GIGABYTE™

Gigabyte Gaming 1000GM PG5

Serial Number -

Lab ID GB10003216

Certification ID 263216

Test Result Report ID: 26PS3216A

Certificate Issue Date: Mar 26, 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	Gigabyte
Model	Gaming 1000GM PG5
OEM/ODM	HEC
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	5-10

Rated Frequency (Hz)	50-60
Rated Power (W)	1000
Operating Temperature (Continuous Full Load) (°C)	0 - 50
Type	ATX12V
Cable Design	Fully Modular
Warranty	No Info
Cybenetics Measurements	
Dimensions (W x H x D)	150 x 85 x 150mm
Weight	1.68 kg (3.70 lb)
Cooling	135mm Fluid Dynamic Bearing Fan (HA13525H12SF-Z)
Semi-Passive Operation	✓
Cybenetics Testing Information	
Lab ID	GB10003216
Date of receipt	Feb 13, 2026
Testing Date	Mar 17, 2026
Report Issued Date	Mar 26, 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 (610mm)	1	1	16-18AWG	Tinned Copper
4+4 pin EPS12V (610mm)	2	2	18AWG	Tinned Copper
6+2 pin PCIe (600mm+150mm)	2	4	16-18AWG	Tinned Copper
12+4 pin PCIe (700mm) (600W)	1	1	16-24AWG	Tinned Copper
SATA (600mm+150mm+150mm+150mm)	2	8	18AWG	Tinned Copper
4-pin Molex (500mm+150mm+150mm+150mm)	1	4	18AWG	Tinned Copper

Protection Features(Manufacturer)

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	120		1000	15	3.6
Total Max. Power (W)		1000				

Parts Description

General Data	
Manufacturer (OEM)	HEC
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 3x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor NTC 5D-15 (5 Ohm @ 25°C) & Relay
Bridge Rectifier	2x GBU15K (800V, 15A @ 100°C)
APFC MOSFETs	3x CRMicro CRJW125N60G2F (600V, 17A @ 100°C, Rds(on): 0.095Ohm)
APFC Boost Diode	Sanan Semiconductor SDS065J010C3 (650V, 15A @ 135°C)
Bulk Cap(s)	Toshin Kogyo (400V, 680uF, 2000h @ 105°C, LGW)
Main Switchers	2x NCE Power Semiconductor NCE65TF099F (650V, 24A @ 100°C, Rds(on): 0.89Ohm)
APFC Controller	Champion CM6500UNX & Champion CM03AX (reducing no load consumption)

Resonant Controller	Champion CU6901T6X
Topology	Primary side: APFC, Half-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	6x
5V & 3.3V	DC-DC Converters: 4x Potens Semiconductor PDC39F2BX (30V, 120A @ 100°C, Rds(on): 2.95mOhm) PWM Controller(s): Anpec APW7159C
Filtering Capacitors	Electrolytic: 5x Toshin Kogyo (@ 105°C, LWD) 2x Toshin Kogyo (@ 105°C, LWY) 1x Toshin Kogyo (@ 105°C, UTWE) Polymer: 29x Toshin Kogyo
Supervisor IC	Weltrend WT7527RT (OVP, UVP, OCP, PGO, FPOB)
MCU / Fan Controller	Nuvoton MS51FB9AE
Fan Model	Hong Hua HA13525H12SF-Z (135mm, 12V, 0.50A, Fluid Dynamic Bearing Fan)
5VSB Circuit	
Rectifier	Chongqing Pingwei Enterprise PS1060L (60V, 10A)
Standby PWM Controller	Excelliance MOS Corporation EM8569D

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)	90.249%
Average Noise Output (>1450 Load Combinations)	28.56dBA
Average PF (>1450 Load Combinations)	0.983
Efficiency With 10W (≤500W) or 2% (>500W) Load	71.252%
Standby Power Consumption	0.0407W
Non-Accredited	
12V Ripple (Full Load)	43.23mV
5V Ripple (Full Load)	24.17mV
3.3V Ripple (Full Load)	25.17mV
5VSB Ripple (Full Load)	26.09mV
12V Load Regulation	1.07%
5V Load Regulation	0.22%
3.3V Load Regulation	0.46%
5VSB Load Regulation	2.38%
Inrush Current	33.600A

230V

Accredited	
Average Efficiency (>1450 load combinations)	92.006%
Average Noise Output (>1450 Load Combinations)	28.07dBA
Average PF (>1450 Load Combinations)	0.948
Efficiency With 10W (≤500W) or 2% (>500W) Load	70.548%
Standby Power Consumption	0.0941W
Non-Accredited	
12V Ripple (Full Load)	42.82mV
5V Ripple (Full Load)	24.37mV
3.3V Ripple (Full Load)	25.78mV

5VSB Ripple (Full Load)		25.06mV
12V Load Regulation		1.09%
5V Load Regulation		0.20%
3.3V Load Regulation		0.46%
5VSB Load Regulation		2.38%
Inrush Current		68.930A
12V Transient Response (200%)		11.38V
5V Transient Response (200%)		4.913V
3.3V Transient Response (200%)		3.177V
5VSB Transient Response (200%)		4.997V
Hold-Up Time & PWR_OK Signal		22.60ms
AC Loss to PWR_OK Hold Up Time		20.10ms
PWR_OK Inactive to DC Loss Delay		2.50ms
PSU Timings: T1 (20% / 100%)	50.0ms	50.0ms
PSU Timings: T3 (20% / 100%)	124.0ms	123.0ms
12V OCP (29.5°C / 42.9°C)	105.00A (126.05%), 12.081V	102.40A (122.93%), 12.084V
5V OCP (29.5°C / 42.9°C)	27.5A (137.50%), 5.037V	27.1A (135.50%), 5.039V
3.3V OCP (29.5°C / 42.9°C)	27.1A (135.50%), 3.271V	26.6A (133.00%), 3.274V
5VSB OCP (29.5°C / 42.9°C)	4.3A (143.33%), 5.023V	4.3A (143.33%), 5.025V
OPP (29.03°C / 41.86°C)	126.41%	111.70%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	22.6
AC Loss to PWR_OK Hold Up Time (ms)	20.1
PWR_OK Inactive to DC Loss Delay (ms)	2.5

