MSI MAG A1000PLS PCIE5

Serial Number -

Lab ID MS10003121

Certification ID 263121

Test Result Report ID: 26PS3121A

Certificate Issue Date: Feb 20, 2026

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 A1000PLS PCIE5
OEM/ODM	CWT
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	15
Rated Frequency (Hz)	50-60
Rated Power (W)	1000
Operating Temperature (Continuous Full Load) (°C)	0 - 40
Type	ATX12V
Cable Design	Fully Modular
Warranty	10 years
Cybenetics Measurements	
Dimensions (W x H x D)	150 x 85 x 150mm
Weight	1.65 kg (3.64 lb)
Cooling	135mm Hydro Dynamic Bearing Fan (PLA13525S12H)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	MS10003121
Date of receipt	Jan 8, 2026
Testing Date	Feb 18, 2026
Report Issued Date	Feb 20, 2026
Engineer Name	Georgios Theodoros Sarimpalas
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	18-22AWG	Tinned Copper
4+4 pin EPS12V (650mm)	2	2	18AWG	Tinned Copper
8 pin EPS12V (650mm)	1	1	18AWG	Tinned Copper
6+2 pin PCIe (600mm+150mm)	1	2	18AWG	Tinned Copper
6+2 pin PCIe (600mm)	2	2	18AWG	Tinned Copper

Modular Cables				
12+4 pin PCIe (600mm) (600W)	1	1	16-24AWG	Tinned Copper
SATA (500mm+150mm+150mm)	2	6	18AWG	Tinned Copper
4-pin Molex (500mm+150mm+150mm)	1	3	18AWG	Tinned Copper

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
	Watts	100		999.6	15	0
Total Max. Power (W)		1000				

Parts Description

General Data	
Manufacturer (OEM)	CWT
PCB Type	Double-Sided
Primary Side	
Transient Filter	6x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor SCK207R0 (7 Ohm @ 25°C) & Relay
Bridge Rectifier	2x WeEn WNB2560M (600V, 25A @ 127°C)
APFC MOSFETs	2x CRmicro CRJQ99N65G2BF (650V, 20A @ 100°C, Rds(on): 0.90Ohm)
APFC Boost Diode	1x CRMicro CRXI10D065G2 (650V, 10A @ 161°C)
Bulk Cap(s)	1x TEAPO (420V,680uF, 2000h @ 105°C, GG)

Main Switchers	2x STMicroelectronics STW43N60DM2 (600V, 21A @ 100°C, Rds(on): 0.93Ohm)
APFC Controller	Champion CM6500UNX & Sync Power SPN5003 (reducing no load consumption)
Resonant Controller	Champion CM6901X
Topology	Primary side: APFC, Half-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	6x C009N04ES
5V & 3.3V	DC-DC Converters: 4x UBIQ Semi QN3107M6N (30V, 70A @ 100°C, Rds(on): 2.6mOhm)
Filtering Capacitors	Electrolytic: 3x (105℃ TEAPO) 4700uF/16V 1x (105℃ CHENGX) 2200uF/16V A 1x (105℃ CHENGX) 100uF/35V AL 2x (105℃ CHENGX) 100uF/25V GR 2x (105℃ ELITE) 47uF/50V EY Polymer: 13x (105℃ ELITE) 16V 12x (105℃ TEAPO) 16V 8x (105℃ ELITE) 6.3V
Fan Controller / Micro Controller	Nuvoton MS51PC0AE
Fan Model	Power Logic PLA13525S12H (135mm, 12V, 0.56A, Fluid Dynamic Bearing Fan)
5VSB Circuit	
Rectifier	Dongke DK5V45R10V (45V, 10mOhm)
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)	90.379%
Average Noise Output (>1450 Load Combinations)	17.93dBA
Average PF (>1450 Load Combinations)	0.982
Efficiency With 10W (≤500W) or 2% (>500W) Load	71.912%
Standby Power Consumption	0.0860W
Non-Accredited	
12V Ripple (Full Load)	36.78mV
5V Ripple (Full Load)	19.63mV
3.3V Ripple (Full Load)	20.03mV
5VSB Ripple (Full Load)	19.93mV
12V Load Regulation	1.24%
5V Load Regulation	0.50%
3.3V Load Regulation	0.90%
5VSB Load Regulation	1.73%
Inrush Current	25.470A

230V

Accredited	
Average Efficiency (>1450 load combinations)	92.206%
Average Noise Output (>1450 Load Combinations)	19.24dBA
Average PF (>1450 Load Combinations)	0.940
Efficiency With 10W (≤500W) or 2% (>500W) Load	73.515%
Standby Power Consumption	0.1479W
Non-Accredited	
12V Ripple (Full Load)	38.14mV
5V Ripple (Full Load)	21.80mV
3.3V Ripple (Full Load)	21.15mV

5VSB Ripple (Full Load)		20.62mV
12V Load Regulation		1.09%
5V Load Regulation		0.54%
3.3V Load Regulation		1.08%
5VSB Load Regulation		1.83%
Inrush Current		48.630A
12V Transient Response (200%)		11.36V
5V Transient Response (200%)		4.872V
3.3V Transient Response (200%)		3.236V
5VSB Transient Response (200%)		4.877V
Hold-Up Time & PWR_OK Signal		21.80ms
AC Loss to PWR_OK Hold Up Time		18.80ms
PWR_OK Inactive to DC Loss Delay		3.00ms
PSU Timings: T1 (20% / 100%)	47.0ms	47.0ms
PSU Timings: T3 (20% / 100%)	122.0ms	123.0ms
12V OCP (29.0°C / 44.2°C)	106.80A (128.21%), 12.028V	107.80A (129.41%), 12.023V
5V OCP (29.0°C / 44.2°C)	32.4A (162.00%), 4.976V	32.4A (162.00%), 4.975V
3.3V OCP (29.0°C / 44.2°C)	30.1A (150.50%), 3.358V	30.2A (151.00%), 3.359V
5VSB OCP (29.0°C / 44.2°C)	5.2A (173.33%), 4.977V	5.2A (173.33%), 4.965V
OPP (30.51°C / 44.04°C)	129.26%	127.11%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	21.8
AC Loss to PWR_OK Hold Up Time (ms)	18.8
PWR_OK Inactive to DC Loss Delay (ms)	3

