full Load)	19.68mV
5VSB Ripple (Full Load)	19.87mV
12V Load Regulation	0.73%
5V Load Regulation	0.54%
3.3V Load Regulation	1.73%
5VSB Load Regulation	2.07%
Inrush Current	38.280A

230V

Accredited	
Average Efficiency (>1450 load combinations)	92.946%
Average Noise Output (>1450 Load Combinations)	17.06dBA
Average PF (>1450 Load Combinations)	0.958
Efficiency With 10W (≤500W) or 2% (>500W) Load	75.505%
Standby Power Consumption	0.1342W

Non-Accredited		
12V Ripple (Full Load)		20.04mV
5V Ripple (Full Load)		18.31mV
3.3V Ripple (Full Load)		20.27mV
5VSB Ripple (Full Load)		16.30mV
12V Load Regulation		0.75%
5V Load Regulation		0.62%
3.3V Load Regulation		1.66%
5VSB Load Regulation		2.07%
Inrush Current		70.350A
12V Transient Response (200%)		11.30V
5V Transient Response (200%)		4.905V
3.3V Transient Response (200%)		3.182V
5VSB Transient Response (200%)		5.025V
Hold-Up Time & PWR_OK Signal		21.10ms
AC Loss to PWR_OK Hold Up Time		19.20ms
PWR_OK Inactive to DC Loss Delay		1.90ms
PSU Timings: T1 (20% / 100%)	118.0ms	117.0ms
PSU Timings: T3 (20% / 100%)	124.0ms	125.0ms
12V OCP (30.9°C / 45.3°C)	148.40A (148.40%), 11.974V	143.80A (143.80%), 11.982V
5V OCP (30.9°C / 45.3°C)	26A (130.00%), 5.008V	25.5A (127.50%), 5.008V
3.3V OCP (30.9°C / 45.3°C)	26.4A (132.00%), 3.267V	26A (130.00%), 3.269V
5VSB OCP (30.9°C / 45.3°C)	4.8A (160.00%), 5.03V	4.7A (156.67%), 5.048V
OPP (30.18°C / 46.69°C)	147.54%	140.67%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	21.1
AC Loss to PWR_OK Hold Up Time (ms)	19.2
PWR_OK Inactive to DC Loss Delay (ms)	1.9

Vampire Power

Tables

115V

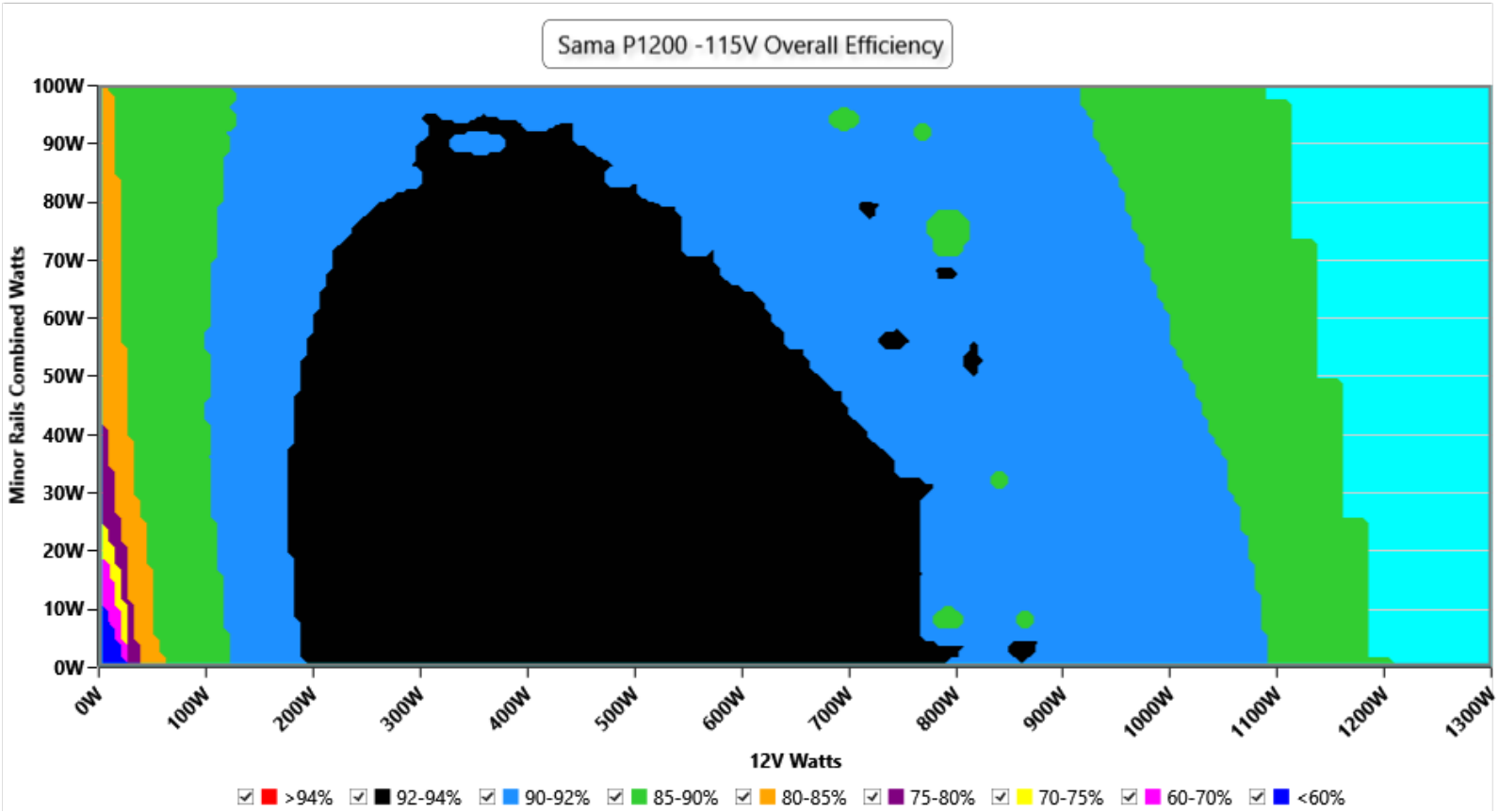
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.08 V	115.04 V	113.85 V	115.12 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.95 Hz	59.40 Hz	60.02 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.09 %	N/A	0.18 %	2.00 %	PASS
Real Power:	0.043 W	-0.004 W	N/A	0.084 W	N/A	N/A
Apparent Power:	9.210 W	8.879 W	N/A	9.547 W	N/A	N/A
Power Factor:	0.005	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	231.03 V	230.93 V	227.70 V	231.11 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:	0.134 W	0.088 W	N/A	0.224 W	N/A	N/A
Apparent Power:	30.194 W	29.745 W	N/A	30.640 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

