MSI MAG A1000GLS PCIE5

Serial Number -

Lab ID MS10002805

Certification ID 252805

Test Result Report ID: 25PS2805A

Certificate Issue Date: May 8, 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	MSI
Model	MAG A1000GLS PCIE5
OEM/ODM	CWT
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	12
Rated Frequency (Hz)	47-63
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	135mm Fluid Dynamic Bearing Fan (ZFF132512H)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	MS10002805
Date of receipt	Apr 23, 2025
Testing Date	May 7, 2025
Report Issued Date	May 8, 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**	In Cable Capacitors
ATX connector 20+4 pin (600mm)	1	1	16-20AWG	No
8 pin EPS12V (650mm)	2	2	18AWG	No
6+2 pin PCIe (600mm)	2	2	18AWG	No
12+4 pin PCIe (600mm) (600W)	1	1	16-24AWG	No
SATA (500mm+150mm+150mm) / 4-pin Molex (+150mm)	1	3 / 1	18AWG	No

SATA (500mm+150mm) / 4-pin Molex (+150mm) / FDD (+150mm)	3	6 / 3 / 3	18-20AWG	No
AC Power Cord (1390mm) - C13 coupler	1	1	18AWG	-

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	0.3
	Watts	100		1000	15	3.6
Total Max. Power (W)		1000				

Parts Description

Manufacturer (OEM)	CWT
PCB Type	Double-Sided
Transient Filter	6x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	1x NTC Thermistor SCK207R0 (7 Ohm @25°C) & Relay
Bridge Rectifier(s)	2x GBJL2510 (1000V, 25A @ 100°C)
APFC MOSFETs	2x STMicroelectronics STFW40N60M2 (650V, 22A @ 100°C, Rds(on): 0.088Ohm)
APFC Boost Diode	1x CRMicro CRXI10D065G2 (650V, 10A @ 161°C)
Bulk Cap(s)	1x Teapo (420V, 680uF @ 105°C, TD(M))

Main Switchers	2x STMicroelectronics STW33N60DM2 (650V, 15.5A @ 100°C, Rds(on): 130mOhm)
APFC Controller	Champion CM6500UNX & 1x Sync Power SPN5003 (For no load consumption)
Resonant Controller	Champion CM6901X
Topology	Primary side: APFC, Half-Bridge & LLC Resonant converter Secondary side: Synchronous Rectification & DC-DC converters
+12V MOSFETs	6x InPower Semiconductor FTG014N04SA (40V, 145A @ 100°C, Rds(on): 1.4mOhm)
5V & 3.3V	DC-DC Converters: 4x UBIQ QN3107M6N (30V, 70A @ 100°C, Rds(on): 2.6mOhm)
Filtering Capacitors	Electrolytic: 8x ChengX (2-3,000h @ 105°C, GR) Polymer: 3x Teapo (FP), 9x BIOSTAR, 19x unknown brand
Fan Controller	Nuvoton MS51FB9AE
Fan Model	ZIC ZFF132512H (135mm, 12V, 0.45A, Fluid Dynamic Bearing Fan)
Rectifier	1x Dongke Semiconductor DK5V45R10S (45V, 10A)
Standby PWM Controller	On-Bright OB2365T

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)	89.593%
Average Noise Output (>1450 Load Combinations)	25.70dBA
Average PF (>1450 Load Combinations)	0.985

Efficiency With 10W (≤500W) or 2% (>500W) Load	71.353%
Standby Power Consumption	0.0183W
Non-Accredited	
12V Ripple (Full Load)	33.70mV
5V Ripple (Full Load)	20.03mV
3.3V Ripple (Full Load)	21.68mV
5VSB Ripple (Full Load)	27.64mV
12V Load Regulation	0.89%
5V Load Regulation	0.58%
3.3V Load Regulation	1.22%
5VSB Load Regulation	1.72%
Inrush Current	24.530A

230V

Accredited	
Average Efficiency (>1450 load combinations)	91.452%
Average Noise Output (>1450 Load Combinations)	24.19dBA
Average PF (>1450 Load Combinations)	0.946
Efficiency With 10W (≤500W) or 2% (>500W) Load	67.394%
Standby Power Consumption	0.0921W
Non-Accredited	
12V Ripple (Full Load)	36.21mV
5V Ripple (Full Load)	21.43mV
3.3V Ripple (Full Load)	22.67mV
5VSB Ripple (Full Load)	28.94mV
12V Load Regulation	0.91%
5V Load Regulation	0.58%
3.3V Load Regulation	1.19%
5VSB Load Regulation	1.62%
Inrush Current	47.770A
12V Transient Response (200%)	11.26V
5V Transient Response (200%)	4.926V

3.3V Transient Response (200%)		3.194V
5VSB Transient Response (200%)		4.842V
Hold-Up Time & PWR_OK Signal		19.40ms
AC Loss to PWR_OK Hold Up Time		17.00ms
PWR_OK Inactive to DC Loss Delay		2.40ms
PSU Timings: T1 (20% / 100%)	53.0ms	53.0ms
PSU Timings: T3 (20% / 100%)	121.0ms	121.0ms
12V OCP (30.6°C / 44.3°C)	106.40A (127.73%), 12.050V	97.40A (116.93%), 12.061V
5V OCP (30.6°C / 44.3°C)	30.8A (154.00%), 5.014V	31A (155.00%), 5.018V
3.3V OCP (30.6°C / 44.3°C)	29.6A (148.00%), 3.275V	31A (155.00%), 3.278V
5VSB OCP (30.6°C / 44.3°C)	5.5A (183.33%), 4.971V	5.5A (183.33%), 4.979V
OPP (31.76°C / 42.25°C)	127.11%	125.36%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	19.4
AC Loss to PWR_OK Hold Up Time (ms)	17
PWR_OK Inactive to DC Loss Delay (ms)	2.4

Tables

115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.06 V	115.01 V	113.85 V	115.09 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	0.18 %	2.00 %	PASS
Real Power:	0.018 W	-0.001 W	N/A	0.038 W	N/A	N/A