Vampire Power

Tables

115V

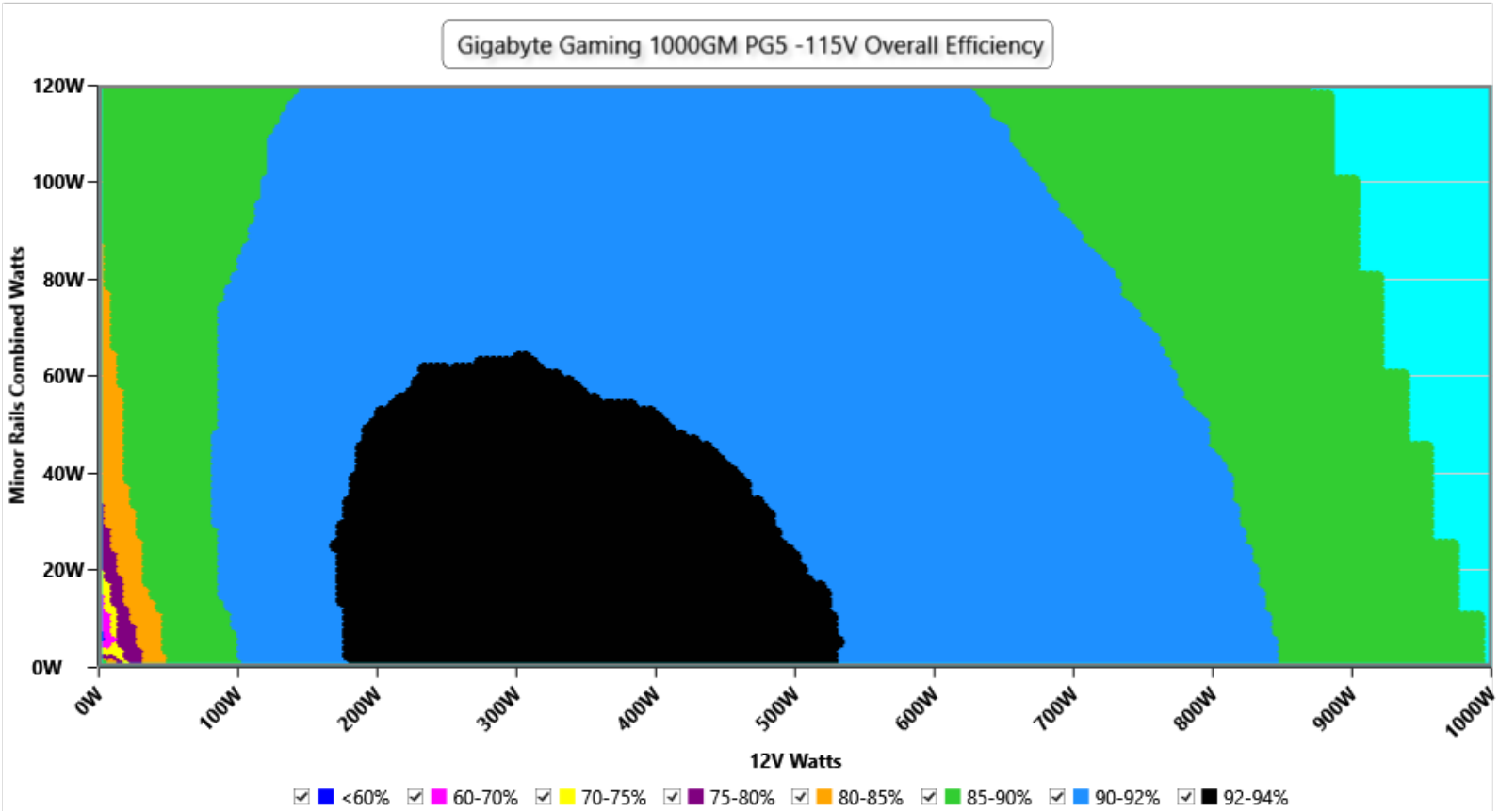
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.04 V	115.02 V	113.85 V	115.06 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	60.00 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.417	1.490	PASS
Mains Voltage THD:	0.13 %	0.11 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.041 W	-0.000 W	N/A	0.076 W	N/A	N/A
Apparent Power:	11.100 W	11.080 W	N/A	11.120 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	230.08 V	230.07 V	227.70 V	230.11 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	50.00 Hz	49.50 Hz	50.01 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:	0.094 W	0.055 W	N/A	0.159 W	N/A	N/A
Apparent Power:	36.524 W	36.492 W	N/A	36.563 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

