GIGABYTE™

Gigabyte GP-UD1000GM PG5 V2 / ICE

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Lab ID GB10003071

Certification ID 253071

Test Result Report ID: 25PS3071A

Certificate Issue Date: Jan 9, 2026

115V

Scheme: ETA-EMI PSU



115V



Scheme: LAMBDA PSU



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	GP-UD1000GM PG5 V2 / ICE
OEM/ODM	Guangzhou Pansheng Electronic Technology Co., Ltd
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	100-240

□□□□ (Arms)	6.5-12
□□□□ (Hz)	50-60
□□□□ (W)	1000
Operating Temperature (Continuous Full Load) (°C)	0 - 50
□□	ATX12V
□□□□	Fully Modular
Warranty	No info
Cybenetics Measurements	
Dimensions (W x H x D)	150 x 85 x 140mm
Weight	1.40 kg (3.09lb)
□□	120mm Fluid Dynamic Bearing Fan (BK BDH12025S)
□□□□□	✓
Cybenetics Testing Information	
Lab ID	GB10003071
Date of receipt	Nov 17, 2025
Testing Date	Dec 29, 2025
Report Issued Date	Jan 9, 2026
□□□□□	• The results apply to both the black and white (ICE) models. • The vampire power consumption is too high for the Gold ETA rating at 230V (0.2127W). • PF @ 230V is lower than the Platinum ETA level's requirements.
Engineer Name	Ioannis Kalyviotis
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□□
(Non-accredited measurements)

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□□	□□□□	□□□□□□	**Gauge**	Cable Type
ATX □□ 20+4 pin (600mm)	1	1	18AWG	Tinned Copper
4+4 pin EPS 12V □□ (650mm+200mm)	1	2	18AWG	Tinned Copper

6+2pin PCIe□□ (600mm+145mm)	2	4	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) / FDD (+150mm)	1	3 / 1	18AWG	Tinned Copper

Protection Features

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

□□□□

□		3.3V	5V	12V	5VSB	-12V
□□□□	□□	25	25	83.3	3	0.3
	□	125		1000	15	3.6
□□□□□ (W)		1000				

Parts Description

General Data	
Manufacturer (OEM)	Guangzhou Pansheng Electronic Technology Co., Ltd
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 3x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor MF72-10D15 (10 Ohm @ 25°C) & Relay
Bridge Rectifier	2x GBU2510 (1000V, 25A @ 100°C)
APFC MOSFETs	2x Wuhan Xinyuan Semiconductor CWH65R038AZ (650V, 30A @ 25°C, Rds(on): 38mOhm)

APFC Boost Diode	1x CR Micro CRXF10D065G2 (650V, 10A @ 125°C)
Bulk Cap(s)	2x Toshin Kogyo (420V, 390µF, 2000h @ 105°C, LW)
Main Switchers	2x Wuhan Xinyuan Semiconductor CWS60R099BZ (600V, 25A @ 100°C, Rds(on): 99mOhm)
APFC Controller	Champion CM6500UNX
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 Nexperia PSMN1R0-40YLD (40V, 280A @ 25°C, Rds(on): 1.1mOhm)
5V & 3.3V	DC-DC Converters: 4x InPower Semiconductor FTG022N03S (30V, 120A @ 100°C, Rds(on): 2.2mOhm) PWM Controller(s): 2x ANPEC APW7164
Filtering Capacitors	Electrolytic: 10x Toshin Kogyo (@ 105°C, AZ series) 6x Toshin Kogyo (@ 105°C, HZ series) Polymer: 7x Teapo (470µF, 16V) 9x Teapo (820µF, 6.3V)
Supervisor IC	Grenergy GR8329E (OVP, UVP, OCP, PGO, FPO)
MCU / Fan Controller	Anpec APW9010
Fan Model	BOK BDH12025S (120mm, 12V, 0.18A, Fluid Dynamic Bearing)
5VSB Circuit	
Rectifier	Dongke Semiconductor DK5V60R20H Synchronous Rectifier (60V, 35A, Rds(on): 20mOhm)
Standby PWM Controller	Excelliance MOS Corporation EM8564A