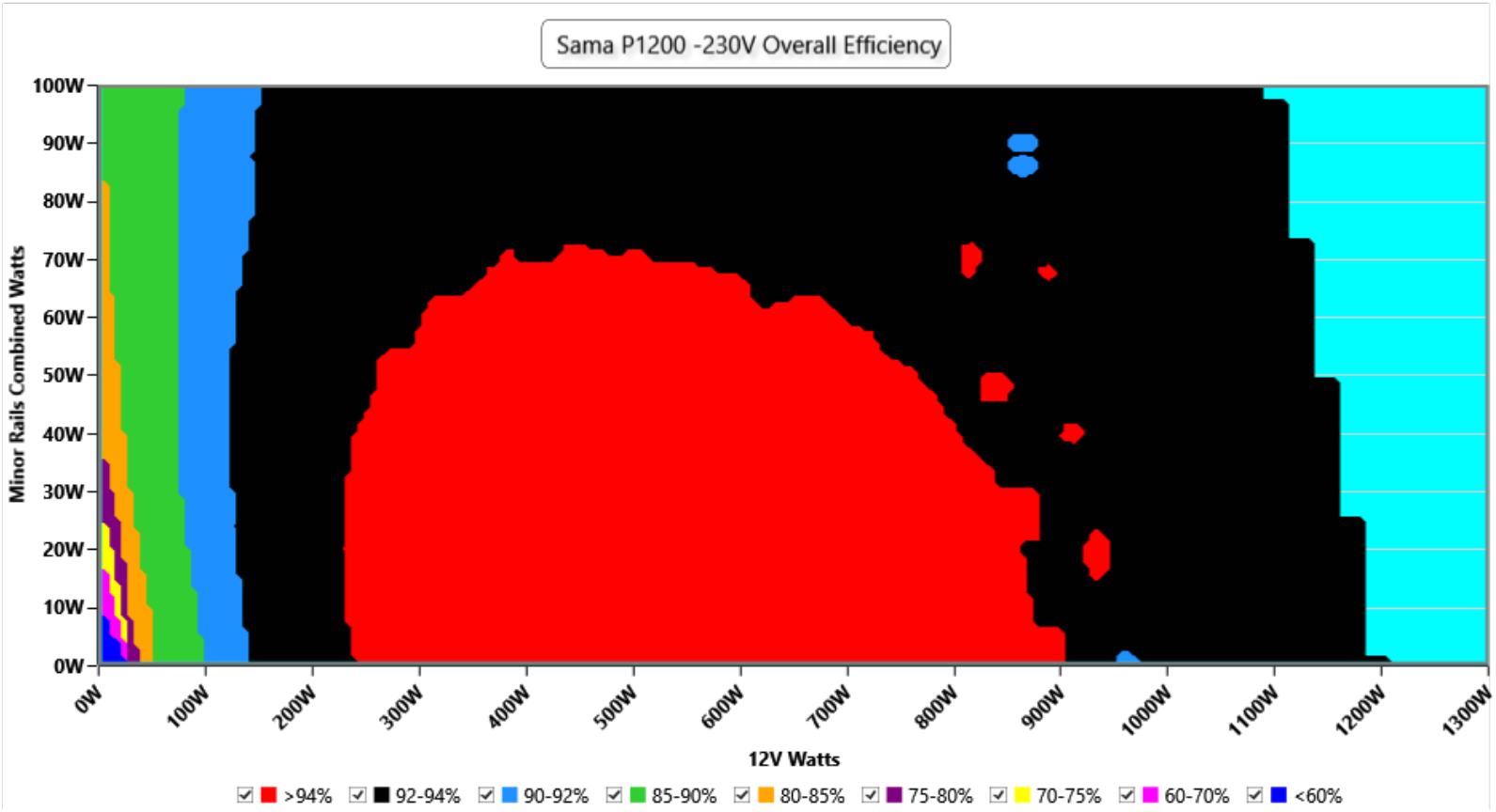
115V



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