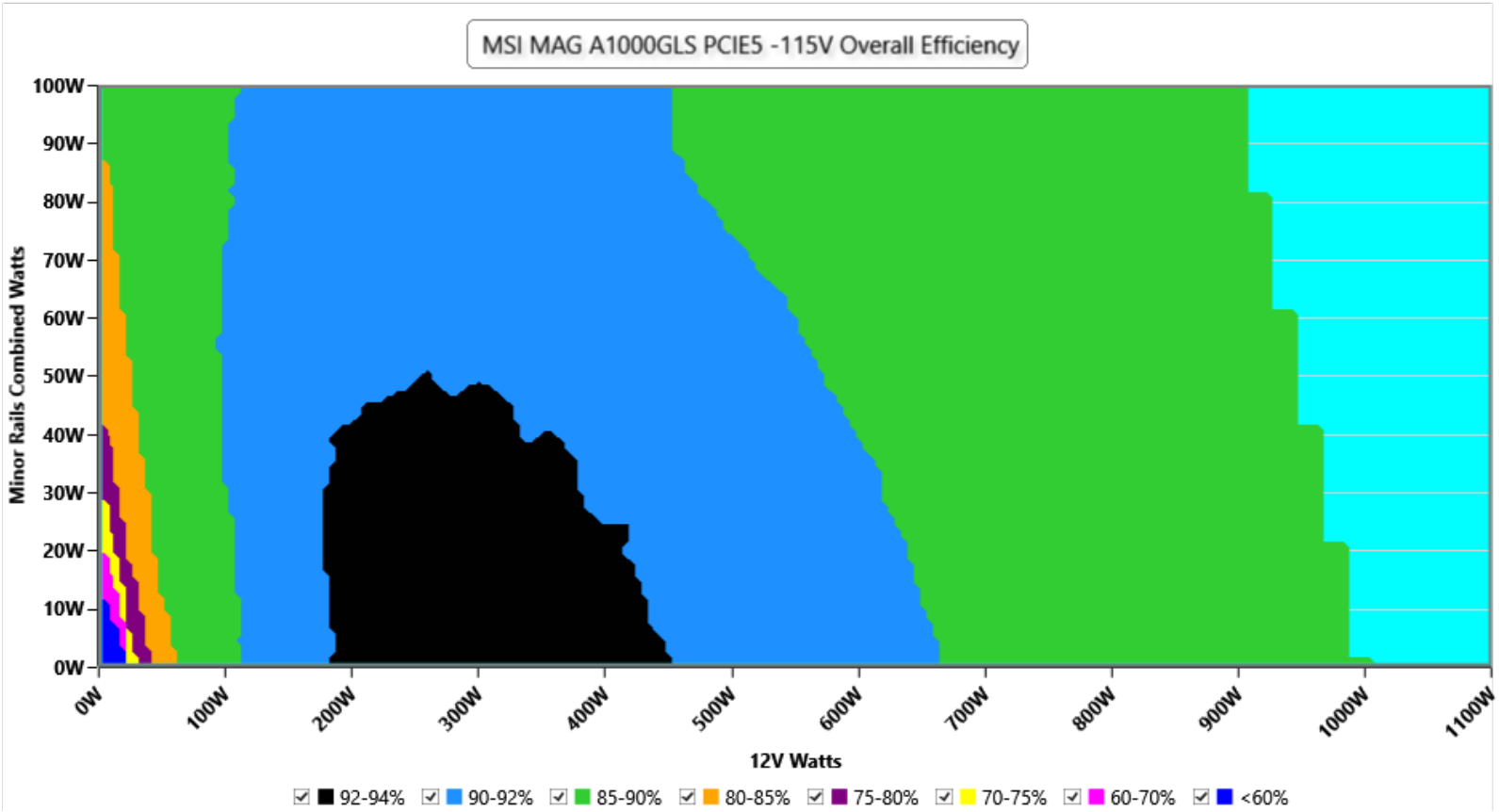
Apparent Power:	12.608 W	12.550 W	N/A	12.672 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	231.00 V	230.89 V	227.70 V	231.06 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 %	0.15 %	N/A	0.28 %	2.00 %	PASS
Real Power:	0.092 W	0.055 W	N/A	0.137 W	N/A	N/A
Apparent Power:	43.192 W	42.980 W	N/A	43.434 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