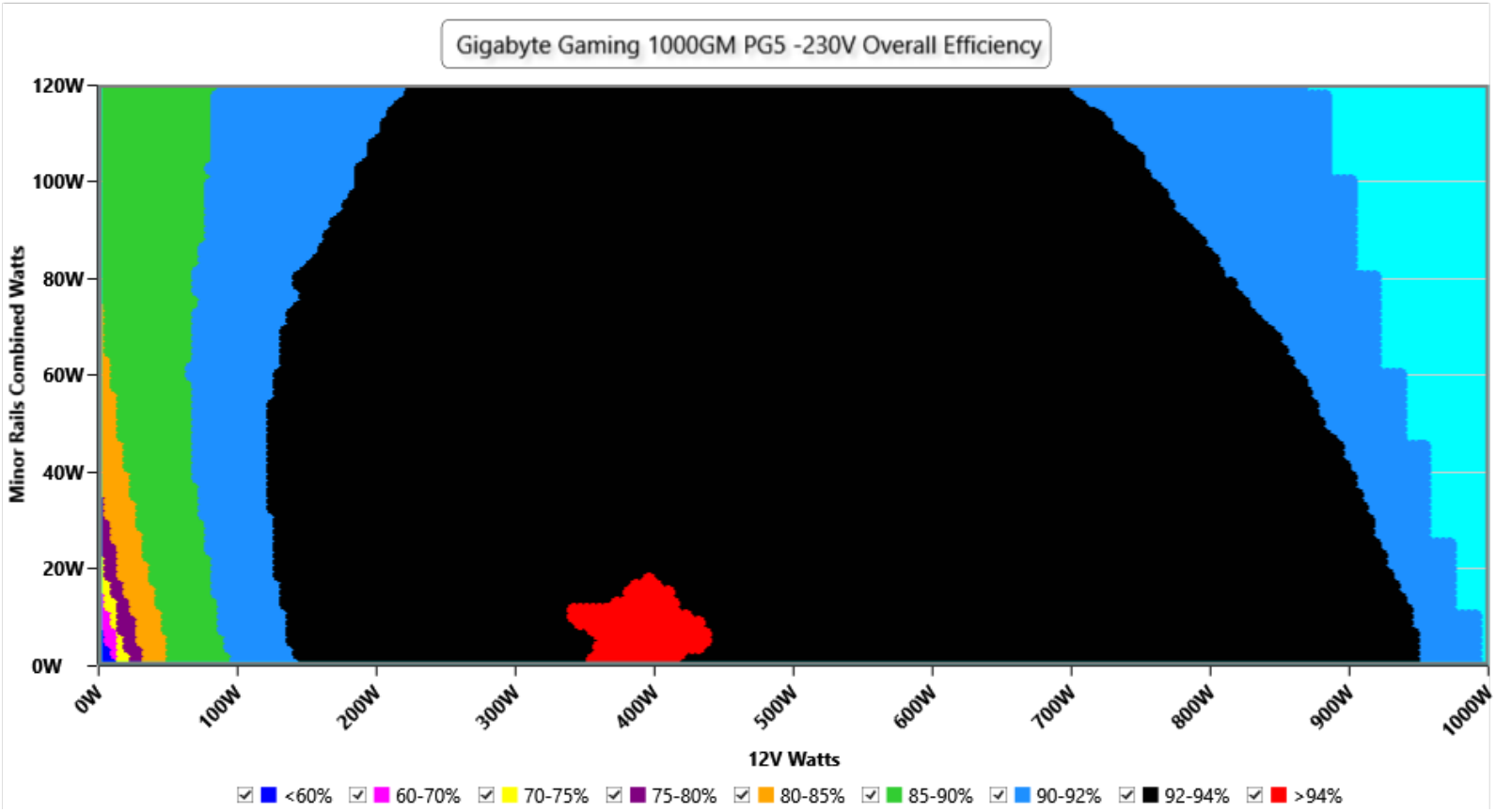
115V



INFO

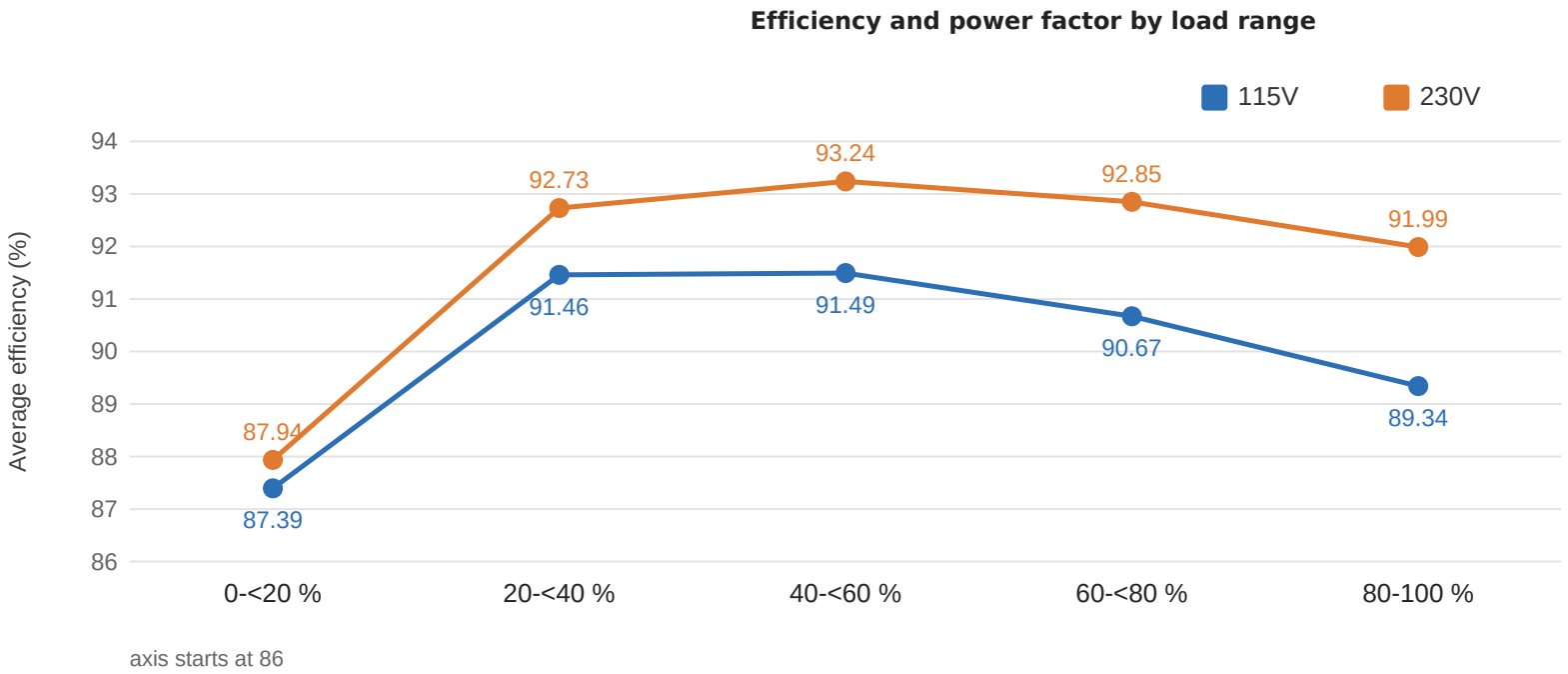
This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

230V

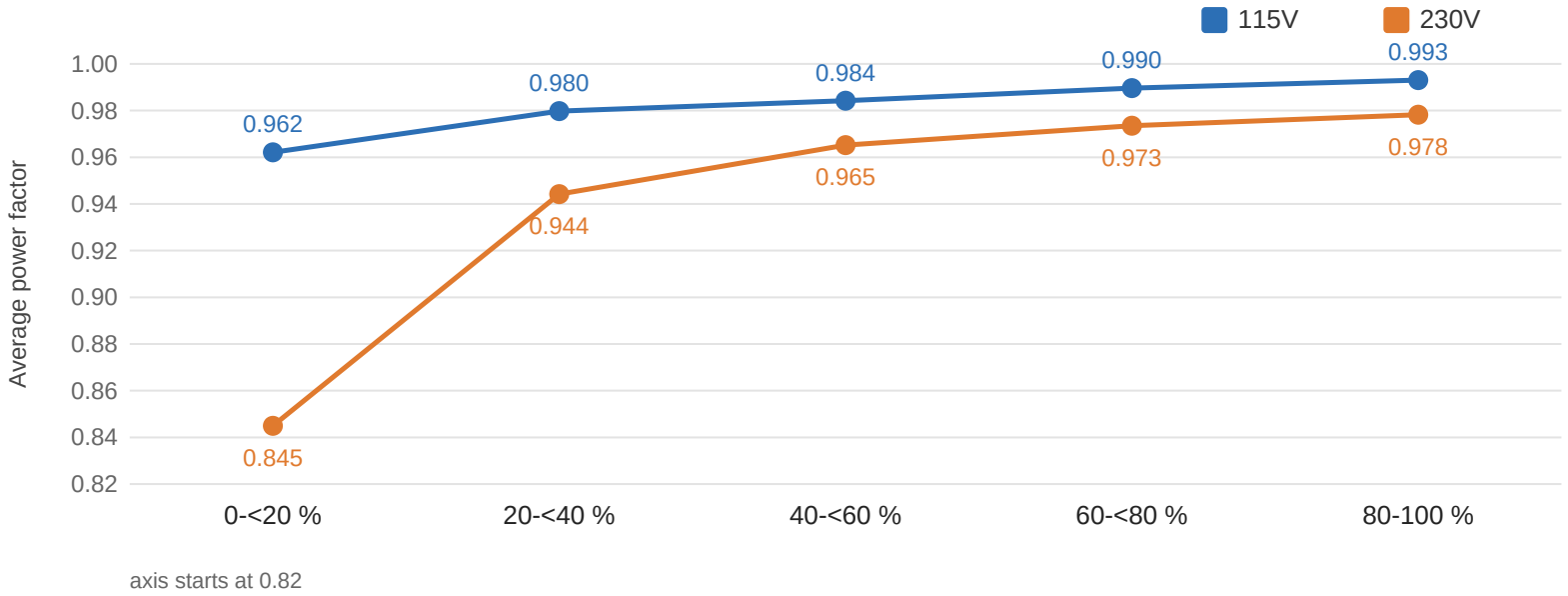


INFO

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 0.82

Load range	Points	Efficiency 115V	Efficiency 230V	PF 115V	PF 230V
0-<20 %	228 / 228	87.39%	87.94%	0.962	0.845
20-<40 %	335 / 335	91.46%	92.73%	0.980	0.944
40-<60 %	333 / 333	91.49%	93.24%	0.984	0.965
60-<80 %	333 / 333	90.67%	92.85%	0.990	0.973
80-100 %	340 / 340	89.34%	91.99%	0.993	0.978
70-100 % (High-Load)	506 / 506	89.69%	92.22%	0.992	0.977
All (published average)	1569 / 1569	90.25%	92.01%	0.983	0.948