Stromverbrauch im Ruhezustand

Tables

115V

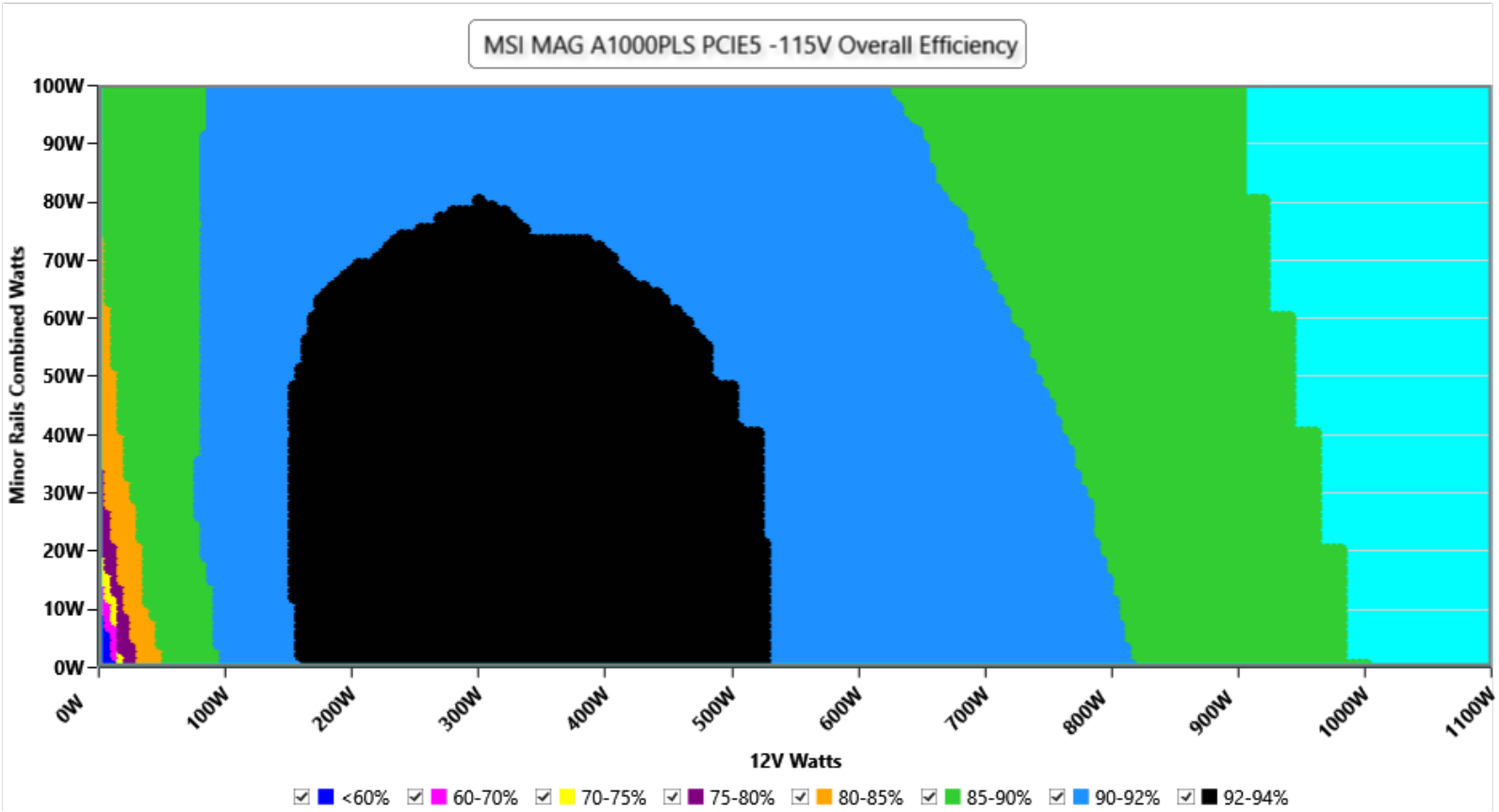
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.01 V	114.99 V	113.85 V	115.04 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	60.00 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.13 %	0.11 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.086 W	0.061 W	N/A	0.114 W	N/A	N/A
Apparent Power:	12.550 W	12.529 W	N/A	12.570 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:	230.06 V	230.04 V	227.70 V	230.08 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:	0.14 %	0.13 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.148 W	0.105 W	N/A	0.227 W	N/A	N/A
Apparent Power:	41.469 W	41.436 W	N/A	41.502 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