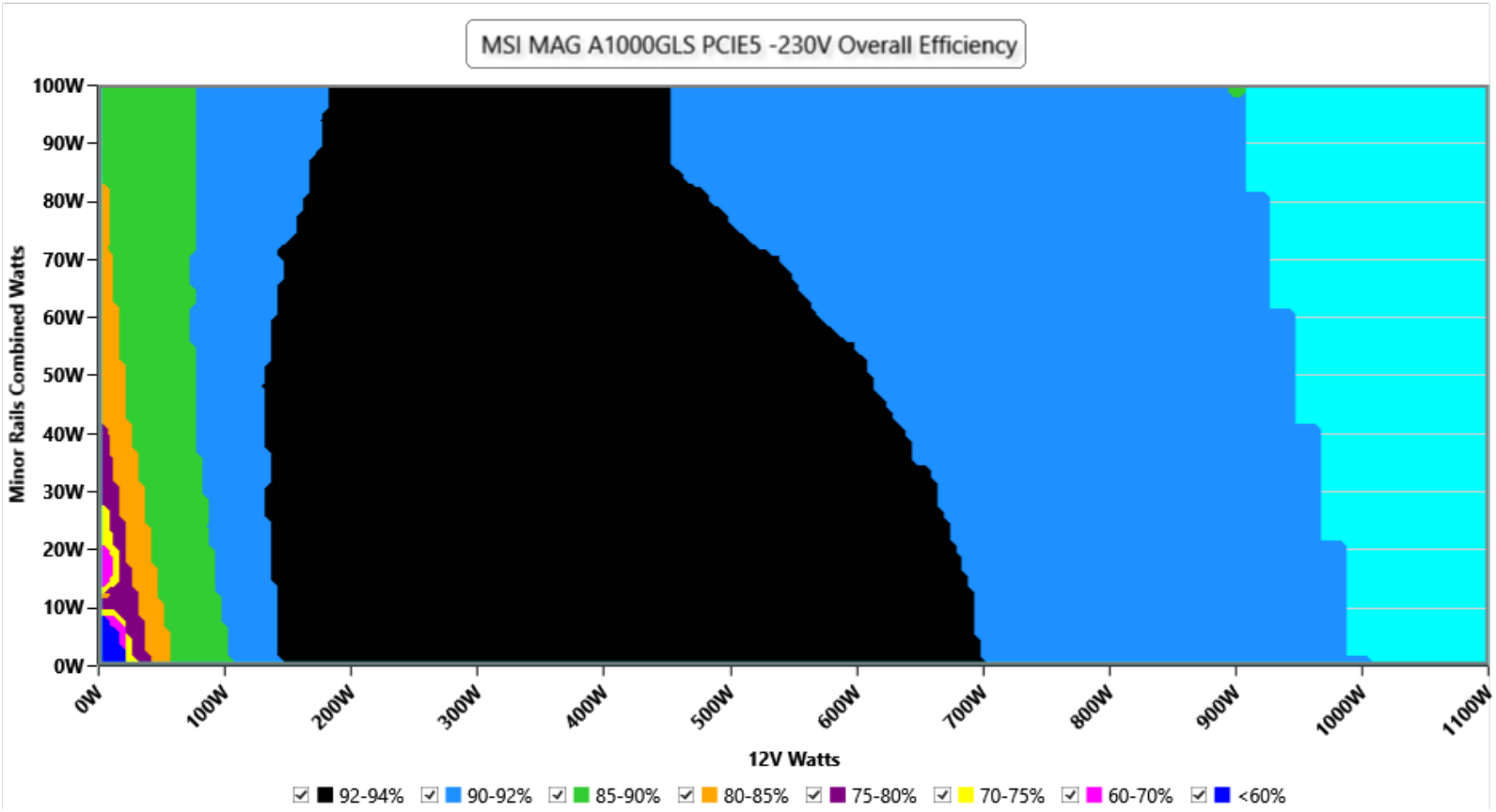
115V



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

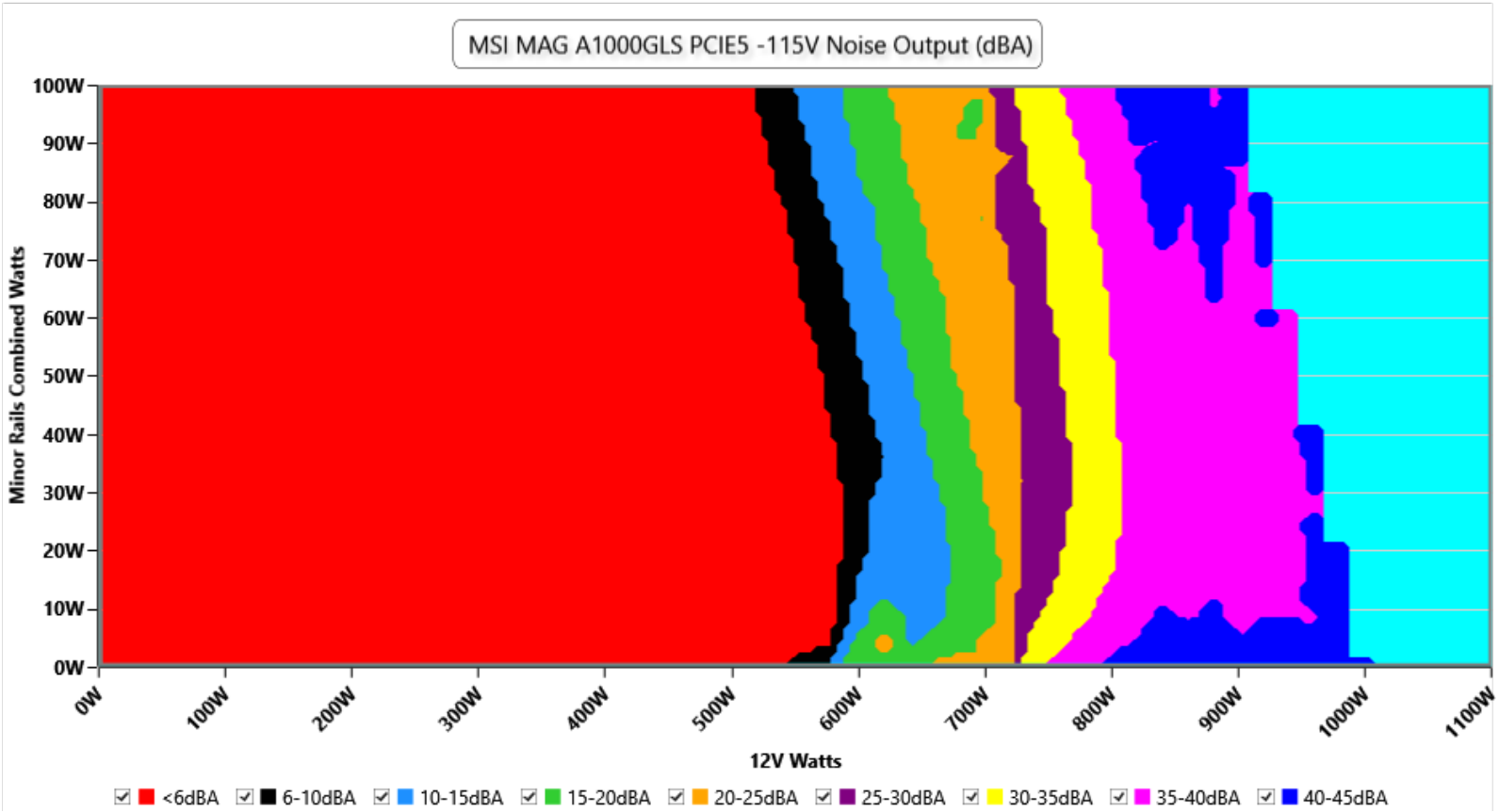


INFO

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

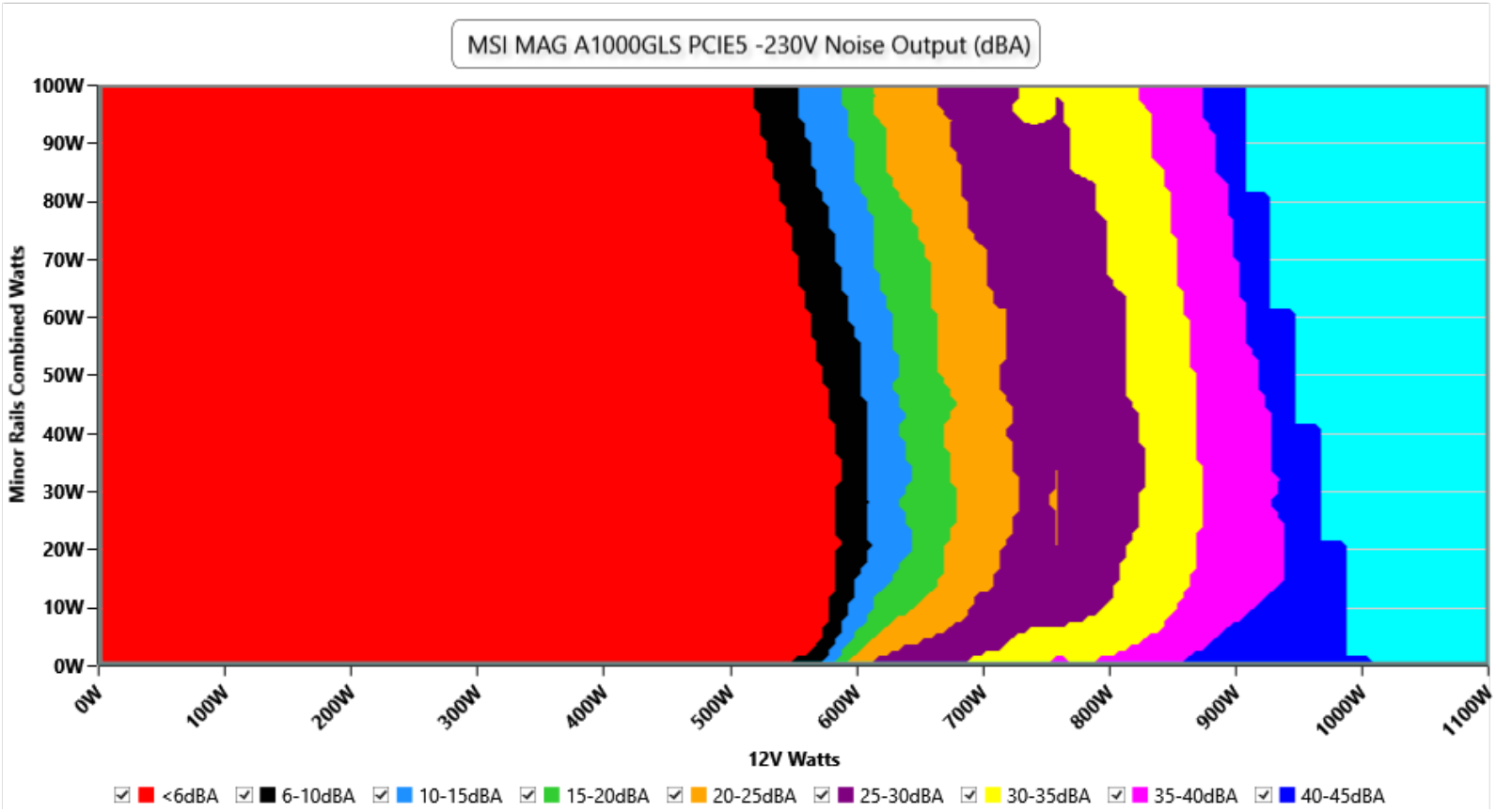
115V



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%	401 RPM · <6.0 dB(A) · 29.6 °C	417 RPM · <6.0 dB(A) · 40.4 °C	<6.0 in both
20%	401 RPM · <6.0 dB(A) · 29.5 °C	418 RPM · <6.0 dB(A) · 40.7 °C	<6.0 in both
50%	401 RPM · <6.0 dB(A) · 29.9 °C	433 RPM · <6.0 dB(A) · 42.1 °C	<6.0 in both
100%	1414 RPM · 34.7 dB(A) · 31.7 °C	1956 RPM · 43.8 dB(A) · 46.3 °C	**+9.1 dB(A)**