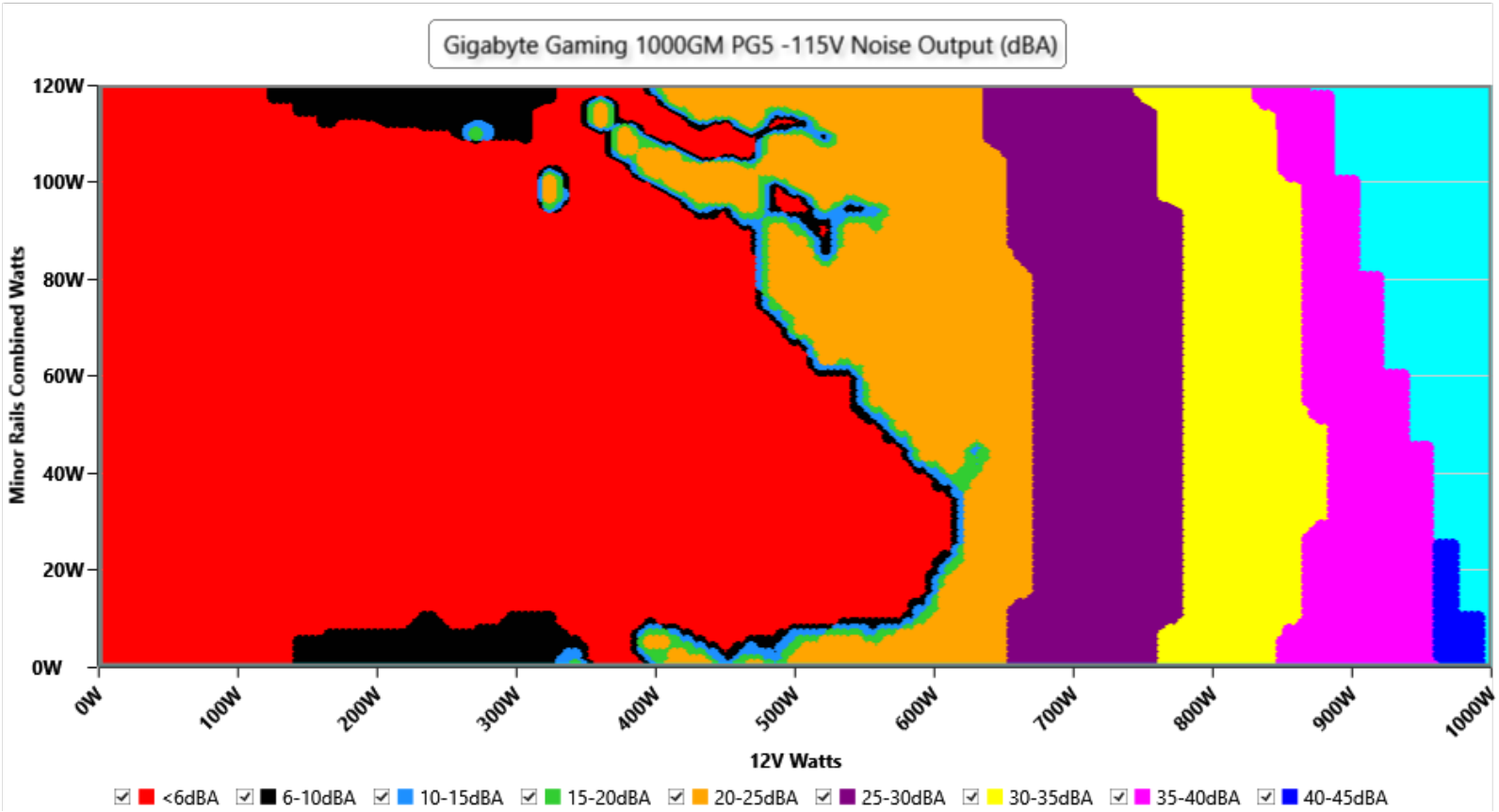
INFO

The average efficiency and power factor in five ranges of load. Calculated from the 1569 (115V) and 1569 (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