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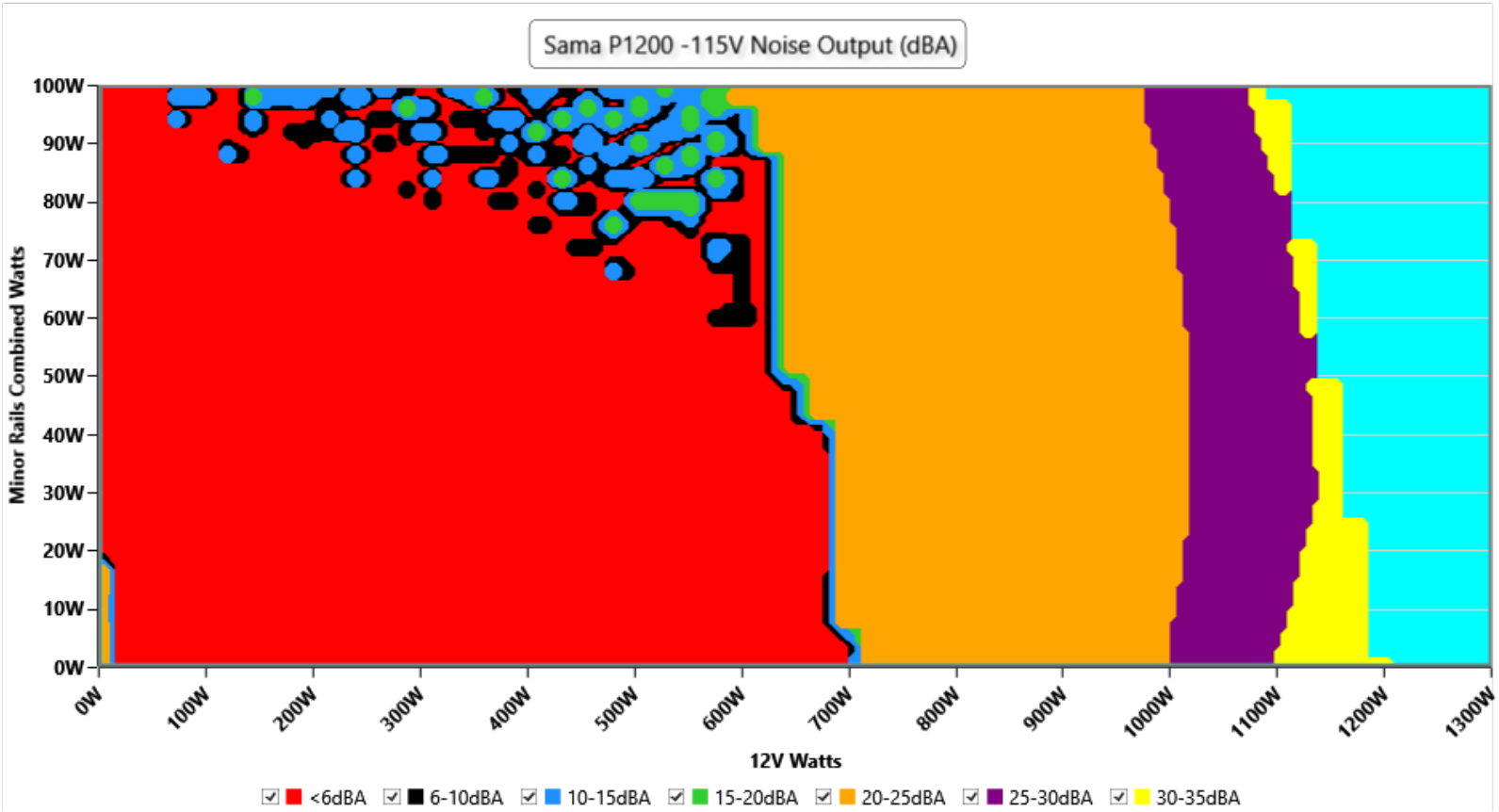
Noise Graph