230V

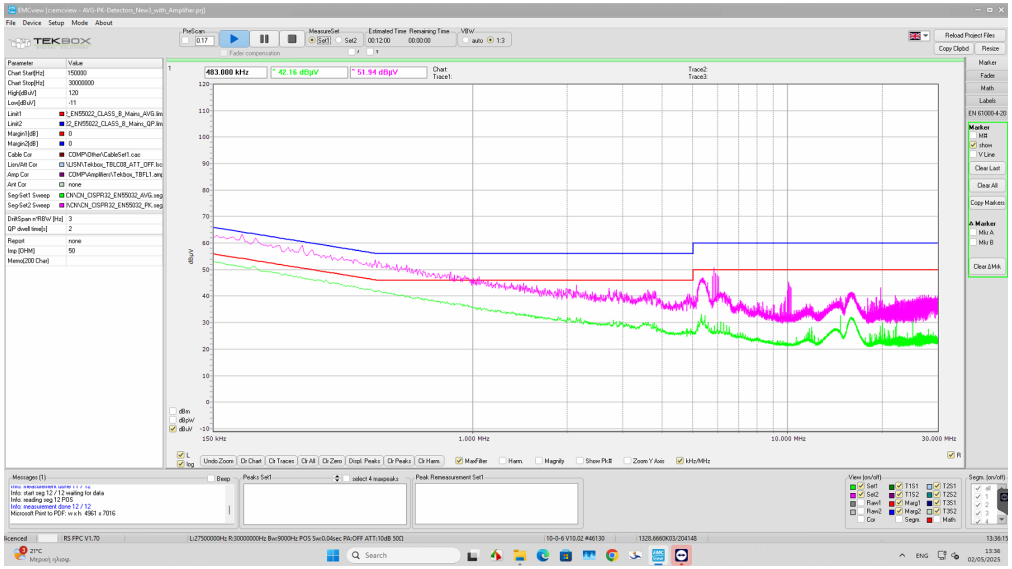
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	396 RPM · <6.0 dB(A) · 29.8 °C	415 RPM · <6.0 dB(A) · 40.0 °C	<6.0 in both
20%	397 RPM · <6.0 dB(A) · 30.3 °C	415 RPM · <6.0 dB(A) · 40.9 °C	<6.0 in both
50%	399 RPM · <6.0 dB(A) · 30.9 °C	419 RPM · <6.0 dB(A) · 42.2 °C	<6.0 in both
100%	1413 RPM · 34.7 dB(A) · 31.0 °C	2253 RPM · 47.4 dB(A) · 45.6 °C	**+12.7 dB(A)**

INFO

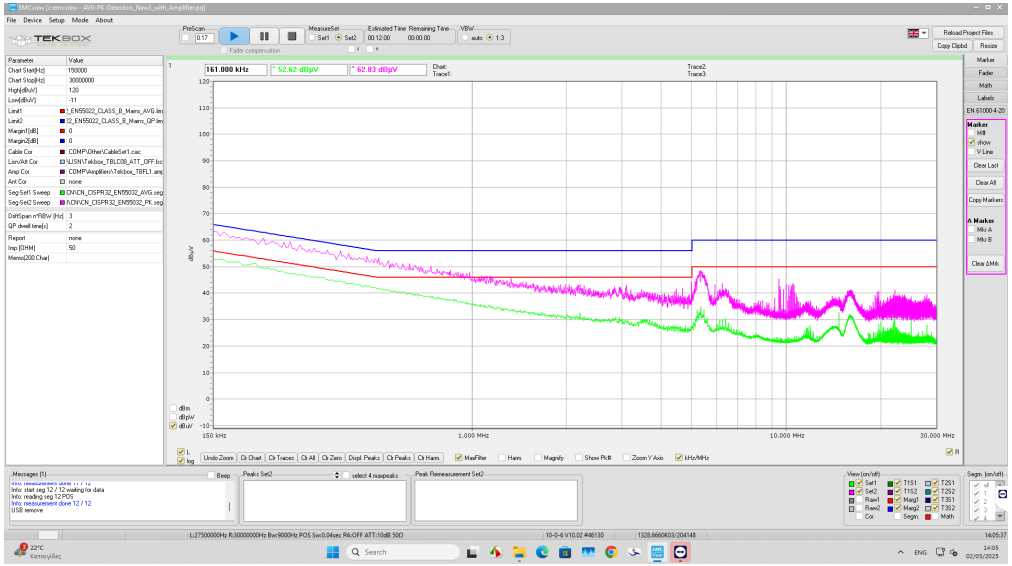
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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