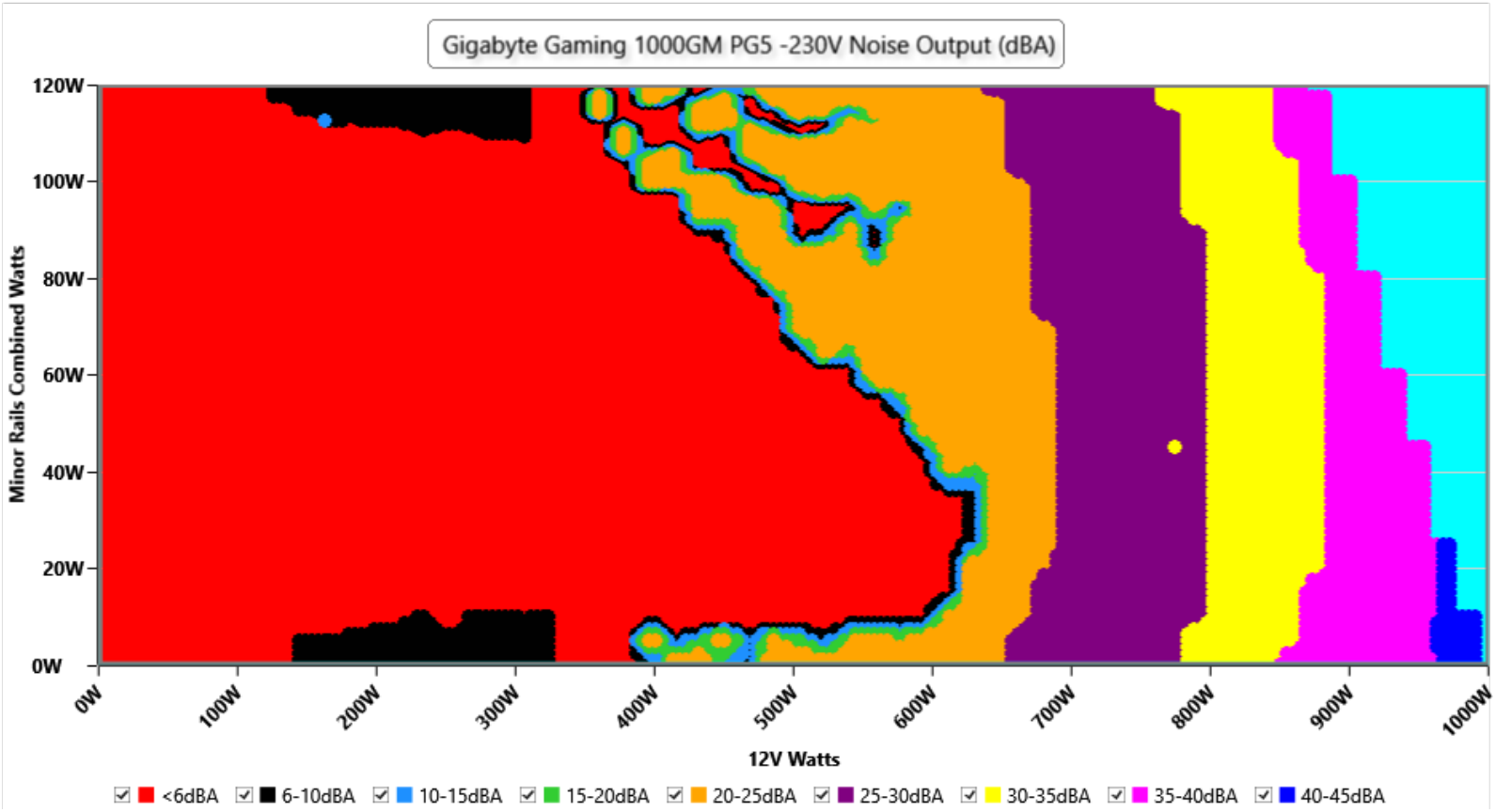
115V



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

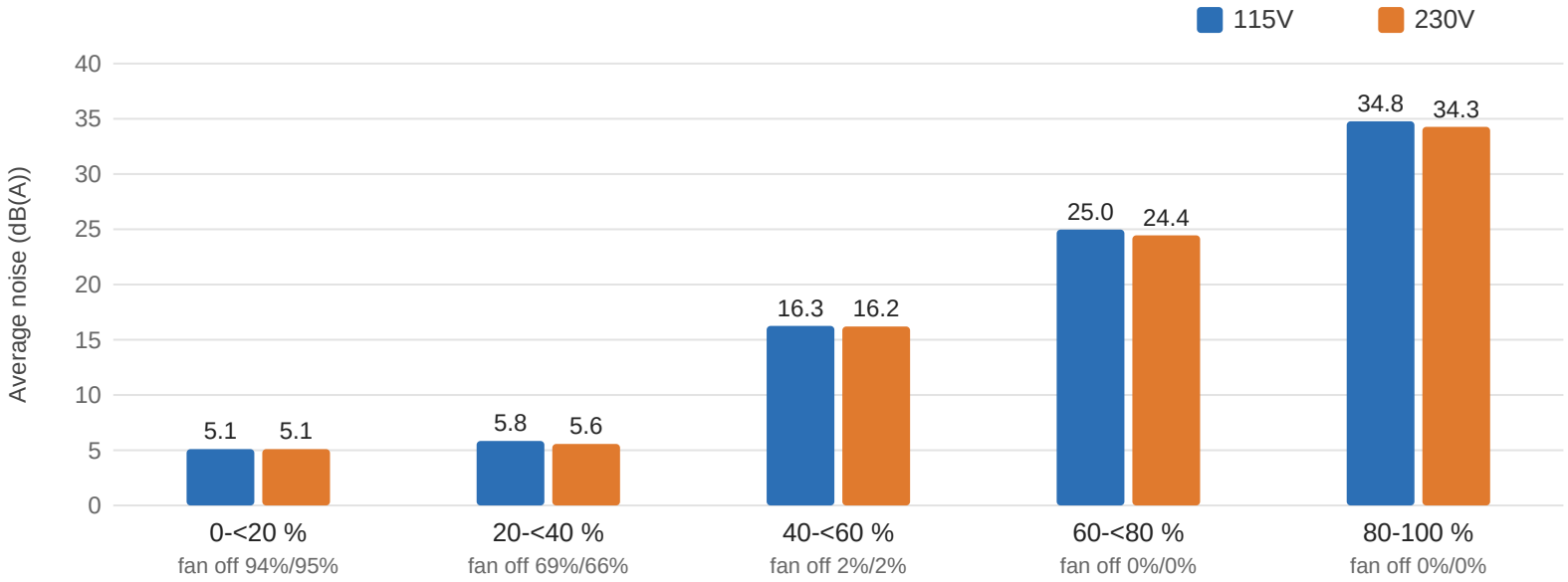
The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

Noise by load range

High-Load Index (70-100 % load)

Noise **33.3 dB(A)** at 115V and **32.8 dB(A)** at 230V · loudest point 43.6 dB(A)

Efficiency 89.69% / 92.22% · power factor 0.992 / 0.977 (115V / 230V)



Load range	Noise 115V avg (loudest)	Noise 230V avg (loudest)	Fan off 115V / 230V
0-<20 %	5.1 (7.6)	5.1 (7.6)	94% / 95%
20-<40 %	5.8 (17.0)	5.6 (12.4)	69% / 66%
40-<60 %	16.3 (24.1)	16.2 (24.1)	2% / 2%
60-<80 %	25.0 (30.8)	24.4 (30.8)	0% / 0%
80-100 %	34.8 (43.6)	34.3 (43.6)	0% / 0%
70-100 % (High-Load)	33.3 (43.6)	32.8 (43.6)	0% / 0%
All (published average)	28.6 (43.6)	28.1 (43.6)	29% / 28%

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 1569 (115V) and 1569 (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".

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%	0 RPM · <6.0 dB(A) · 32.8 °C	0 RPM · <6.0 dB(A) · 43.0 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 32.6 °C	0 RPM · <6.0 dB(A) · 48.7 °C	fan off in both
50%	365 RPM · <6.0 dB(A) · 30.1 °C	970 RPM · 24.6 dB(A) · 42.3 °C	<6.0 → 24.6 dB(A)
100%	1366 RPM · 34.6 dB(A) · 30.6 °C	2202 RPM · 47.1 dB(A) · 45.7 °C	**+12.5 dB(A)**

230V

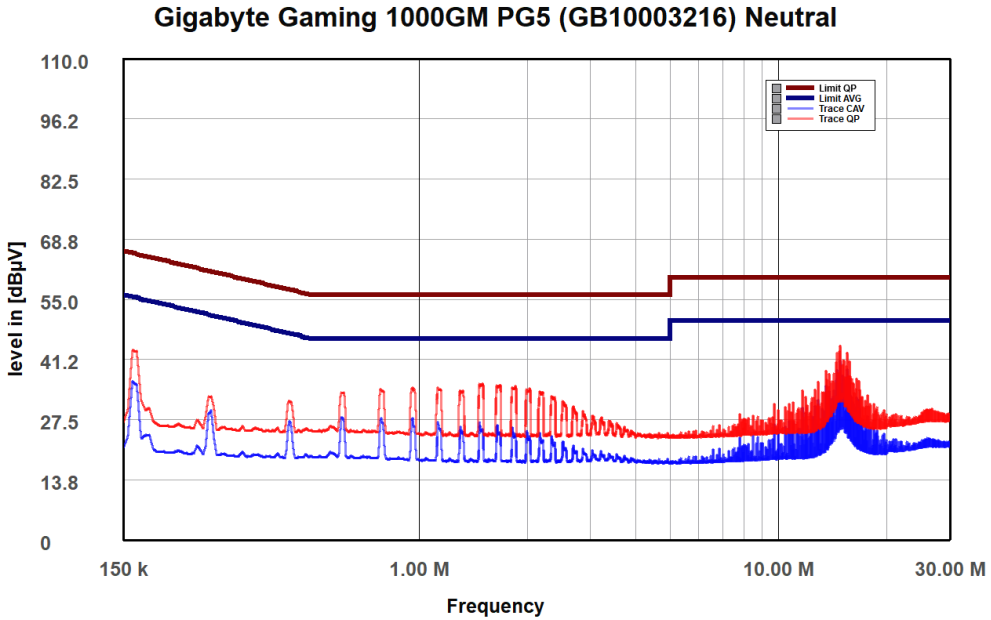
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 32.8 °C	0 RPM · <6.0 dB(A) · 44.0 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 33.3 °C	0 RPM · <6.0 dB(A) · 47.9 °C	fan off in both
50%	373 RPM · <6.0 dB(A) · 30.8 °C	961 RPM · 24.4 dB(A) · 42.1 °C	<6.0 → 24.4 dB(A)
100%	1448 RPM · 36.1 dB(A) · 30.3 °C	2215 RPM · 47.3 dB(A) · 45.9 °C	**+11.2 dB(A)**