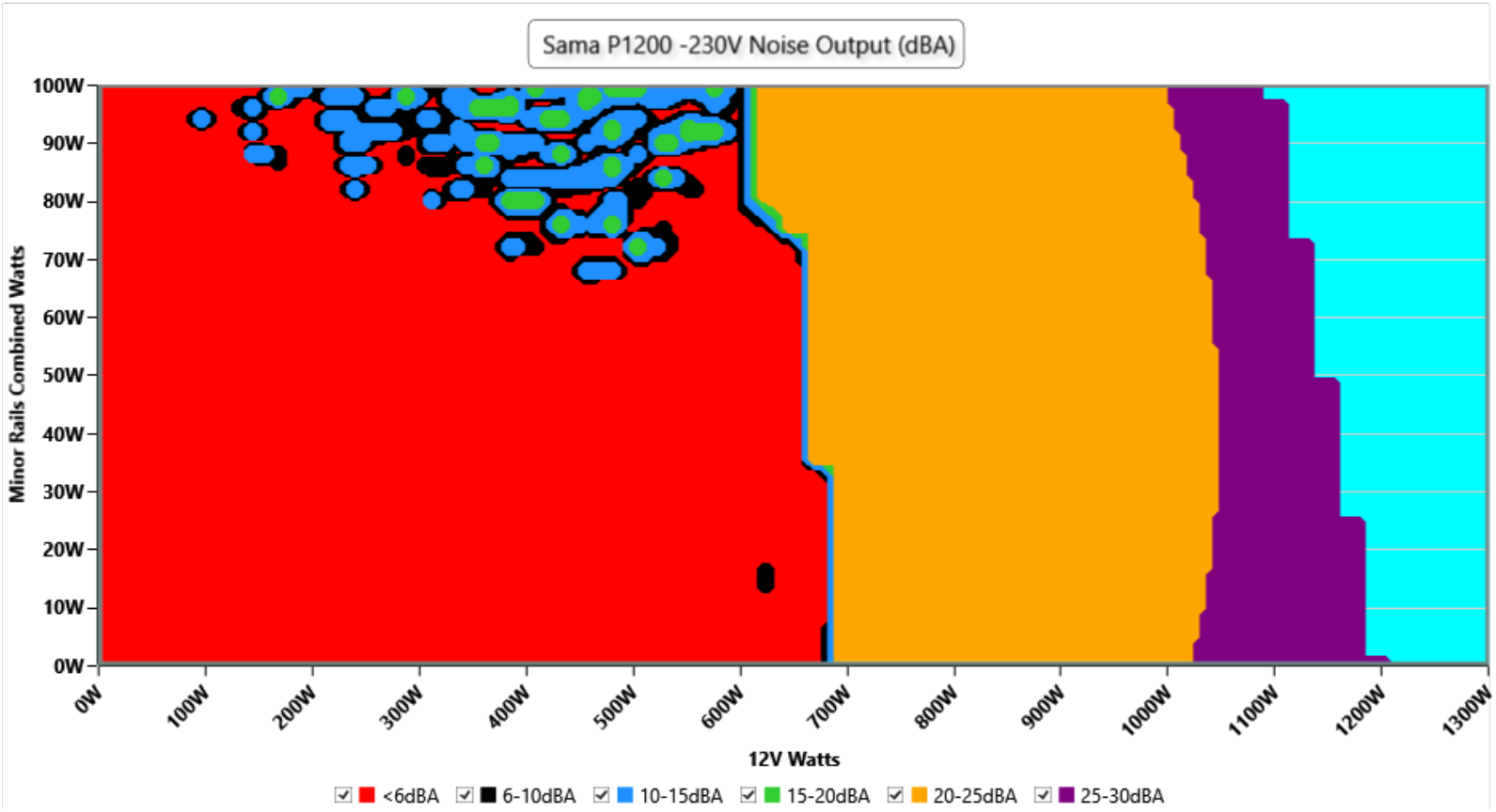
115V



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) · 37.9 °C	0 RPM · <6.0 dB(A) · 53.2 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 40.6 °C	0 RPM · <6.0 dB(A) · 55.2 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 49.6 °C	369 RPM · <6.0 dB(A) · 42.0 °C	<6.0 in both
100%	982 RPM · 26.4 dB(A) · 30.3 °C	1616 RPM · 41.4 dB(A) · 45.9 °C	**+15.0 dB(A)**

230V

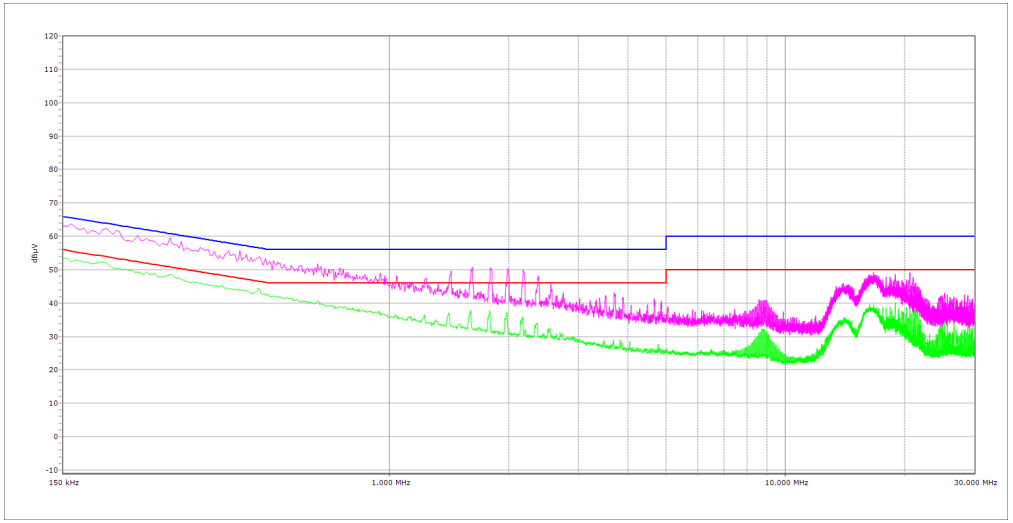
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 31.4 °C	0 RPM · <6.0 dB(A) · 49.8 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 37.3 °C	0 RPM · <6.0 dB(A) · 51.8 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 42.1 °C	360 RPM · <6.0 dB(A) · 42.2 °C	<6.0 in both
100%	1141 RPM · 31.2 dB(A) · 30.2 °C	1569 RPM · 41.0 dB(A) · 45.7 °C	**+9.8 dB(A)**