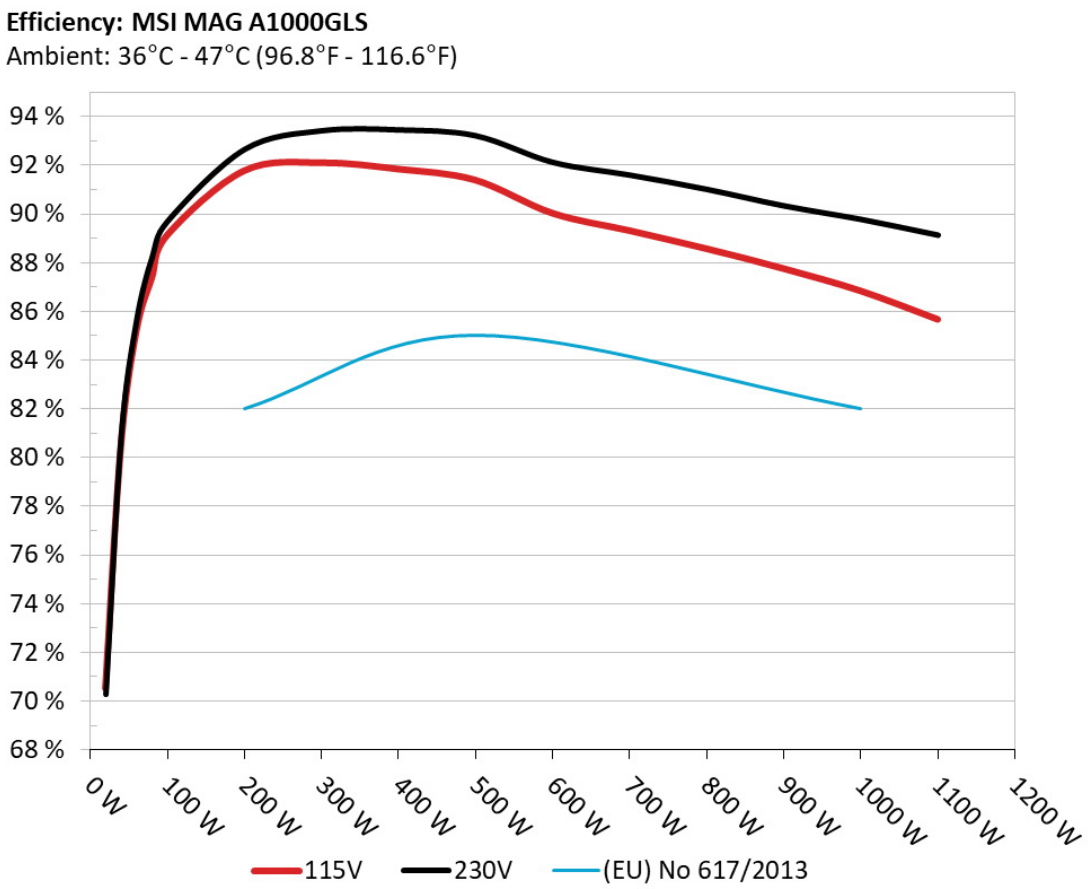
NEUTRAL



PHASE

Indicative Performance

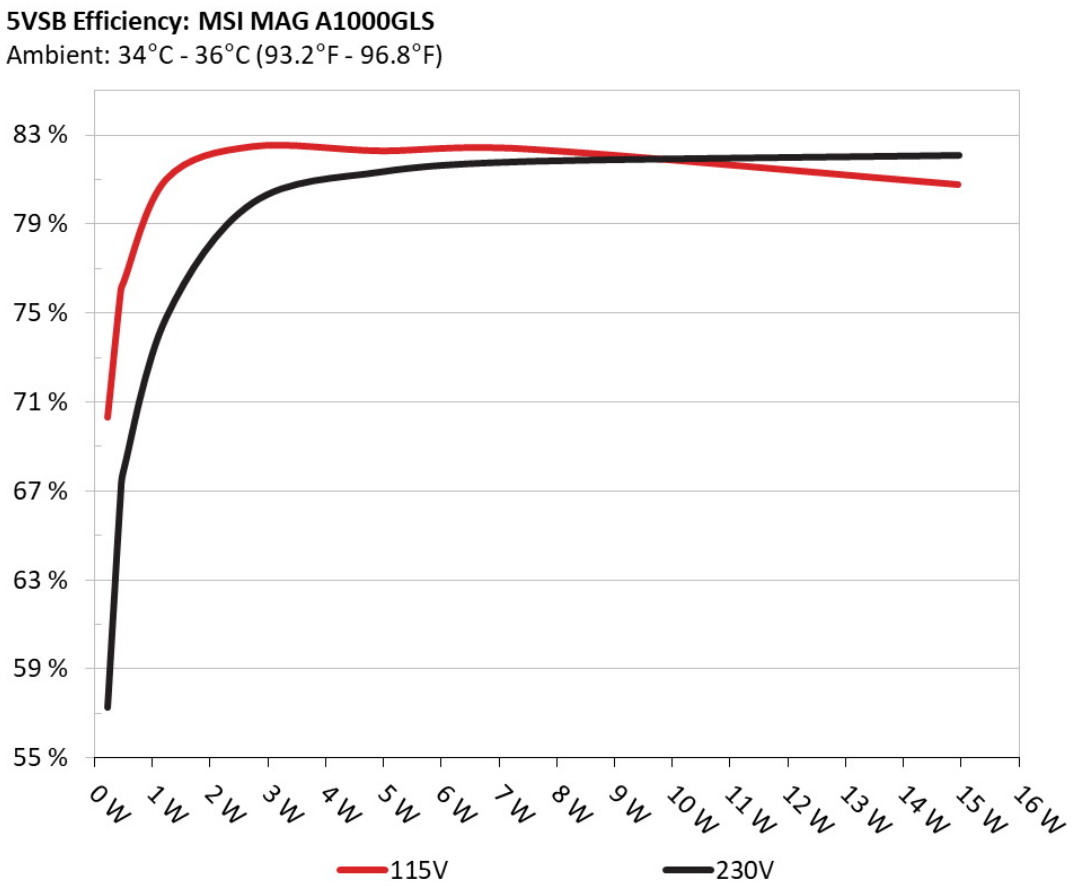
Efficiency under high ambient temperature



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**	0.224W	70.306%	0.026
	4.971V	0.319W		115.07V
2	**0.09A**	0.448W	75.931%	0.047
	4.971V	0.59W		115.07V
3	**0.55A**	2.735W	82.481%	0.225
	4.973V	3.317W		115.07V
4	**1A**	4.976W	82.283%	0.334
	4.975V	6.047W		115.06V
5	**1.5A**	7.467W	82.37%	0.398
	4.977V	9.064W		115.06V
6	**3.001A**	14.953W	80.771%	0.487
	4.984V	18.513W		115.06V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.224W	57.293%	0.009
	4.971V	0.391W		230.28V
2	**0.09A**	0.447W	66.801%	0.016
	4.972V	0.67W		230.26V
3	**0.55A**	2.735W	79.961%	0.081
	4.974V	3.42W		230.24V
4	**1A**	4.976W	81.356%	0.138
	4.976V	6.116W		230.24V
5	**1.5A**	7.469W	81.814%	0.193
	4.979V	9.13W		230.24V
6	**3A**	14.963W	82.093%	0.308
	4.988V	18.229W		230.23V