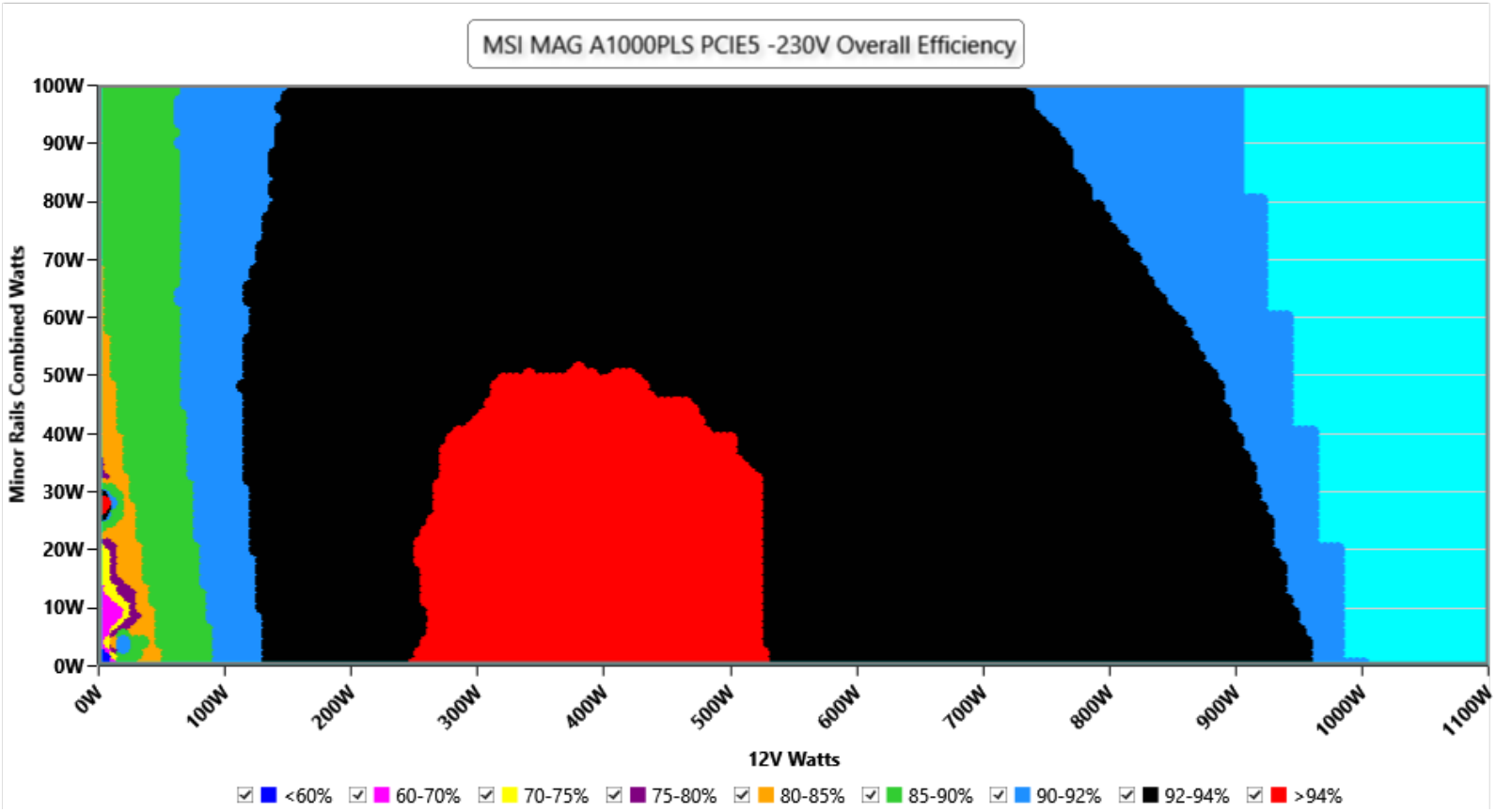
115V



INFO

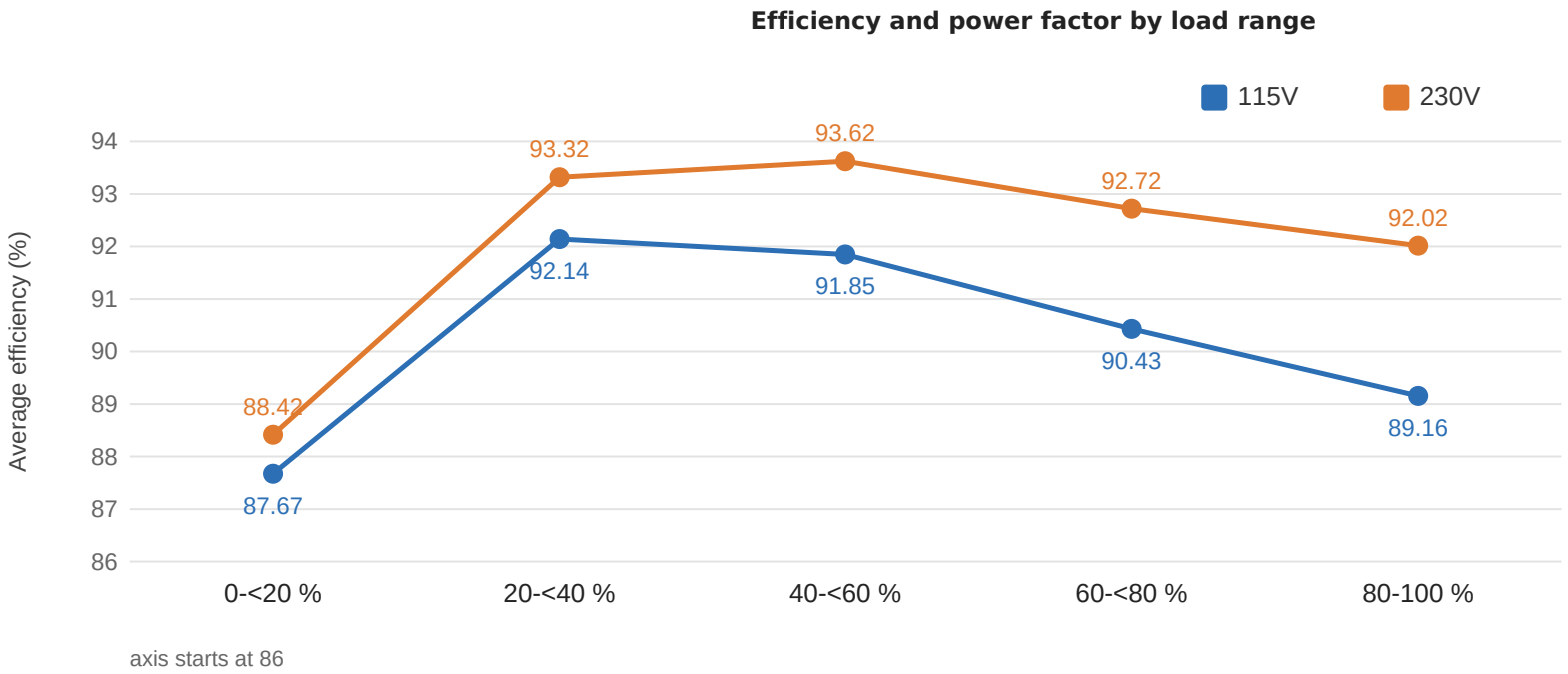
This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

230V

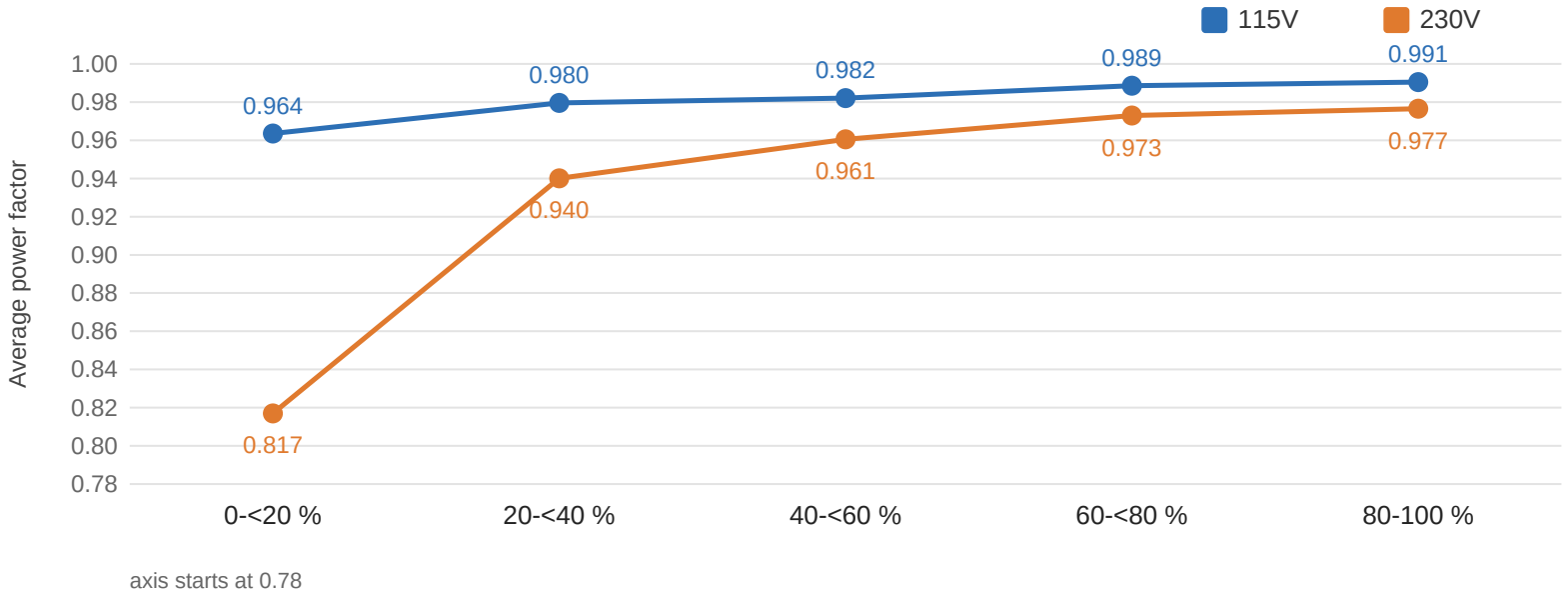


INFO

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



axis starts at 86



axis starts at 0.78

Load range	Points	Efficiency 115V	Efficiency 230V	PF 115V	PF 230V
0-<20 %	233 / 233	87.67%	88.42%	0.964	0.817
20-<40 %	310 / 310	92.14%	93.32%	0.980	0.940
40-<60 %	310 / 310	91.85%	93.62%	0.982	0.961
60-<80 %	310 / 310	90.43%	92.72%	0.989	0.973
80-100 %	317 / 317	89.16%	92.02%	0.991	0.977
70-100 % (High-Load)	472 / 472	89.49%	92.20%	0.990	0.976
All (published average)	1480 / 1480	90.38%	92.21%	0.982	0.940