INFO

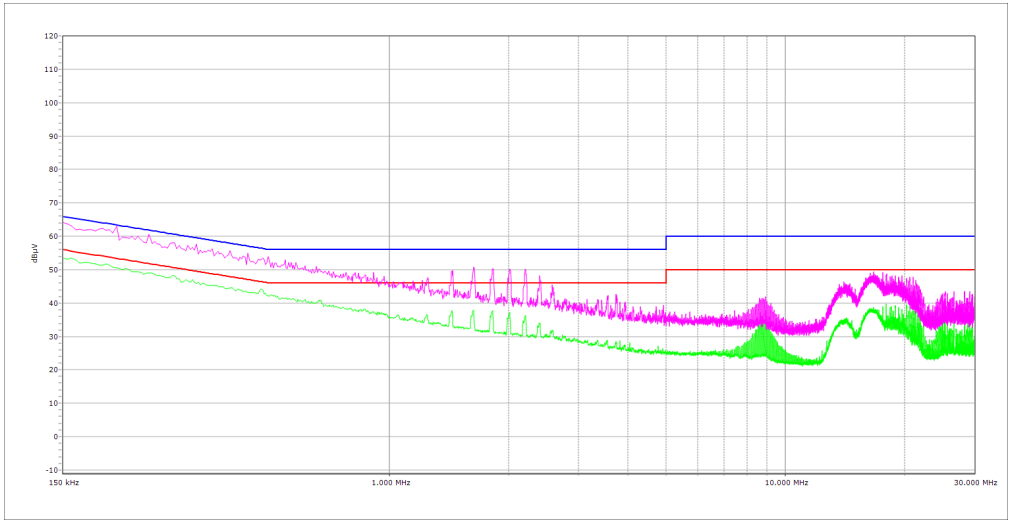
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative 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