Protection Features

OCP (Normal @ 30.6°C)	12V: 106.4A (127.73%), 12.05V 5V: 30.8A (154%), 5.014V 3.3V: 29.6A (148%), 3.275V 5VSB: 5.5A (183.33%), 4.971V
OCP (Hot @ 44.3°C)	12V: 97.4A (116.93%), 12.061V 5V: 31A (155%), 5.018V 3.3V: 31A (155%), 3.278V 5VSB: 5.5A (183.33%), 4.979V
OPP (Normal @ 31.8°C)	1271.09W (127.11%)
OPP (Hot @ 42.3°C)	1253.59W (125.36%)
OTP	✓ (110°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%	**6.464A**	**1.978A**	**1.986A**	**1.007A**	99.996	89.122%	417	<6.0	40.35°C	0.978
	12.127V	5.056V	3.323V	4.965V	112.202				42.8°C	115.03V
20%	**13.952A**	**2.969A**	**2.983A**	**1.21A**	199.947	91.772%	418	<6.0	40.68°C	0.988
	12.116V	5.053V	3.318V	4.957V	217.875				45.04°C	115V
30%	**21.804A**	**3.465A**	**3.484A**	**1.414A**	300.001	92.101%	431	<6.0	41.48°C	0.979
	12.105V	5.051V	3.315V	4.95V	325.731				47.77°C	114.95V
40%	**29.633A**	**3.962A**	**3.987A**	**1.619A**	399.583	91.842%	432	<6.0	41.67°C	0.981
	12.094V	5.048V	3.311V	4.942V	435.076				50.87°C	114.91V
50%	**37.142A**	**4.956A**	**4.99A**	**1.824A**	499.3	91.394%	433	<6.0	42.11°C	0.984
	12.083V	5.046V	3.307V	4.934V	546.315				54.7°C	114.87V
60%	**44.705A**	**5.951A**	**5.996A**	**2A**	599.661	90.033%	488	<6.0	42.67°C	0.989
	12.079V	5.043V	3.303V	4.923V	666.048				57°C	114.84V
70%	**52.245A**	**6.947A**	**7.003A**	**2.239A**	699.548	89.315%	780	15.7	43.09°C	0.991
	12.067V	5.04V	3.299V	4.913V	783.234				54.83°C	114.8V
80%	**59.866A**	**7.942A**	**8.012A**	**2.345A**	799.549	88.576%	1040	25.1	43.97°C	0.992
	12.054V	5.036V	3.295V	4.904V	902.667				56.71°C	114.76V
90%	**67.833A**	**8.443A**	**8.508A**	**2.452A**	899.334	87.761%	1265	31.6	44.9°C	0.993
	12.042V	5.034V	3.291V	4.894V	1024.755				59.55°C	114.71V
100%	**75.619A**	**8.944A**	**9.036A**	**3.071A**	999.349	86.845%	1956	43.8	46.25°C	0.993
	12.030V	5.031V	3.287V	4.885V	1150.723				62.63°C	114.67V
110%	**83.352A**	**9.944A**	**10.143A**	**3.075A**	1099.947	85.673%	2251	47.4	47.18°C	0.994
	12.017V	5.028V	3.283V	4.878V	1283.891				62.51°C	114.62V
CL1	**0.116A**	**11.941A**	**12.004A**	**0A**	101.301	84.797%	439	<6.0	41.71°C	0.978
	12.125V	5.041V	3.307V	4.944V	119.48				57.81°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	**0.115A**	**19.874A**	**0A**	**0A**	101.393	84.066%	437	<6.0	41.63°C	0.978
	12.129V	5.032V	3.318V	4.952V	120.608				55.89°C	115.03V
CL3	**0.114A**	**0A**	**20.031A**	**0A**	67.386	78.718%	434	<6.0	40°C	0.965
	12.126V	5.051V	3.295V	4.948V	85.607				52.94°C	115.04V
CL4	**83.107A**	**0A**	**0A**	**0.001A**	999.997	87.164%	2262	47.5	43.39°C	0.993
	12.032V	5.045V	3.301V	4.894V	1147.27				55.51°C	114.67V

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%	**6.466A**	**1.978A**	**1.986A**	**1.007A**	100.01	89.33%	415	<6.0	40°C	0.839
	12.126V	5.056V	3.323V	4.965V	111.948				44.29°C	230.18V
20%	**13.954A**	**2.969A**	**2.983A**	**1.21A**	199.967	92.668%	415	<6.0	40.86°C	0.925
	12.115V	5.053V	3.319V	4.958V	215.786				45.56°C	230.17V
30%	**21.809A**	**3.466A**	**3.484A**	**1.414A**	300.023	93.431%	416	<6.0	41.38°C	0.95
	12.104V	5.051V	3.315V	4.95V	321.119				46.96°C	230.16V
40%	**29.640A**	**3.962A**	**3.986A**	**1.619A**	399.637	93.468%	417	<6.0	41.61°C	0.959
	12.092V	5.049V	3.312V	4.943V	427.563				49.15°C	230.14V
50%	**37.152A**	**4.956A**	**4.989A**	**1.824A**	499.352	93.232%	419	<6.0	42.21°C	0.965
	12.081V	5.046V	3.308V	4.934V	535.605				51.72°C	230.12V
60%	**44.717A**	**5.951A**	**5.995A**	**2A**	599.721	92.136%	902	20.4	42.65°C	0.975
	12.077V	5.043V	3.303V	4.924V	650.91				53.72°C	230.1V
70%	**52.258A**	**6.947A**	**7.002A**	**2.239A**	699.602	91.613%	1396	34.1	43.46°C	0.977
	12.064V	5.04V	3.3V	4.914V	763.646				53.4°C	230.08V
80%	**59.881A**	**7.943A**	**8.01A**	**2.345A**	799.592	91.027%	1835	42	43.87°C	0.979
	12.052V	5.036V	3.296V	4.906V	878.411				52.98°C	230.06V
90%	**67.852A**	**8.443A**	**8.505A**	**2.451A**	899.38	90.352%	2259	47.5	44.91°C	0.981
	12.040V	5.034V	3.292V	4.898V	995.418				54.71°C	230.04V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**75.636A**	**8.945A**	**9.033A**	**3.069A**	999.392	89.794%	2253	47.4	45.56°C	0.982
	12.028V	5.031V	3.288V	4.889V	1112.985				57.38°C	230.02V
110%	**83.369A**	**9.945A**	**10.14A**	**3.076A**	1099.996	89.146%	2246	47.3	46.68°C	0.982
	12.015V	5.028V	3.284V	4.878V	1233.922				57.75°C	230V
CL1	**0.116A**	**11.942A**	**12.001A**	**0A**	101.308	85.461%	437	<6.0	42.16°C	0.853
	12.124V	5.041V	3.308V	4.943V	118.556				55.68°C	230.18V
CL2	**0.116A**	**19.873A**	**0A**	**0A**	101.398	84.583%	433	<6.0	40.2°C	0.854
	12.128V	5.032V	3.319V	4.952V	119.879				52.9°C	230.17V
CL3	**0.114A**	**0A**	**20.016A**	**0A**	67.385	79.532%	430	<6.0	42°C	0.771
	12.126V	5.051V	3.297V	4.948V	84.727				52.51°C	230.19V
CL4	**83.087A**	**0A**	**0A**	**0.001A**	999.896	90.465%	2258	47.5	42.57°C	0.982
	12.034V	5.045V	3.301V	4.895V	1105.294				52.33°C	230.06V