INFO

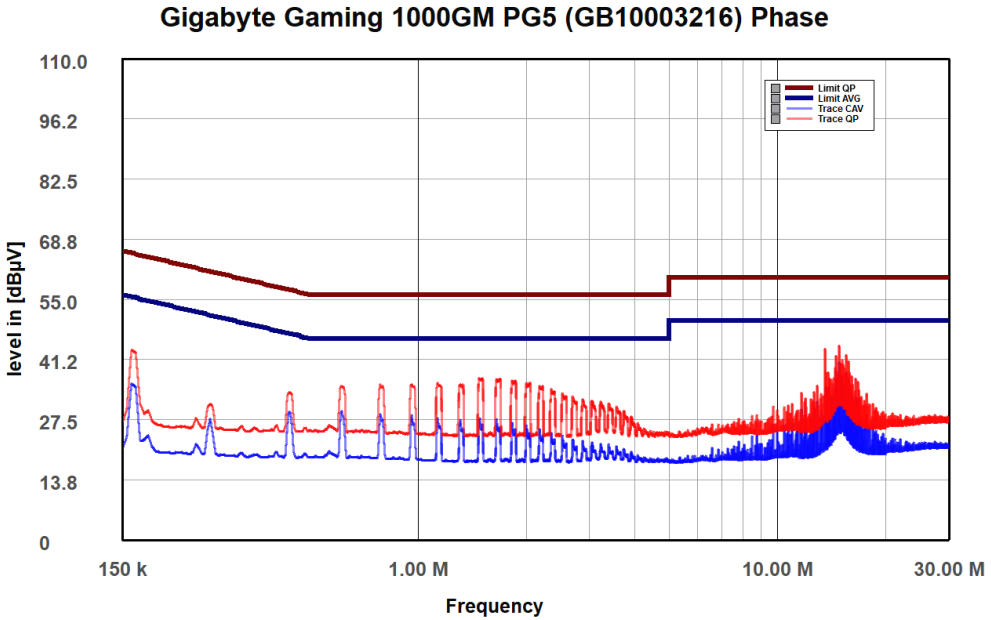
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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



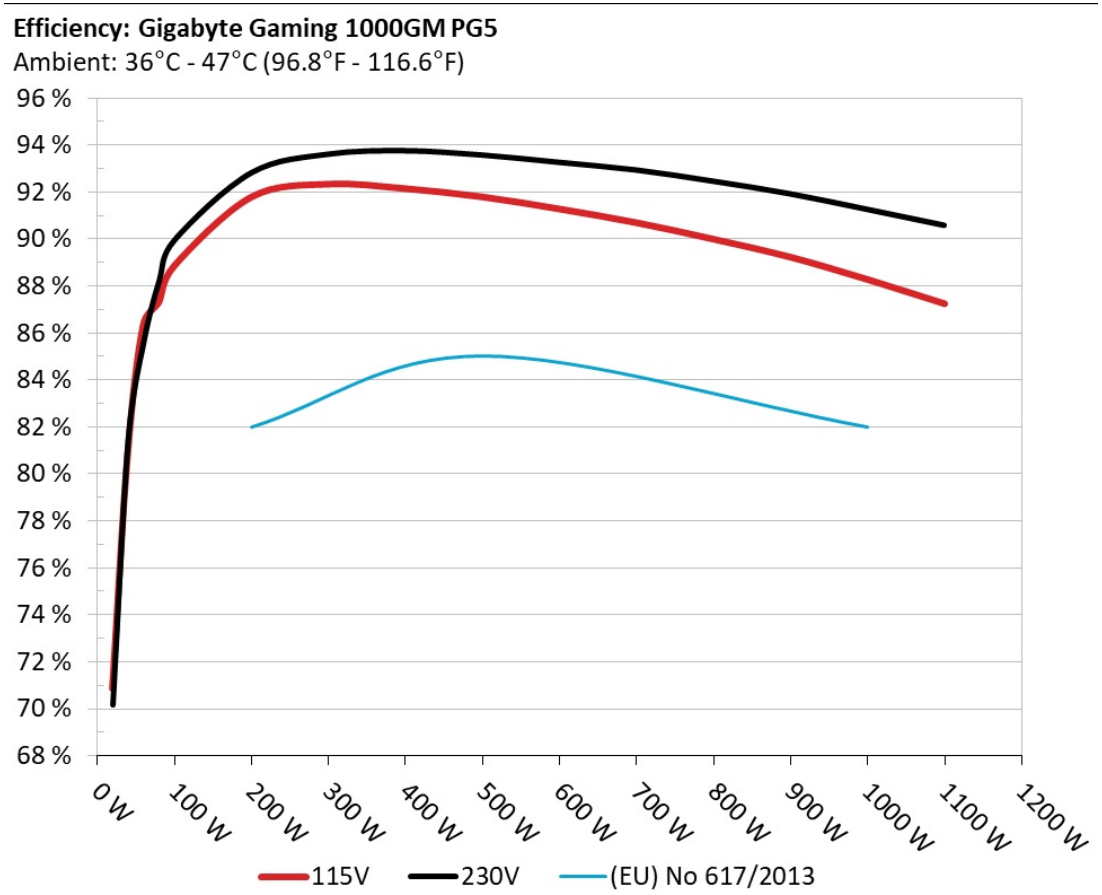
NEUTRAL



PHASE

Indicative Performance

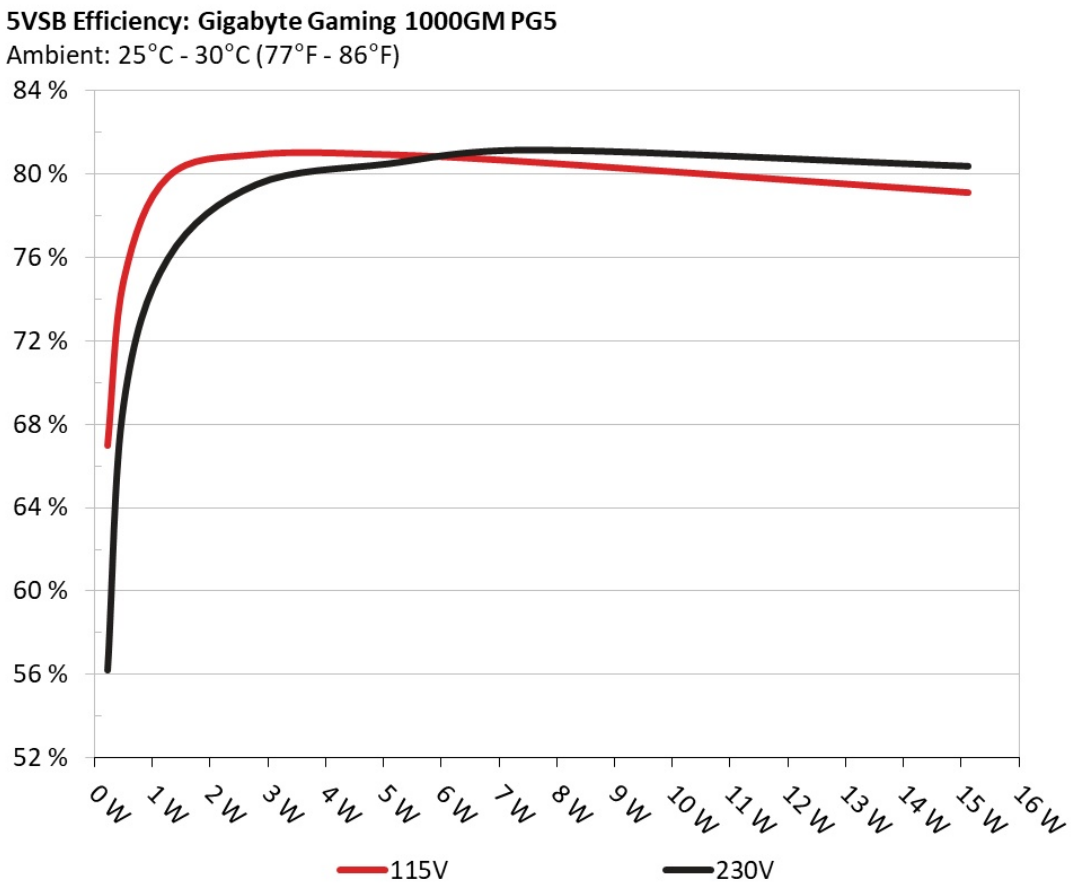
Efficiency under high ambient temperature