Test Results

Temperature & Compliance Info

□□□ (°C /°F)	28-32 / 82.4-89.6
□□ ErP Lot3/6□□	✓
□□ (EU) No 617/2013□□	✓
ALPM (Alternative Low Power Mode) compatible	✓

ATX v3.1 PSU Power Excursion	✓

Performance Summary 115V

Accredited	
□□□□ (>1450 load combinations)	89.270%
Average Noise Output (>1450 Load Combinations)	34.74dBA
PF□□□ (>1450 Load Combinations)	0.982
Efficiency With 10W (≤500W) or 2% (>500W) Load	69.884%
□□□□□□	0.0712W
Non-Accredited	
12V Ripple (Full Load)	32.46mV
5V Ripple (Full Load)	27.75mV
3.3V Ripple (Full Load)	26.18mV
5VSB Ripple (Full Load)	28.43mV
12V Load Regulation	0.49%
5V Load Regulation	0.70%
3.3V Load Regulation	0.52%
5VSB Load Regulation	1.93%
Inrush Current	19.760A

□□□□ & PG□□

Hold-Up Time (ms)	25.8
AC Loss to PWR_OK Hold Up Time (ms)	21.4
PWR_OK Inactive to DC Loss Delay (ms)	4.4

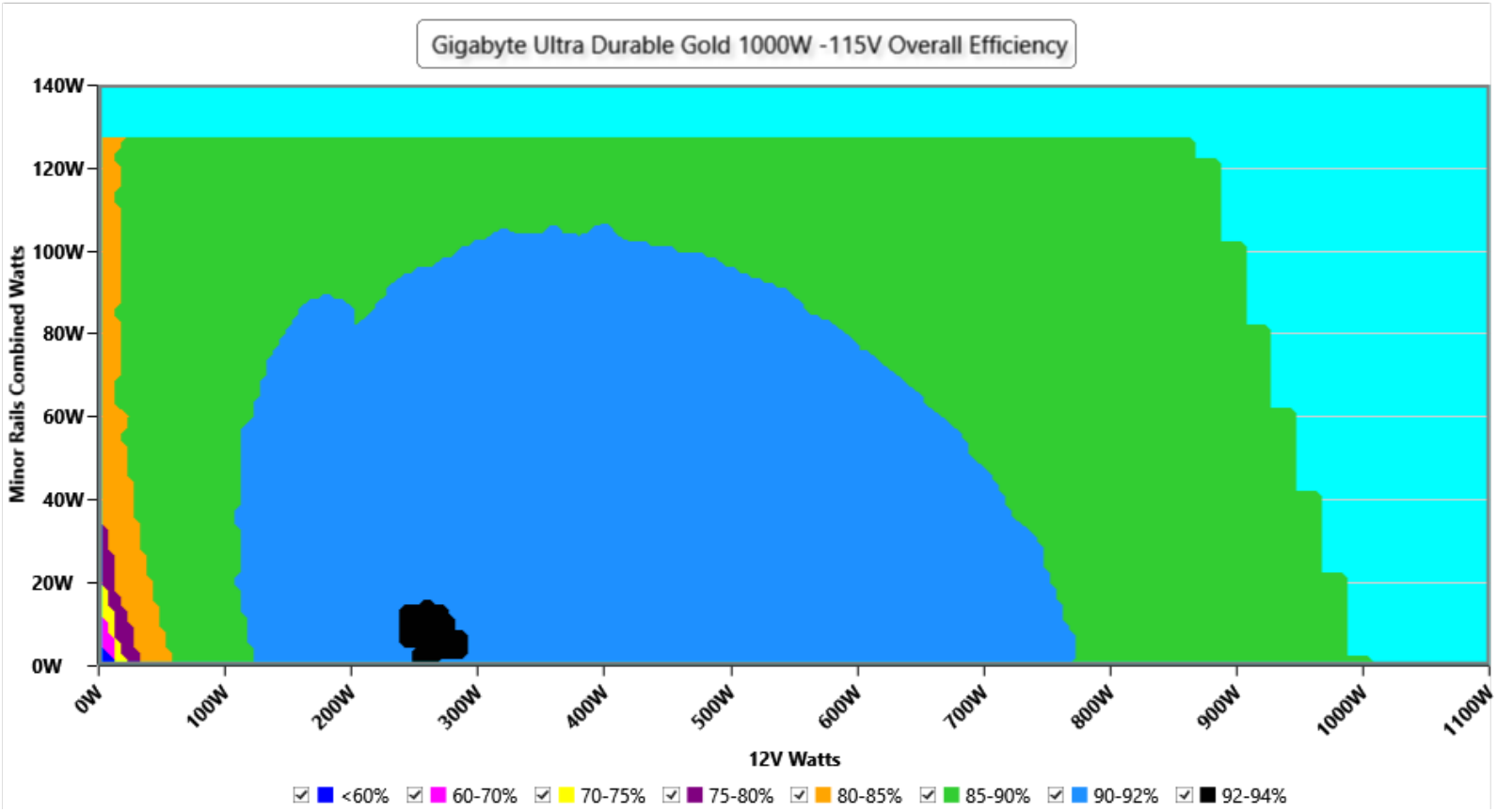
□□□□

Tables 115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result

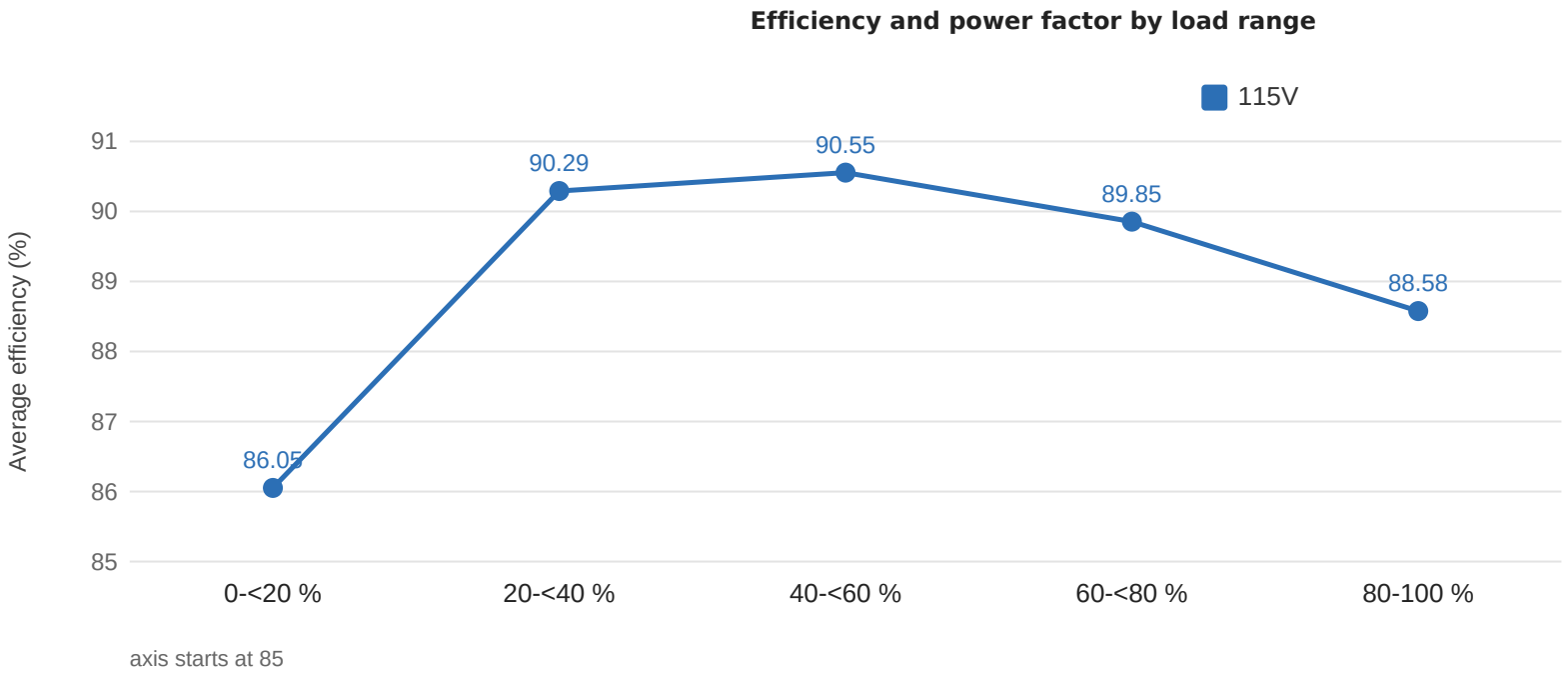
Mains Voltage RMS:	230.07 V	230.06 V	227.70 V	230.10 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	50.00 Hz	49.50 Hz	50.01 Hz	50.50 Hz	PASS
Mains Voltage CF:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.15 %	0.13 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.213 W	0.170 W	N/A	0.280 W	N/A	N/A
Apparent Power:	67.211 W	67.180 W	N/A	67.241 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