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	**1.224A**	**0.494A**	**0.496A**	**0.2A**	19.995	70.539%	401	<6.0	36.44°C	0.814
	12.137V	5.06V	3.327V	4.969V	28.349				41.32°C	115.07V
40W	**2.694A**	**0.692A**	**0.694A**	**0.302A**	40.001	80.454%	408	<6.0	37.73°C	0.919
	12.134V	5.059V	3.326V	4.968V	49.719				39.61°C	115.06V
60W	**4.166A**	**0.89A**	**0.893A**	**0.403A**	60	85.2%	412	<6.0	38.28°C	0.958
	12.132V	5.058V	3.325V	4.967V	70.419				40.11°C	115.05V
80W	**5.632A**	**1.088A**	**1.092A**	**0.503A**	79.944	87.359%	415	<6.0	39.52°C	0.967
	12.129V	5.058V	3.325V	4.966V	91.51				41.41°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	**1.224A**	**0.494A**	**0.496A**	**0.2A**	19.998	70.281%	417	<6.0	36.85°C	0.416
	12.137V	5.06V	3.327V	4.968V	28.451				44.56°C	230.2V
40W	**2.694A**	**0.692A**	**0.695A**	**0.302A**	40.004	80.911%	414	<6.0	37.19°C	0.598
	12.134V	5.059V	3.326V	4.968V	49.438				43.24°C	230.2V
60W	**4.166A**	**0.89A**	**0.893A**	**0.403A**	60.005	85.664%	414	<6.0	38.05°C	0.71
	12.131V	5.058V	3.325V	4.967V	70.043				43.67°C	230.19V
80W	**5.634A**	**1.088A**	**1.092A**	**0.504A**	79.955	88.226%	413	<6.0	39.81°C	0.787
	12.129V	5.058V	3.325V	4.965V	90.622				43.58°C	230.19V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	17.69mV	13.24mV	13.24mV	10.74mV	Pass
20% Load	21.55mV	14.01mV	13.86mV	11.72mV	Pass
30% Load	25.47mV	14.01mV	13.96mV	11.77mV	Pass
40% Load	27.38mV	13.96mV	15.41mV	13.06mV	Pass
50% Load	30.01mV	14.84mV	16.60mV	14.55mV	Pass
60% Load	28.41mV	17.31mV	20.43mV	15.49mV	Pass
70% Load	29.39mV	15.35mV	18.10mV	18.89mV	Pass
80% Load	29.85mV	16.07mV	19.34mV	20.29mV	Pass
90% Load	31.97mV	19.42mV	20.74mV	21.94mV	Pass
100% Load	33.70mV	20.03mV	21.68mV	27.64mV	Pass
110% Load	35.97mV	20.95mV	24.14mV	28.04mV	Pass
Crossload1	16.72mV	13.62mV	13.75mV	13.32mV	Pass
Crossload2	17.37mV	15.15mV	13.39mV	13.06mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	16.45mV	13.65mV	14.89mV	13.53mV	Pass
Crossload4	35.64mV	18.10mV	20.58mV	18.18mV	Pass

The results above are not used in the certification process

230V

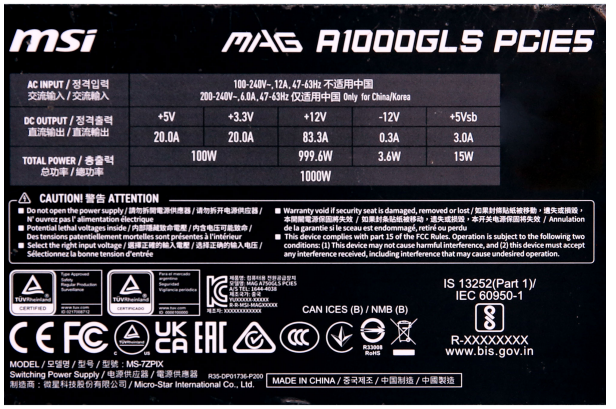
Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	16.91mV	13.29mV	14.07mV	10.48mV	Pass
20% Load	22.48mV	15.04mV	14.94mV	11.82mV	Pass
30% Load	24.95mV	15.25mV	15.56mV	12.49mV	Pass
40% Load	28.25mV	15.25mV	16.39mV	13.32mV	Pass
50% Load	30.26mV	16.85mV	17.38mV	14.81mV	Pass
60% Load	28.41mV	17.88mV	20.79mV	15.07mV	Pass
70% Load	30.06mV	16.28mV	18.92mV	18.12mV	Pass
80% Load	31.24mV	16.79mV	20.37mV	20.39mV	Pass
90% Load	32.22mV	21.59mV	22.24mV	21.88mV	Pass
100% Load	36.21mV	21.43mV	22.67mV	28.94mV	Pass
110% Load	37.46mV	21.04mV	23.56mV	28.59mV	Pass
Crossload1	18.33mV	14.44mV	15.25mV	13.84mV	Pass
Crossload2	18.41mV	15.61mV	15.05mV	14.14mV	Pass
Crossload3	17.73mV	15.77mV	17.07mV	14.92mV	Pass
Crossload4	34.35mV	18.01mV	21.12mV	19.16mV	Pass

The results above are not used in the certification process

MSI MAG A1000GLS PCIE5



Top side



Power specifications label