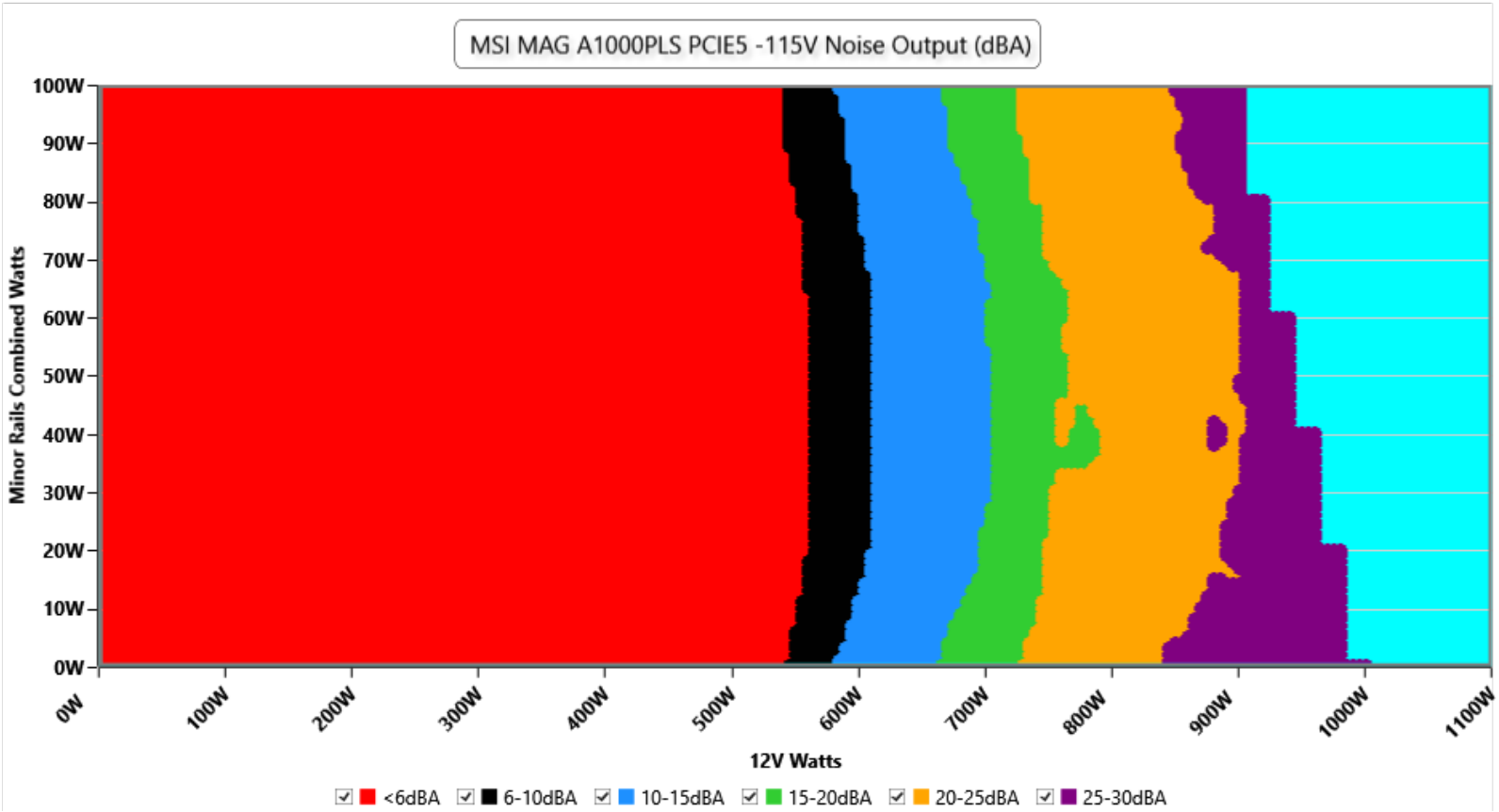
INFO

The average efficiency and power factor in five ranges of load. Calculated from the 1480 (115V) and 1480 (230V) load combinations of the certification sweep, the same data that ETA and LAMBDA use (test 0 excluded). Load is the total DC output as a share of the rated 1000 W. These are plain averages of the valid readings, as for the ETA rating, so the ranges combined give back the published averages.

Informational. Not part of the ETA or LAMBDA rating.