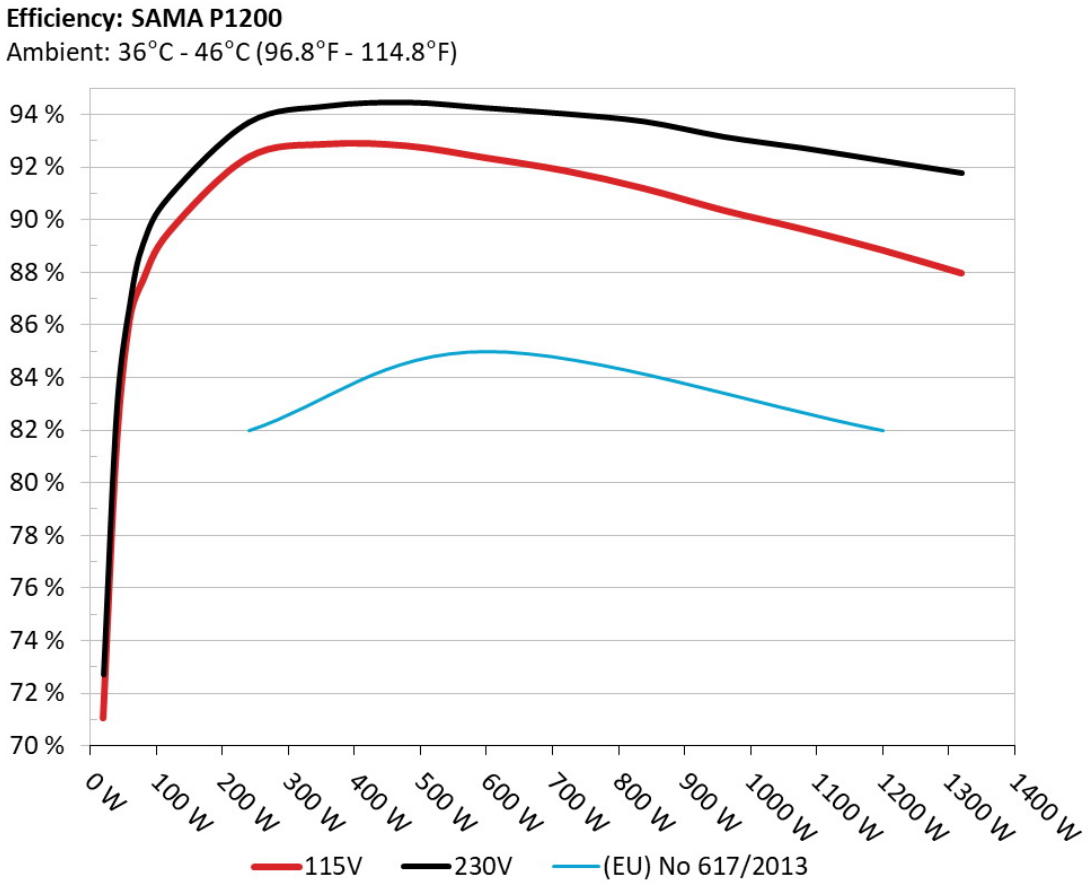
NEUTRAL



PHASE

Indicative Performance

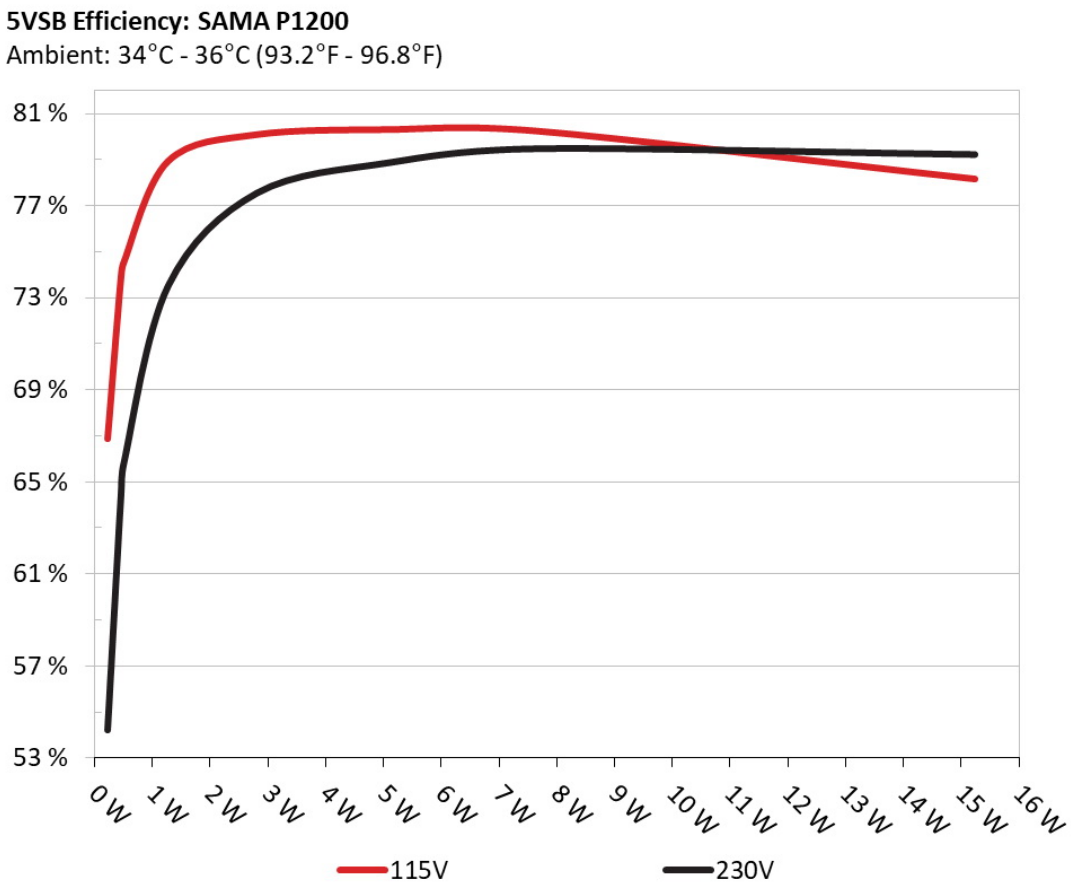
Efficiency under high ambient temperature



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**	0.231W	66.858%	0.039
	5.132V	0.346W		115.08V
2	**0.09A**	0.461W	73.839%	0.07
	5.129V	0.625W		115.08V
3	**0.55A**	2.814W	80.068%	0.289
	5.119V	3.515W		115.08V
4	**1A**	5.111W	80.285%	0.383
	5.112V	6.365W		115.08V
5	**1.5A**	7.656W	80.222%	0.429
	5.105V	9.544W		115.07V
6	**2.999A**	15.239W	78.141%	0.49
	5.081V	19.502W		115.07V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.231W	54.193%	0.015
	5.133V	0.427W		230.21V
2	**0.09A**	0.461W	64.346%	0.025
	5.126V	0.717W		230.19V
3	**0.55A**	2.816W	77.556%	0.119
	5.119V	3.628W		230.15V
4	**1A**	5.113W	78.884%	0.192
	5.112V	6.481W		230.15V
5	**1.5A**	7.658W	79.484%	0.253
	5.105V	9.634W		230.15V
6	**3A**	15.244W	79.232%	0.352
	5.082V	19.24W		230.17V