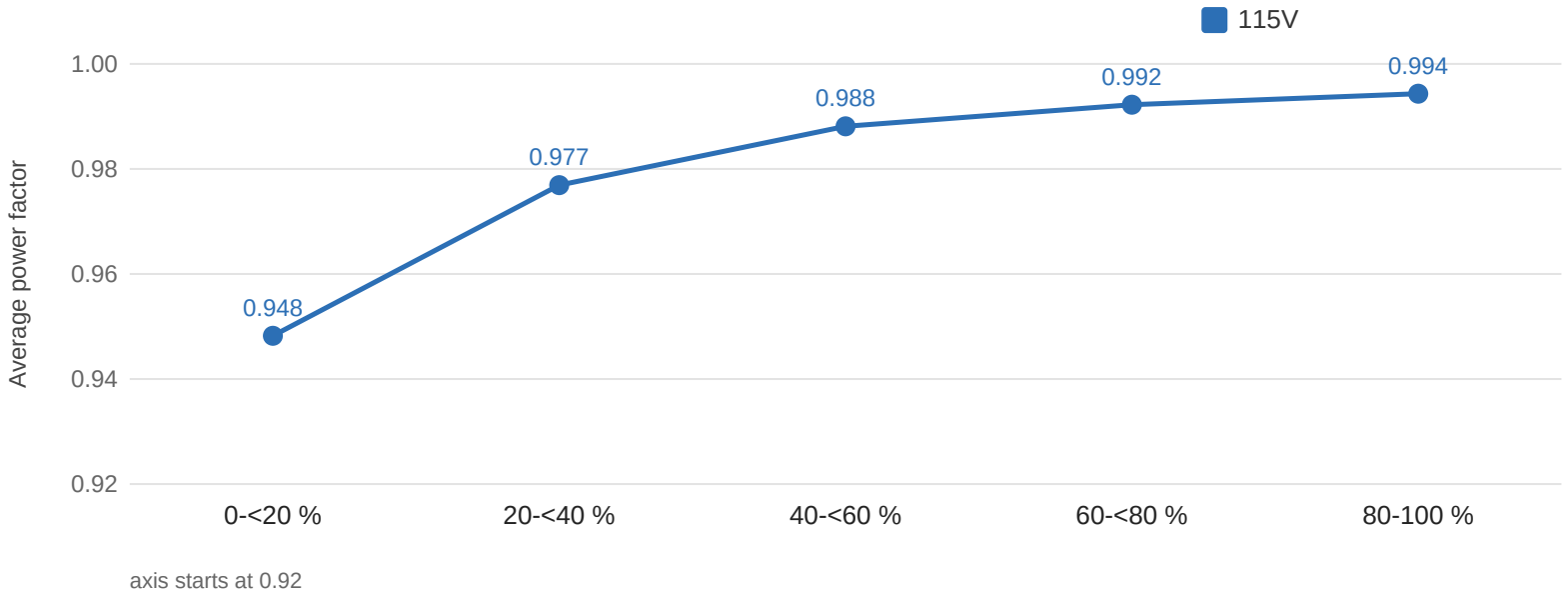
115V



□□

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


Efficiency and power factor by load range
115V
Average efficiency (%)
91
90
89
88
87
86
85
86.05
90.29
90.55
89.85
88.58
0-<20 %
20-<40 %
40-<60 %
60-<80 %
80-100 %
axis starts at 85



axis starts at 0.92

Load range	Points	Efficiency 115V	PF 115V
0-<20 %	210	86.05%	0.948
20-<40 %	310	90.29%	0.977
40-<60 %	310	90.55%	0.988
60-<80 %	310	89.85%	0.992
80-100 %	318	88.58%	0.994
70-100 % (High-Load)	473	88.91%	0.994
All (published average)	1458	89.27%	0.982