Noise Graph

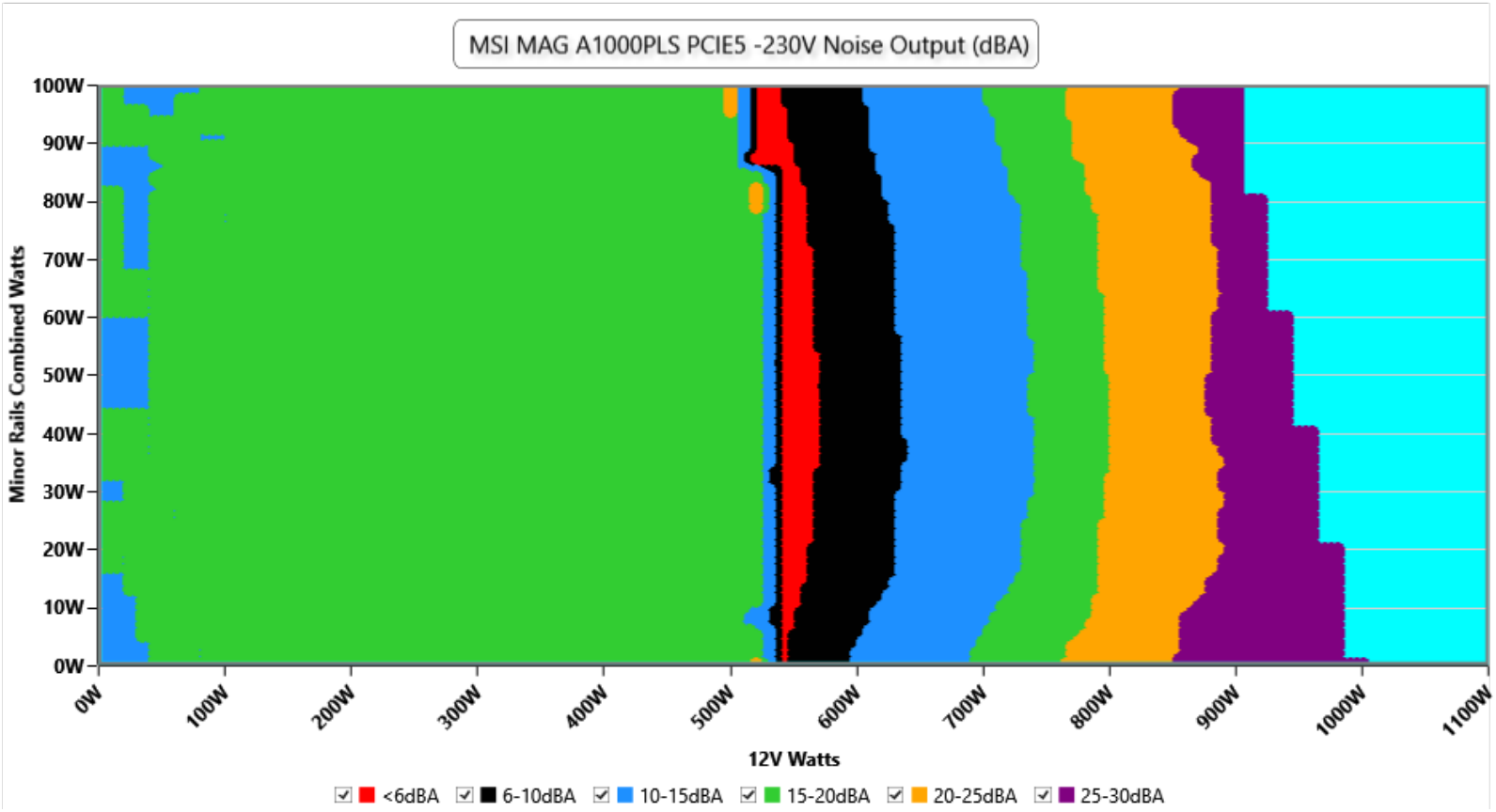
115V



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

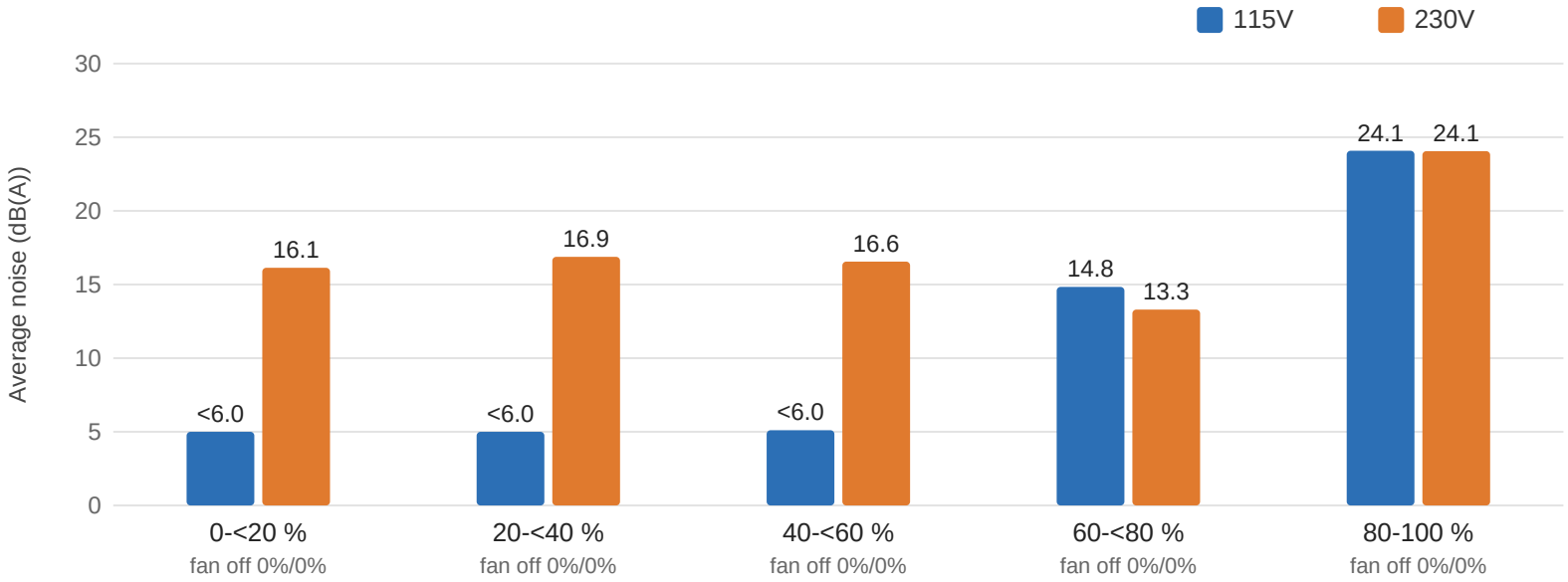
The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

Noise by load range

High-Load Index (70-100 % load)

Noise **22.7 dB(A)** at 115V and **22.6 dB(A)** at 230V · loudest point 27.2 dB(A)

Efficiency 89.49% / 92.20% · power factor 0.990 / 0.976 (115V / 230V)



Load range	Noise 115V avg (loudest)	Noise 230V avg (loudest)	Fan off 115V / 230V
0-<20 %	<6.0 (<6.0)	16.1 (16.9)	0% / 0%
20-<40 %	<6.0 (<6.0)	16.9 (16.9)	0% / 0%
40-<60 %	<6.0 (8.5)	16.6 (20.7)	0% / 0%
60-<80 %	14.8 (22.4)	13.3 (20.7)	0% / 0%
80-100 %	24.1 (27.2)	24.1 (27.2)	0% / 0%
70-100 % (High-Load)	22.7 (27.2)	22.6 (27.2)	0% / 0%
All (published average)	18.0 (27.2)	19.3 (27.2)	0% / 0%

INFO

The average noise in five ranges of load, the share of points with the fan stopped (semi-passive operation), and the High-Load Index: the same figures for all points at 70 % of the rated output and above. Calculated from the 1480 (115V) and 1480 (230V) load combinations of the certification sweep, the same data that ETA and LAMBDA use (test 0 excluded). Load is the total DC output as a share of the rated 1000 W. Noise is averaged on the energy scale, as for LAMBDA, so the ranges combined give back the published average noise. Each load combination is held for about five seconds; the stabilized readings at fixed loads are under "Noise under high ambient temperature". Below 6 dB(A), the floor of our sound meter, the table and the chart show <6.0. In the averages a stopped fan counts as 5 dB(A),

as in the published average.

Informational. Not part of the ETA or LAMBDA rating.

Noise under high ambient temperature (indicative)

115V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	386 RPM · <6.0 dB(A) · 30.9 °C	862 RPM · 17.6 dB(A) · 40.4 °C	<6.0 → 17.6 dB(A)
20%	389 RPM · <6.0 dB(A) · 31.0 °C	866 RPM · 17.7 dB(A) · 40.9 °C	<6.0 → 17.7 dB(A)
50%	392 RPM · <6.0 dB(A) · 30.6 °C	968 RPM · 21.7 dB(A) · 42.2 °C	<6.0 → 21.7 dB(A)
100%	1066 RPM · 24.7 dB(A) · 31.0 °C	1250 RPM · 29.8 dB(A) · 45.8 °C	**+5.1 dB(A)**

230V

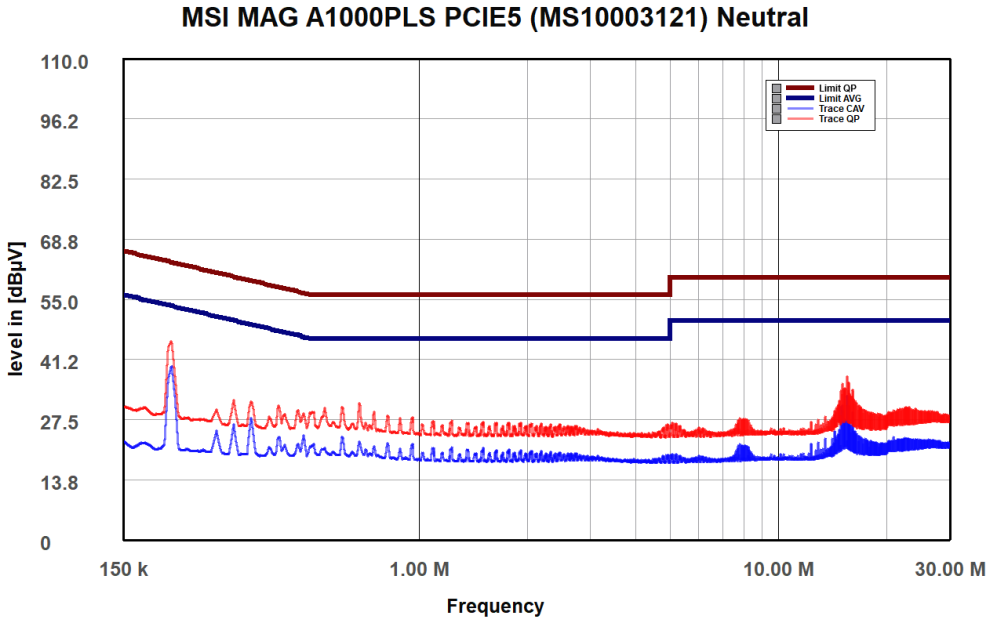
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	828 RPM · 15.9 dB(A) · 30.8 °C	856 RPM · 17.1 dB(A) · 40.3 °C	**+1.2 dB(A)**
20%	826 RPM · 15.8 dB(A) · 30.8 °C	858 RPM · 17.3 dB(A) · 40.7 °C	**+1.5 dB(A)**
50%	827 RPM · 15.8 dB(A) · 31.0 °C	962 RPM · 21.1 dB(A) · 42.1 °C	**+5.3 dB(A)**
100%	1075 RPM · 24.8 dB(A) · 30.0 °C	1243 RPM · 29.7 dB(A) · 46.0 °C	**+4.9 dB(A)**