Protection Features

OCP (Normal @ 30.9°C)	12V: 148.4A (148.4%), 11.974V 5V: 26A (130%), 5.008V 3.3V: 26.4A (132%), 3.267V 5VSB: 4.8A (160%), 5.03V
OCP (Hot @ 45.3°C)	12V: 143.8A (143.8%), 11.982V 5V: 25.5A (127.5%), 5.008V 3.3V: 26A (130%), 3.269V 5VSB: 4.7A (156.67%), 5.048V
OPP (Normal @ 30.2°C)	1770.54W (147.54%)
OPP (Hot @ 46.7°C)	1688.07W (140.67%)
OTP	✓ (117°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%	**8.136A**	**1.997A**	**2.002A**	**0.977A**	119.977	89.531%	0	<6.0	53.18°C	0.975
	12.092V	5.007V	3.297V	5.115V	134.008				40.46°C	115.03V
20%	**17.297A**	**2.998A**	**3.007A**	**1.175A**	239.925	92.362%	0	<6.0	55.24°C	0.989
	12.085V	5.004V	3.292V	5.107V	259.765				40.86°C	115V
30%	**26.742A**	**3.5A**	**3.513A**	**1.373A**	359.008	92.862%	0	<6.0	58.25°C	0.993
	12.077V	5V	3.288V	5.099V	386.603				41.19°C	114.96V
40%	**36.308A**	**4.002A**	**4.021A**	**1.571A**	479.402	92.796%	0	<6.0	62.19°C	0.994
	12.069V	4.997V	3.283V	5.091V	516.621				41.61°C	114.92V
50%	**45.499A**	**5.006A**	**5.035A**	**1.771A**	599.191	92.341%	369	<6.0	42.04°C	0.995
	12.059V	4.994V	3.277V	5.082V	648.887				54.71°C	114.87V
60%	**54.780A**	**6.01A**	**6.056A**	**1.972A**	719.732	91.849%	596	11.6	42.94°C	0.995
	12.047V	4.992V	3.27V	5.072V	783.605				55.85°C	114.83V
70%	**63.994A**	**7.015A**	**7.08A**	**2.173A**	839.461	91.176%	849	21.9	43.44°C	0.996
	12.038V	4.99V	3.263V	5.061V	920.703				56.44°C	114.78V
80%	**73.290A**	**8.018A**	**8.107A**	**2.276A**	959.468	90.348%	1129	30.4	43.91°C	0.996
	12.029V	4.988V	3.256V	5.052V	1061.97				56.8°C	114.73V
90%	**82.928A**	**8.525A**	**8.614A**	**2.379A**	1079.28	89.632%	1379	36.8	44.86°C	0.996
	12.020V	4.985V	3.25V	5.044V	1204.13				57.85°C	114.68V
100%	**92.379A**	**9.031A**	**9.154A**	**2.983A**	1199.274	88.841%	1616	41.4	45.88°C	0.996
	12.011V	4.982V	3.244V	5.027V	1349.904				58.96°C	114.63V
110%	**101.785A**	**10.039A**	**10.287A**	**2.987A**	1319.898	87.963%	1851	46.3	46.13°C	0.996
	12.002V	4.98V	3.237V	5.021V	1500.509				60.79°C	114.57V
CL1	**0.116A**	**11.99A**	**12.091A**	**0A**	101.287	84.285%	831	21.1	41.02°C	0.972
	12.084V	5.02V	3.283V	5.127V	120.172				52.92°C	115.03V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL2	**0.114A**	**19.889A**	**0A**	**0A**	101.362	83.605%	834	21.3	40.67°C	0.972
	12.086V	5.027V	3.301V	5.131V	121.237				48.88°C	115.04V
CL3	**0.114A**	**0A**	**20.166A**	**0A**	67.374	77.135%	823	20.8	42.57°C	0.967
	12.086V	5.008V	3.272V	5.125V	87.345				48.99°C	115.05V
CL4	**99.860A**	**0A**	**0A**	**0A**	1199.859	89.58%	1383	37	46.8°C	0.996
	12.015V	4.972V	3.254V	5.085V	1339.441				57.29°C	114.64V

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%	**8.136A**	**1.997A**	**2.001A**	**0.977A**	119.968	90.898%	0	<6.0	49.76°C	0.891
	12.092V	5.007V	3.298V	5.115V	131.979				40.03°C	230.23V
20%	**17.297A**	**2.998A**	**3.006A**	**1.175A**	239.91	93.701%	0	<6.0	51.83°C	0.956
	12.084V	5.004V	3.293V	5.106V	256.037				40.63°C	230.22V
30%	**26.745A**	**3.5A**	**3.511A**	**1.373A**	359.021	94.32%	0	<6.0	54.82°C	0.967
	12.076V	5V	3.289V	5.098V	380.641				41.28°C	230.2V
40%	**36.313A**	**4.003A**	**4.02A**	**1.572A**	479.42	94.461%	0	<6.0	57.49°C	0.972
	12.068V	4.997V	3.284V	5.089V	507.529				41.56°C	230.17V
50%	**45.500A**	**5.007A**	**5.033A**	**1.771A**	599.199	94.248%	360	<6.0	42.15°C	0.975
	12.059V	4.994V	3.278V	5.081V	635.761				52.46°C	230.15V
60%	**54.788A**	**6.012A**	**6.054A**	**1.972A**	719.739	94.025%	828	21	42.91°C	0.976
	12.045V	4.991V	3.271V	5.07V	765.477				50.44°C	230.13V
70%	**64.006A**	**7.017A**	**7.077A**	**2.174A**	839.464	93.73%	829	21.1	43.35°C	0.976
	12.035V	4.989V	3.264V	5.059V	895.63				51.17°C	230.11V
80%	**73.298A**	**8.019A**	**8.101A**	**2.276A**	959.435	93.151%	1075	29.1	43.94°C	0.976
	12.027V	4.987V	3.258V	5.051V	1029.983				53.35°C	230.09V
90%	**82.934A**	**8.527A**	**8.607A**	**2.379A**	1079.251	92.724%	1332	35.6	44.02°C	0.976
	12.019V	4.983V	3.253V	5.043V	1163.938				53.94°C	230.07V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**92.393A**	**9.036A**	**9.147A**	**2.984A**	1199.292	92.245%	1569	41	45.72°C	0.976
	12.010V	4.979V	3.247V	5.026V	1300.118				55.63°C	230.05V
110%	**101.798A**	**10.048A**	**10.277A**	**2.988A**	1319.906	91.772%	1815	45.5	46.38°C	0.975
	12.000V	4.975V	3.24V	5.019V	1438.253				56.94°C	230.03V
CL1	**0.116A**	**12.003A**	**12.074A**	**0A**	101.287	85.608%	833	21.2	43.84°C	0.876
	12.085V	5.015V	3.288V	5.127V	118.316				52.59°C	230.23V
CL2	**0.114A**	**19.922A**	**0A**	**0A**	101.36	84.769%	835	21.4	41.99°C	0.877
	12.087V	5.018V	3.301V	5.131V	119.572				49.23°C	230.23V
CL3	**0.114A**	**0A**	**20.148A**	**0A**	67.375	78.393%	822	20.8	40.98°C	0.818
	12.085V	5.008V	3.275V	5.125V	85.947				47.14°C	230.23V
CL4	**99.870A**	**0A**	**0A**	**0A**	1199.868	92.891%	1364	36.5	45.92°C	0.976
	12.014V	4.972V	3.254V	5.084V	1291.701				54.06°C	230.05V