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	66.958%	0.032
	5.109V	0.344W		115.04V
2	**0.09A**	0.46W	74.266%	0.056
	5.108V	0.619W		115.04V
3	**0.55A**	2.803W	80.94%	0.226
	5.097V	3.463W		115.04V
4	**1A**	5.087W	80.933%	0.294
	5.087V	6.285W		115.04V
5	**1.5A**	7.614W	80.57%	0.333
	5.076V	9.45W		115.04V
6	**3A**	15.124W	79.111%	0.38
	5.042V	19.118W		115.03V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.23W	56.203%	0.011
	5.106V	0.41W		229.98V
2	**0.09A**	0.459W	67.734%	0.019
	5.105V	0.679W		229.98V
3	**0.55A**	2.802W	79.508%	0.092
	5.095V	3.524W		229.99V
4	**1A**	5.085W	80.507%	0.149
	5.085V	6.316W		229.99V
5	**1.5A**	7.611W	81.168%	0.196
	5.074V	9.378W		229.99V
6	**3A**	15.12W	80.392%	0.274
	5.041V	18.808W		229.99V

Protection Features

OCP (Normal @ 29.5°C)	12V: 105.00A (126.05%), 12.081V 5V: 27.5A (137.50%), 5.037V 3.3V: 27.1A (135.50%), 3.271V 5VSB: 4.3A (143.33%), 5.023V
OCP (Hot @ 42.9°C)	12V: 102.40A (122.93%), 12.084V 5V: 27.1A (135.50%), 5.039V 3.3V: 26.6A (133.00%), 3.274V 5VSB: 4.3A (143.33%), 5.025V
OPP (Normal @ 29.0°C)	1264.08W (126.41%)
OPP (Hot @ 41.9°C)	1116.98W (111.70%)
OTP	✓ (160°C @ 12V Heatsink)
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%	**6.440A**	**1.983A**	**2.005A**	**0.983A**	100.008	88.852%	0	<6.0	43.04°C	0.963
	12.174V	5.042V	3.291V	5.089V	112.555				40.05°C	115.01V
20%	**13.902A**	**2.975A**	**3.009A**	**1.181A**	199.965	91.789%	0	<6.0	48.69°C	0.982
	12.161V	5.042V	3.29V	5.079V	217.852				40.68°C	114.98V
30%	**21.728A**	**3.472A**	**3.512A**	**1.381A**	300.024	92.347%	0	<6.0	50.58°C	0.978
	12.148V	5.041V	3.289V	5.069V	324.888				41.03°C	114.94V
40%	**29.533A**	**3.968A**	**4.015A**	**1.581A**	399.611	92.157%	619	10.8	41.63°C	0.981
	12.136V	5.041V	3.288V	5.06V	433.622				53.05°C	114.9V
50%	**37.025A**	**4.962A**	**5.022A**	**1.783A**	499.318	91.804%	970	24.6	42.34°C	0.984
	12.122V	5.039V	3.286V	5.049V	543.897				51.77°C	114.87V
60%	**44.602A**	**5.957A**	**6.03A**	**1.985A**	599.84	91.288%	1034	26.6	42.89°C	0.987
	12.108V	5.037V	3.284V	5.038V	657.085				51.85°C	114.83V
70%	**52.132A**	**6.952A**	**7.04A**	**2.188A**	699.578	90.705%	1172	30.2	43.41°C	0.99
	12.094V	5.036V	3.282V	5.027V	771.272				52.52°C	114.79V
80%	**59.743A**	**7.944A**	**8.049A**	**2.292A**	799.583	90.002%	1376	34.8	43.63°C	0.992
	12.080V	5.034V	3.28V	5.018V	888.408				53.29°C	114.75V
90%	**67.703A**	**8.442A**	**8.54A**	**2.395A**	899.367	89.238%	1659	39.5	44.05°C	0.993
	12.066V	5.033V	3.279V	5.01V	1007.832				53.98°C	114.71V
100%	**75.482A**	**8.941A**	**9.062A**	**3.006A**	999.369	88.284%	2202	47.1	45.7°C	0.994
	12.052V	5.032V	3.278V	4.991V	1131.998				55.26°C	114.67V
110%	**83.213A**	**9.938A**	**10.166A**	**3.01A**	1099.988	87.248%	2219	47.4	46.96°C	0.995
	12.038V	5.031V	3.276V	4.983V	1260.757				57.59°C	114.62V
CL1	**0.116A**	**14.331A**	**14.547A**	**0A**	121.3	84.659%	1128	29.1	41.6°C	0.968
	12.171V	5.037V	3.279V	5.096V	143.283				52.66°C	115V