INFO

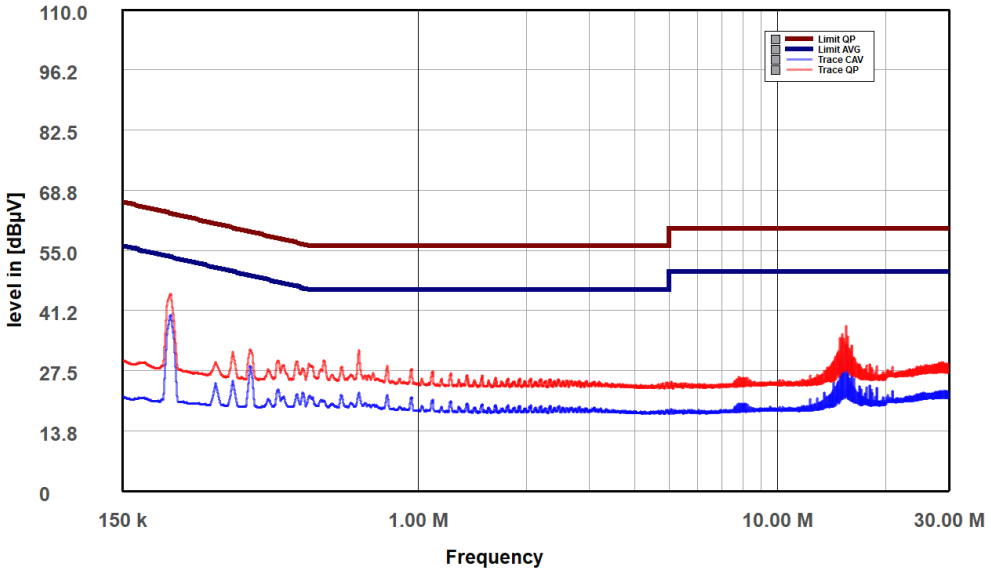
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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



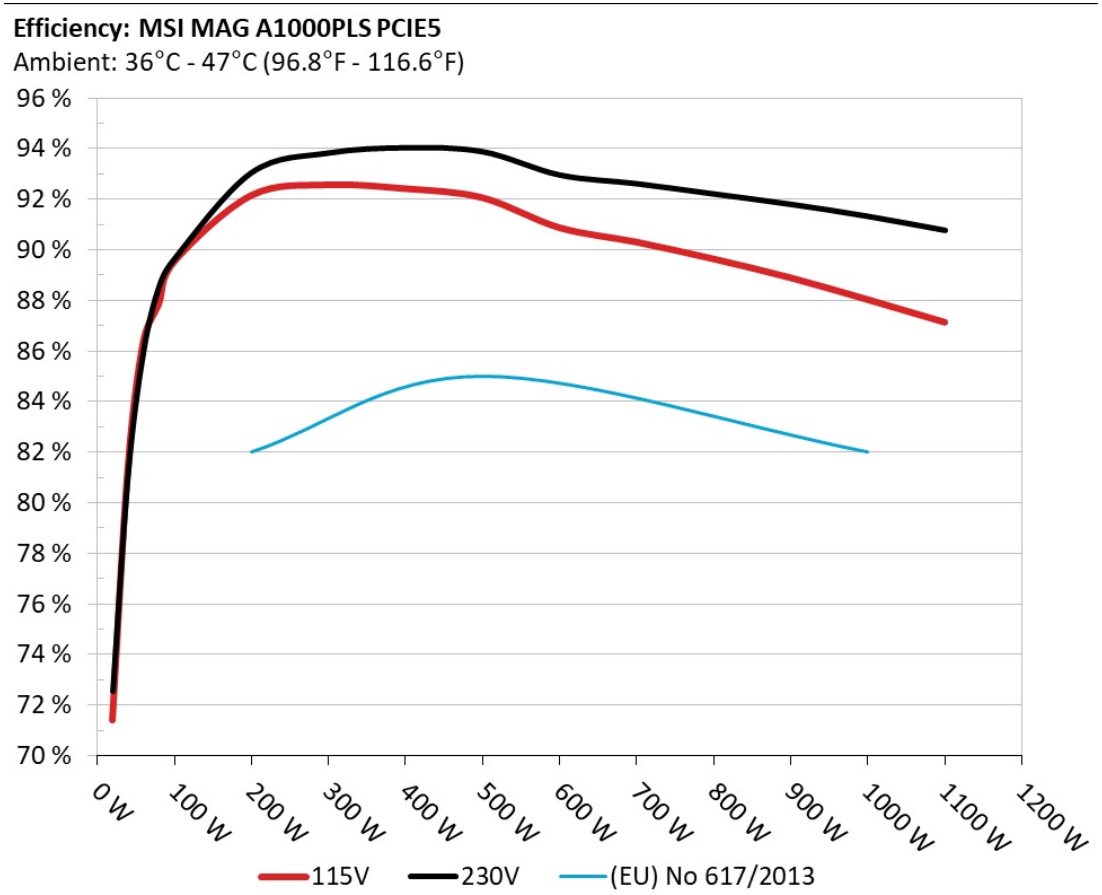
NEUTRAL



PHASE

Indicative Performance

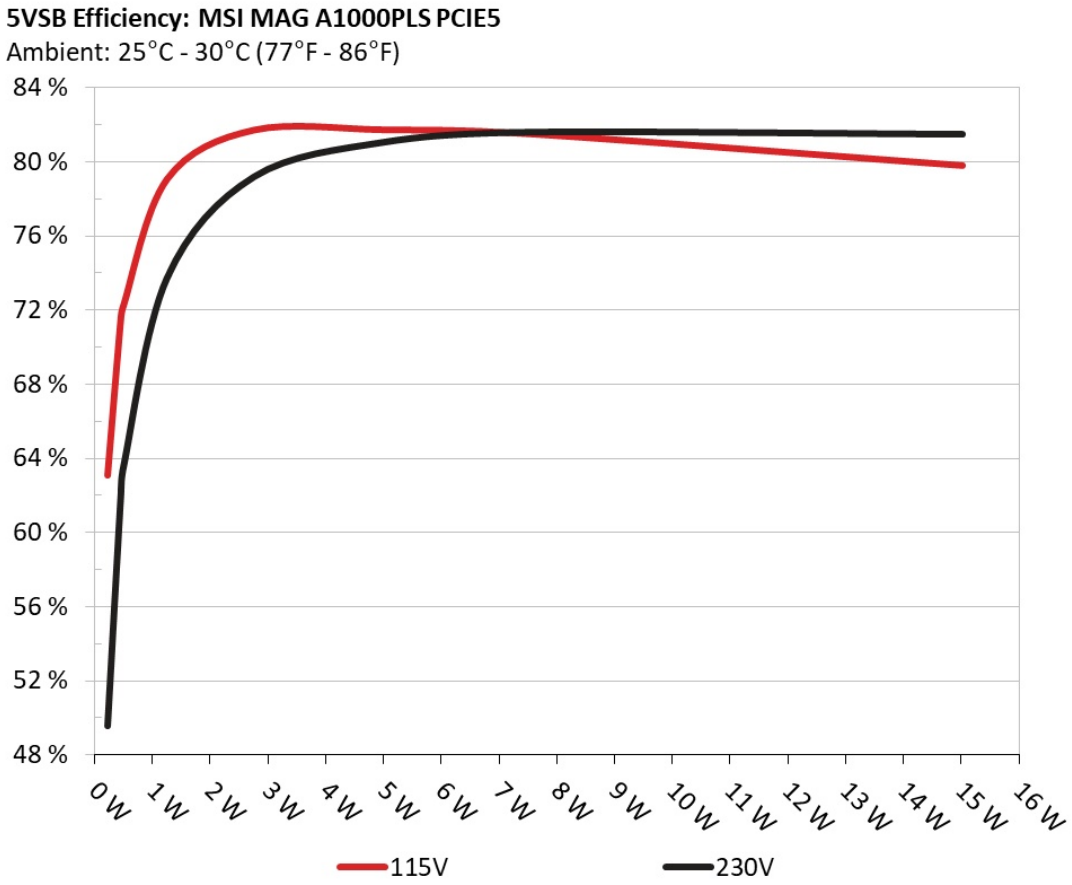
Efficiency under high ambient temperature