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	**1.228A**	**0.499A**	**0.5A**	**0.195A**	20.005	71.069%	0	<6.0	47.28°C	0.849
	12.097V	5.009V	3.3V	5.131V	28.143				36.06°C	115.06V
40W	**2.702A**	**0.699A**	**0.7A**	**0.292A**	39.999	81.272%	0	<6.0	49.43°C	0.928
	12.099V	5.009V	3.3V	5.129V	49.217				37.07°C	115.06V
60W	**4.176A**	**0.898A**	**0.9A**	**0.39A**	59.995	86.184%	0	<6.0	50.12°C	0.966
	12.097V	5.008V	3.299V	5.128V	69.614				38.49°C	115.05V
80W	**5.647A**	**1.098A**	**1.1A**	**0.488A**	79.931	87.667%	0	<6.0	51.78°C	0.967
	12.096V	5.008V	3.298V	5.125V	91.177				39.71°C	115.04V

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	**1.228A**	**0.499A**	**0.5A**	**0.195A**	20.001	72.692%	0	<6.0	44.53°C	0.554
	12.099V	5.01V	3.301V	5.13V	27.514				36.61°C	230.25V
40W	**2.702A**	**0.699A**	**0.7A**	**0.292A**	39.995	82.79%	0	<6.0	45.85°C	0.696
	12.098V	5.009V	3.3V	5.128V	48.308				37.98°C	230.24V
60W	**4.176A**	**0.898A**	**0.9A**	**0.39A**	59.992	86.818%	0	<6.0	47.4°C	0.782
	12.097V	5.008V	3.3V	5.126V	69.101				38.94°C	230.24V
80W	**5.646A**	**1.098A**	**1.1A**	**0.488A**	79.924	89.083%	0	<6.0	48.62°C	0.826
	12.095V	5.007V	3.299V	5.124V	89.718				39.31°C	230.24V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	11.80mV	11.44mV	11.38mV	7.28mV	Pass
20% Load	13.87mV	11.18mV	11.79mV	9.76mV	Pass
30% Load	15.98mV	12.05mV	12.00mV	9.03mV	Pass
40% Load	16.96mV	12.11mV	12.82mV	9.60mV	Pass
50% Load	17.84mV	12.93mV	13.60mV	10.38mV	Pass
60% Load	18.77mV	13.24mV	14.32mV	12.03mV	Pass
70% Load	18.09mV	13.86mV	15.00mV	16.77mV	Pass
80% Load	17.48mV	15.97mV	18.20mV	16.00mV	Pass
90% Load	18.92mV	17.36mV	18.77mV	17.60mV	Pass
100% Load	19.60mV	18.47mV	19.68mV	19.87mV	Pass
110% Load	19.68mV	19.58mV	20.75mV	17.28mV	Pass
Crossload1	14.91mV	16.08mV	16.41mV	18.51mV	Pass
Crossload2	13.87mV	18.13mV	15.77mV	18.63mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	13.66mV	12.31mV	16.03mV	18.53mV	Pass
Crossload4	18.06mV	15.27mV	16.13mV	17.34mV	Pass

The results above are not used in the certification process

230V

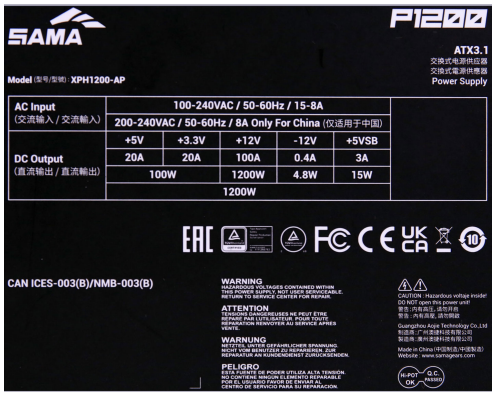
Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	12.12mV	11.69mV	11.94mV	7.59mV	Pass
20% Load	14.85mV	12.21mV	11.89mV	8.88mV	Pass
30% Load	16.71mV	12.41mV	12.51mV	9.39mV	Pass
40% Load	17.74mV	12.52mV	13.29mV	9.50mV	Pass
50% Load	19.23mV	24.88mV	14.27mV	10.94mV	Pass
60% Load	20.21mV	14.63mV	15.15mV	12.23mV	Pass
70% Load	20.57mV	14.73mV	15.93mV	17.40mV	Pass
80% Load	18.82mV	16.17mV	18.46mV	16.00mV	Pass
90% Load	19.59mV	17.00mV	19.39mV	17.29mV	Pass
100% Load	20.04mV	18.31mV	20.27mV	16.30mV	Pass
110% Load	20.75mV	19.43mV	20.27mV	18.76mV	Pass
Crossload1	14.56mV	16.36mV	17.55mV	18.70mV	Pass
Crossload2	13.97mV	17.98mV	16.55mV	18.74mV	Pass
Crossload3	13.04mV	12.78mV	16.24mV	19.15mV	Pass
Crossload4	18.97mV	16.23mV	16.46mV	17.71mV	Pass

The results above are not used in the certification process

SAMA P1200 (China: XP1200)



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

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