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**	**19.829A**	**0A**	**0A**	101.356	83.631%	1456	36.1	41.06°C	0.968
	12.174V	5.041V	3.291V	5.103V	121.196				48.7°C	115V
CL3	**0.115A**	**0A**	**20.127A**	**0A**	67.403	77.98%	808	19.3	40.7°C	0.956
	12.174V	5.041V	3.28V	5.103V	86.436				48.14°C	115.01V
CL4	**82.954A**	**0A**	**0A**	**0A**	999.937	88.84%	1917	43.7	45.91°C	0.994
	12.054V	5.037V	3.288V	5.064V	1125.556				54.47°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%	**6.438A**	**1.983A**	**2.005A**	**0.982A**	99.988	89.57%	0	<6.0	43.95°C	0.838
	12.175V	5.043V	3.292V	5.089V	111.631				40.13°C	229.98V
20%	**13.898A**	**2.975A**	**3.009A**	**1.181A**	199.937	92.838%	0	<6.0	47.91°C	0.92
	12.162V	5.042V	3.29V	5.079V	215.362				40.93°C	229.96V
30%	**21.724A**	**3.471A**	**3.512A**	**1.381A**	299.986	93.627%	0	<6.0	47.86°C	0.946
	12.150V	5.041V	3.289V	5.069V	320.408				41.3°C	229.95V
40%	**29.522A**	**3.968A**	**4.014A**	**1.581A**	399.521	93.773%	306	<6.0	41.68°C	0.959
	12.137V	5.041V	3.288V	5.06V	426.052				47.47°C	229.93V
50%	**37.015A**	**4.962A**	**5.022A**	**1.783A**	499.247	93.591%	961	24.4	42.13°C	0.965
	12.123V	5.039V	3.286V	5.049V	533.436				48.1°C	229.91V
60%	**44.591A**	**5.957A**	**6.03A**	**1.985A**	599.775	93.28%	1027	26.4	42.55°C	0.971
	12.109V	5.037V	3.284V	5.038V	642.988				47.82°C	229.89V
70%	**52.121A**	**6.951A**	**7.04A**	**2.188A**	699.511	92.954%	1121	28.9	43.27°C	0.974
	12.095V	5.036V	3.282V	5.027V	752.533				47.6°C	229.88V
80%	**59.731A**	**7.944A**	**8.049A**	**2.291A**	799.528	92.478%	1253	31.9	43.64°C	0.976
	12.082V	5.034V	3.28V	5.018V	864.561				47.88°C	229.86V
90%	**67.691A**	**8.442A**	**8.54A**	**2.395A**	899.318	91.943%	1659	39.5	44.07°C	0.979
	12.068V	5.033V	3.279V	5.01V	978.131				50.52°C	229.84V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**75.470A**	**8.939A**	**9.061A**	**3.005A**	999.341	91.279%	2215	47.3	45.88°C	0.981
	12.054V	5.033V	3.278V	4.991V	1094.824				51.81°C	229.82V
110%	**83.204A**	**9.936A**	**10.165A**	**3.01A**	1099.96	90.599%	2217	47.4	46.47°C	0.983
	12.039V	5.031V	3.276V	4.984V	1214.106				53.44°C	229.81V
CL1	**0.115A**	**14.329A**	**14.546A**	**0A**	121.297	85.368%	1123	28.9	40.29°C	0.87
	12.172V	5.038V	3.28V	5.096V	142.089				49.73°C	229.98V
CL2	**0.115A**	**19.826A**	**0A**	**0A**	101.35	84.047%	1122	28.9	41.12°C	0.849
	12.175V	5.042V	3.291V	5.103V	120.588				47.2°C	229.98V
CL3	**0.114A**	**0A**	**20.128A**	**0A**	67.399	78.619%	572	8.8	40.32°C	0.785
	12.175V	5.041V	3.279V	5.103V	85.728				45.95°C	229.99V
CL4	**82.946A**	**0A**	**0A**	**0A**	999.939	91.777%	1912	43.6	45.85°C	0.981
	12.055V	5.036V	3.287V	5.064V	1089.531				49.55°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	**1.220A**	**0.496A**	**0.501A**	**0.196A**	20.009	70.844%	0	<6.0	39.53°C	0.83
	12.176V	5.041V	3.292V	5.11V	28.245				36.29°C	115.03V
40W	**2.684A**	**0.694A**	**0.702A**	**0.294A**	40.006	80.939%	0	<6.0	40.5°C	0.918
	12.181V	5.042V	3.293V	5.108V	49.428				37.69°C	115.02V
60W	**4.150A**	**0.892A**	**0.902A**	**0.392A**	60.005	86.339%	0	<6.0	40.79°C	0.942
	12.179V	5.043V	3.293V	5.105V	69.499				38.89°C	115.02V
80W	**5.612A**	**1.091A**	**1.102A**	**0.49A**	79.957	87.299%	0	<6.0	41.3°C	0.958
	12.177V	5.043V	3.293V	5.101V	91.59				39.15°C	115.02V

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	**1.218A**	**0.496A**	**0.501A**	**0.196A**	19.999	70.167%	0	<6.0	40.91°C	0.49
	12.185V	5.042V	3.293V	5.11V	28.503				36.73°C	229.99V
40W	**2.684A**	**0.694A**	**0.702A**	**0.294A**	39.997	81.476%	0	<6.0	40.48°C	0.648
	12.182V	5.043V	3.293V	5.107V	49.091				37.88°C	229.99V
60W	**4.148A**	**0.892A**	**0.902A**	**0.392A**	59.994	85.613%	0	<6.0	42.63°C	0.738
	12.180V	5.043V	3.293V	5.104V	70.077				38.24°C	229.99V
80W	**5.610A**	**1.09A**	**1.102A**	**0.49A**	79.937	88.204%	0	<6.0	45.56°C	0.797
	12.177V	5.043V	3.293V	5.101V	90.627				39.18°C	229.98V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	30.85mV	22.73mV	24.40mV	22.35mV	Pass
20% Load	34.58mV	23.40mV	22.25mV	22.81mV	Pass
30% Load	37.75mV	24.22mV	23.12mV	23.12mV	Pass
40% Load	37.45mV	23.35mV	22.56mV	22.82mV	Pass
50% Load	36.78mV	22.68mV	22.00mV	22.61mV	Pass
60% Load	36.68mV	23.81mV	22.61mV	25.32mV	Pass
70% Load	38.83mV	24.63mV	24.45mV	24.81mV	Pass
80% Load	40.26mV	23.91mV	23.94mV	23.99mV	Pass
90% Load	40.98mV	25.03mV	24.81mV	26.04mV	Pass
100% Load	43.23mV	24.17mV	25.17mV	26.09mV	Pass
110% Load	47.88mV	25.49mV	26.70mV	25.78mV	Pass
Crossload1	30.34mV	23.50mV	23.28mV	22.35mV	Pass
Crossload2	31.00mV	25.39mV	22.66mV	22.92mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	27.47mV	23.55mV	25.53mV	23.07mV	Pass
Crossload4	42.82mV	23.76mV	24.04mV	24.96mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	28.09mV	21.87mV	21.79mV	21.18mV	Pass
20% Load	33.30mV	22.07mV	21.28mV	21.79mV	Pass
30% Load	34.74mV	21.92mV	21.38mV	21.13mV	Pass
40% Load	37.50mV	22.58mV	22.05mV	22.51mV	Pass
50% Load	35.66mV	22.84mV	22.30mV	22.35mV	Pass
60% Load	37.60mV	22.28mV	23.43mV	23.27mV	Pass
70% Load	37.60mV	23.09mV	22.30mV	23.43mV	Pass
80% Load	39.44mV	22.79mV	23.07mV	24.76mV	Pass
90% Load	41.13mV	23.35mV	24.09mV	25.11mV	Pass
100% Load	42.82mV	24.37mV	25.78mV	25.06mV	Pass
110% Load	45.17mV	25.14mV	25.32mV	24.96mV	Pass
Crossload1	29.78mV	23.30mV	23.33mV	21.59mV	Pass
Crossload2	38.06mV	28.66mV	31.15mV	25.68mV	Pass
Crossload3	28.03mV	24.63mV	24.25mV	22.20mV	Pass
Crossload4	42.62mV	23.81mV	23.43mV	24.50mV	Pass

The results above are not used in the certification process

Gigabyte Gaming 1000GM PG5



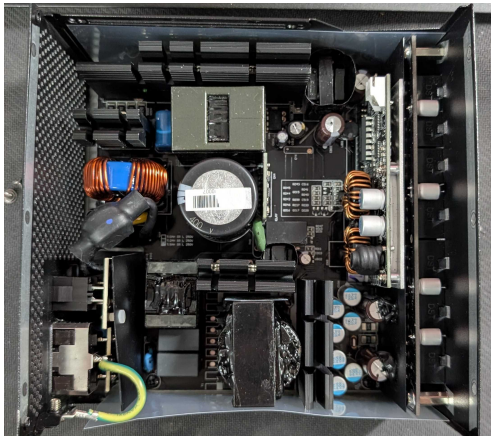
Top side



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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