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**	0.226W	63.065%	0.029
	5.016V	0.359W		115.05V
2	**0.09A**	0.452W	71.452%	0.051
	5.016V	0.633W		115.04V
3	**0.55A**	2.759W	81.732%	0.213
	5.015V	3.376W		115.04V
4	**1A**	5.015W	81.75%	0.294
	5.015V	6.135W		115.04V
5	**1.5A**	7.522W	81.531%	0.342
	5.014V	9.226W		115.04V
6	**3A**	15.028W	79.818%	0.419
	5.009V	18.827W		115.04V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.226W	49.591%	0.011
	5.017V	0.456W		230.05V
2	**0.09A**	0.452W	61.894%	0.018
	5.017V	0.731W		229.99V
3	**0.55A**	2.759W	79.197%	0.082
	5.016V	3.484W		230V
4	**1A**	5.016W	81.068%	0.135
	5.016V	6.19W		230V
5	**1.5A**	7.524W	81.605%	0.183
	5.015V	9.219W		230V
6	**3A**	15.031W	81.495%	0.275
	5.01V	18.444W		230V

Protection Features

OCP (Normal @ 29°C)	12V: 106.8A (128.21%), 12.028V 5V: 32.4A (162%), 4.976V 3.3V: 30.1A (150.5%), 3.358V 5VSB: 5.2A (173.33%), 4.977V
OCP (Hot @ 44.2°C)	12V: 107.8A (129.41%), 12.023V 5V: 32.4A (162%), 4.975V 3.3V: 30.2A (151%), 3.359V 5VSB: 5.2A (173.33%), 4.965V
OPP (Normal @ 30.5°C)	1292.61W (129.26%)
OPP (Hot @ 44°C)	1271.13W (127.11%)
OTP	✓ (150°C @ 12V Heatsink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB 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%	**6.484A**	**1.984A**	**1.966A**	**0.999A**	100.005	89.539%	862	17.6	40.41°C	0.971
	12.092V	5.04V	3.357V	5.004V	111.692				44.63°C	115.01V
20%	**13.995A**	**2.978A**	**2.952A**	**1.201A**	199.956	92.159%	866	17.7	40.93°C	0.987
	12.080V	5.038V	3.354V	4.996V	216.967				44.58°C	114.98V
30%	**21.873A**	**3.476A**	**3.447A**	**1.403A**	300.01	92.581%	860	17.5	41.07°C	0.978
	12.068V	5.035V	3.351V	4.989V	324.045				45.46°C	114.94V
40%	**29.728A**	**3.974A**	**3.942A**	**1.606A**	399.587	92.43%	872	17.8	41.57°C	0.979
	12.055V	5.033V	3.349V	4.981V	432.31				46.59°C	114.9V
50%	**37.270A**	**4.97A**	**4.933A**	**1.81A**	499.298	92.079%	968	21.7	42.17°C	0.982
	12.041V	5.031V	3.345V	4.972V	542.253				48.47°C	114.87V
60%	**44.871A**	**5.967A**	**5.925A**	**2A**	599.746	90.889%	846	16.6	42.92°C	0.987
	12.035V	5.028V	3.342V	4.963V	659.864				49.2°C	114.83V
70%	**52.453A**	**6.965A**	**6.92A**	**2.221A**	699.542	90.319%	1103	25.8	43.18°C	0.989
	12.019V	5.026V	3.339V	4.954V	774.522				49.4°C	114.8V
80%	**60.146A**	**7.962A**	**7.915A**	**2.326A**	799.553	89.654%	1178	27.8	43.69°C	0.99
	11.998V	5.023V	3.335V	4.945V	891.821				50.44°C	114.76V
90%	**68.218A**	**8.464A**	**8.402A**	**2.431A**	899.352	88.911%	1210	28.7	44.15°C	0.991
	11.975V	5.02V	3.333V	4.936V	1011.512				52.1°C	114.71V
100%	**76.108A**	**8.967A**	**8.921A**	**3.046A**	999.36	88.048%	1250	29.8	45.75°C	0.992
	11.953V	5.017V	3.329V	4.924V	1135.015				54.92°C	114.67V
110%	**83.872A**	**9.97A**	**10.014A**	**3.053A**	1099.964	87.147%	1547	36.1	46.25°C	0.992
	11.944V	5.014V	3.325V	4.914V	1262.184				56.53°C	114.63V
CL1	**0.116A**	**11.956A**	**11.877A**	**0A**	101.301	85.812%	813	15.4	40.6°C	0.975
	12.086V	5.034V	3.343V	4.992V	118.051				48.32°C	115.01V

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**	**19.834A**	**0A**	**0A**	101.353	84.838%	935	23.3	41.83°C	0.975
	12.090V	5.04V	3.349V	4.998V	119.466				46.92°C	115V
CL3	**0.115A**	**0A**	**19.789A**	**0A**	67.4	79.04%	874	17.9	40.23°C	0.959
	12.091V	5.023V	3.336V	4.998V	85.272				47.84°C	115.02V
CL4	**83.593A**	**0A**	**0A**	**0A**	999.934	88.626%	1222	29.1	45.24°C	0.992
	11.962V	5.02V	3.34V	4.944V	1128.262				52.92°C	114.68V

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%	**6.484A**	**1.983A**	**1.967A**	**0.999A**	100.011	89.64%	856	17.1	40.3°C	0.818
	12.093V	5.042V	3.356V	5.005V	111.568				43.71°C	230V
20%	**13.996A**	**2.977A**	**2.954A**	**1.201A**	199.967	93.04%	858	17.3	40.65°C	0.917
	12.080V	5.04V	3.352V	4.996V	214.927				43.91°C	229.98V
30%	**21.876A**	**3.475A**	**3.449A**	**1.403A**	300.026	93.816%	860	17.5	41.25°C	0.944
	12.066V	5.037V	3.349V	4.989V	319.802				45.2°C	229.96V
40%	**29.736A**	**3.973A**	**3.946A**	**1.607A**	399.624	94.02%	862	17.6	41.65°C	0.954
	12.053V	5.034V	3.346V	4.981V	425.041				46.2°C	229.95V
50%	**37.278A**	**4.969A**	**4.938A**	**1.811A**	499.332	93.869%	962	21.1	42.12°C	0.96
	12.040V	5.032V	3.342V	4.972V	531.944				47.23°C	229.93V
60%	**44.877A**	**5.966A**	**5.933A**	**2.001A**	599.788	92.947%	835	16.1	42.51°C	0.972
	12.034V	5.029V	3.338V	4.962V	645.302				47.39°C	229.91V
70%	**52.456A**	**6.964A**	**6.93A**	**2.221A**	699.584	92.604%	1082	25.1	43.12°C	0.974
	12.019V	5.027V	3.334V	4.953V	755.457				48.41°C	229.89V
80%	**60.124A**	**7.961A**	**7.928A**	**2.326A**	799.598	92.198%	1180	27.9	43.85°C	0.976
	12.004V	5.024V	3.33V	4.944V	867.256				49.76°C	229.87V
90%	**68.142A**	**8.463A**	**8.416A**	**2.432A**	899.371	91.791%	1212	28.8	44.55°C	0.978
	11.989V	5.021V	3.327V	4.935V	979.801				50.95°C	229.85V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**75.976A**	**8.966A**	**8.936A**	**3.047A**	999.381	91.317%	1243	29.7	45.97°C	0.979
	11.974V	5.018V	3.324V	4.923V	1094.415				52.28°C	229.83V
110%	**83.775A**	**9.968A**	**10.031A**	**3.053A**	1100.013	90.762%	1468	34.9	46.94°C	0.98
	11.957V	5.015V	3.32V	4.914V	1211.979				53.51°C	229.82V
CL1	**0.116A**	**11.945A**	**11.886A**	**0A**	101.304	85.912%	718	11.8	40.35°C	0.833
	12.087V	5.039V	3.34V	4.993V	117.919				47.61°C	229.99V
CL2	**0.116A**	**19.816A**	**0A**	**0A**	101.359	84.963%	964	21.3	40.87°C	0.834
	12.090V	5.044V	3.347V	4.998V	119.3				48.11°C	229.99V
CL3	**0.116A**	**0A**	**19.821A**	**0A**	67.404	79.386%	874	17.9	40.84°C	0.746
	12.091V	5.023V	3.33V	4.998V	84.921				47.25°C	230.01V
CL4	**83.478A**	**0A**	**0A**	**0A**	999.961	91.845%	1222	29.1	45.41°C	0.978
	11.979V	5.02V	3.337V	4.944V	1088.749				50.72°C	229.83V

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**	**0.496A**	**0.491A**	**0.2A**	20.013	71.412%	996	22.3	36.75°C	0.775
	12.102V	5.042V	3.359V	5.009V	28.024				45.87°C	115.04V
40W	**2.702A**	**0.694A**	**0.688A**	**0.299A**	40.007	81.346%	869	17.8	37.09°C	0.9
	12.100V	5.042V	3.359V	5.009V	49.182				44.27°C	115.03V
60W	**4.178A**	**0.893A**	**0.884A**	**0.399A**	60.004	86.359%	865	17.7	38.72°C	0.946
	12.097V	5.041V	3.359V	5.008V	69.481				44.62°C	115.02V
80W	**5.649A**	**1.091A**	**1.081A**	**0.499A**	79.953	87.857%	864	17.7	39.12°C	0.962
	12.095V	5.041V	3.358V	5.007V	91.005				44.96°C	115.01V

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**	**0.496A**	**0.491A**	**0.2A**	20.004	72.563%	844	16.5	36.23°C	0.417
	12.104V	5.045V	3.36V	5.013V	27.624				38.99°C	230.01V
40W	**2.702A**	**0.694A**	**0.688A**	**0.299A**	40.004	81.19%	845	16.5	37.18°C	0.574
	12.101V	5.045V	3.359V	5.012V	49.272				39.04°C	230.01V
60W	**4.177A**	**0.892A**	**0.884A**	**0.399A**	60.003	86.019%	846	16.6	38.07°C	0.684
	12.098V	5.044V	3.359V	5.01V	69.755				39.31°C	230V
80W	**5.648A**	**1.09A**	**1.081A**	**0.499A**	79.957	88.535%	848	16.8	39.33°C	0.761
	12.096V	5.043V	3.358V	5.008V	90.311				41.15°C	230V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	24.20mV	19.62mV	18.52mV	19.18mV	Pass
20% Load	28.50mV	19.00mV	18.21mV	19.28mV	Pass
30% Load	31.06mV	21.20mV	19.59mV	19.90mV	Pass
40% Load	32.90mV	19.92mV	19.85mV	18.52mV	Pass
50% Load	37.35mV	20.49mV	19.64mV	19.18mV	Pass
60% Load	36.07mV	20.64mV	20.92mV	19.39mV	Pass
70% Load	35.35mV	20.69mV	21.54mV	19.39mV	Pass
80% Load	36.27mV	21.71mV	21.54mV	20.00mV	Pass
90% Load	38.52mV	19.93mV	20.82mV	20.66mV	Pass
100% Load	36.78mV	19.63mV	20.03mV	19.93mV	Pass
110% Load	38.50mV	21.48mV	24.71mV	20.10mV	Pass
Crossload1	25.02mV	18.23mV	18.67mV	20.00mV	Pass
Crossload2	24.76mV	22.17mV	18.57mV	20.97mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	24.56mV	19.31mV	20.82mV	20.92mV	Pass
Crossload4	38.15mV	19.60mV	21.89mV	21.06mV	Pass

The results above are not used in the certification process

230V

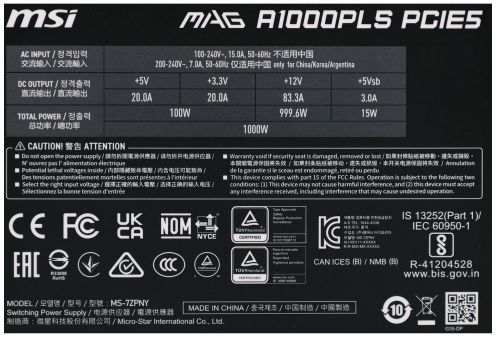
Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	25.07mV	20.39mV	19.28mV	19.28mV	Pass
20% Load	28.55mV	20.03mV	19.44mV	20.41mV	Pass
30% Load	33.51mV	19.11mV	19.03mV	18.41mV	Pass
40% Load	34.17mV	19.41mV	19.64mV	19.28mV	Pass
50% Load	35.66mV	20.54mV	19.80mV	19.18mV	Pass
60% Load	36.17mV	19.87mV	20.87mV	18.62mV	Pass
70% Load	37.45mV	19.67mV	20.21mV	20.51mV	Pass
80% Load	36.07mV	21.10mV	21.69mV	19.90mV	Pass
90% Load	38.73mV	20.69mV	22.25mV	20.20mV	Pass
100% Load	38.14mV	21.80mV	21.15mV	20.62mV	Pass
110% Load	38.21mV	21.32mV	23.67mV	20.31mV	Pass
Crossload1	23.91mV	19.08mV	20.19mV	21.87mV	Pass
Crossload2	25.63mV	21.25mV	20.46mV	21.33mV	Pass
Crossload3	22.25mV	18.65mV	20.56mV	22.15mV	Pass
Crossload4	37.85mV	19.71mV	21.24mV	21.00mV	Pass

The results above are not used in the certification process

MSI MAG A1000PLS PCIE5



Top side



Power specifications label



Third Photo



Fourth Photo

Cybenetics bietet freiwillige Zertifizierungsprogramme für Netzteile – ETA für Effizienz, LAMBDA für Lautstärke und SAFE für Sicherheit und korrekten Betrieb – sowie für Kühlprodukte mit DELTA für die Schalldämmung von Gehäusen und PHI für Luftstrom und statischen Druck von Lüftern

CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus

www.cybenetics.com - info@cybenetics.com