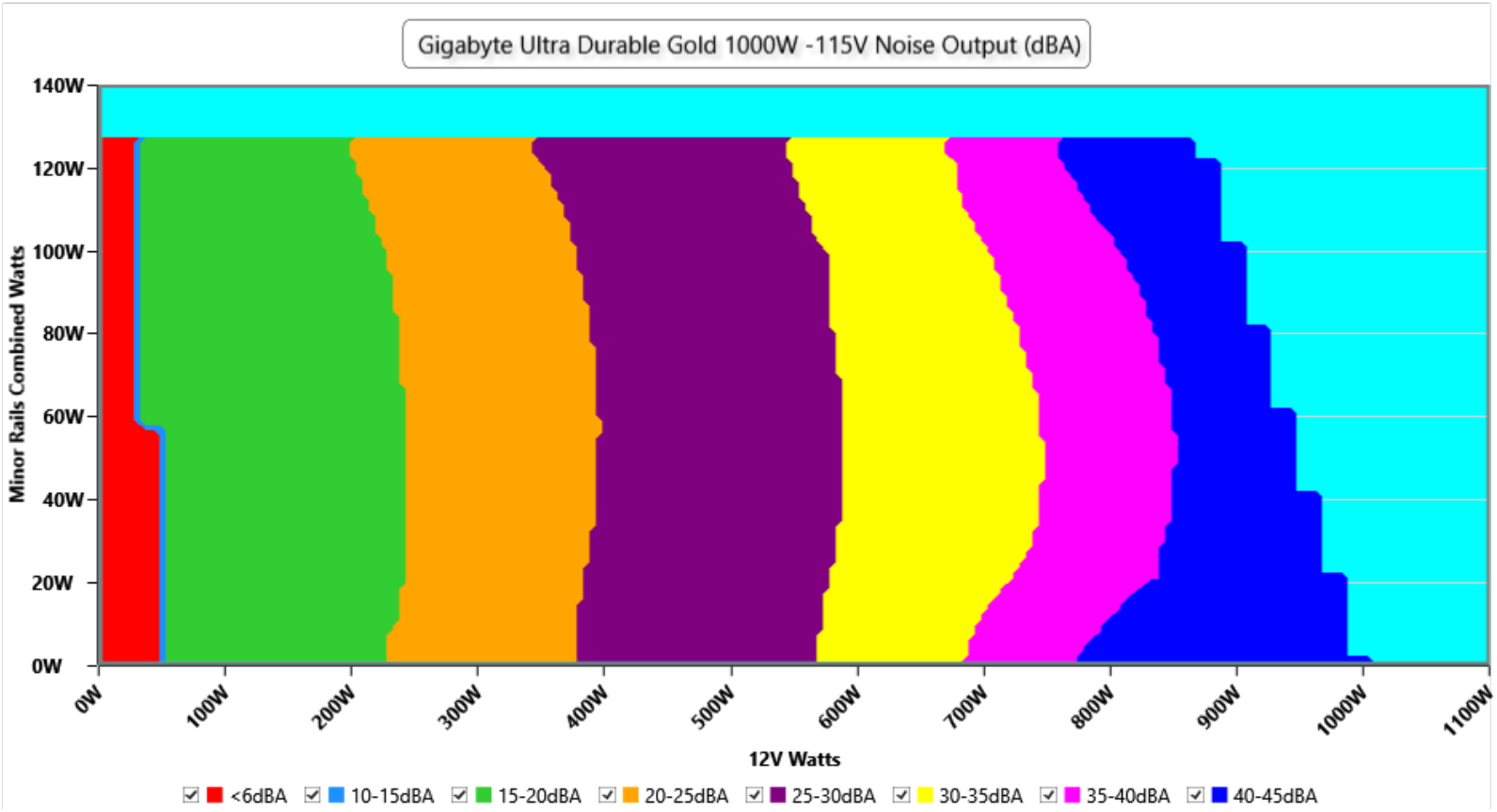
INFO

The average efficiency and power factor in five ranges of load. Calculated from the 1458 (115V) 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.

□□□□□

115V



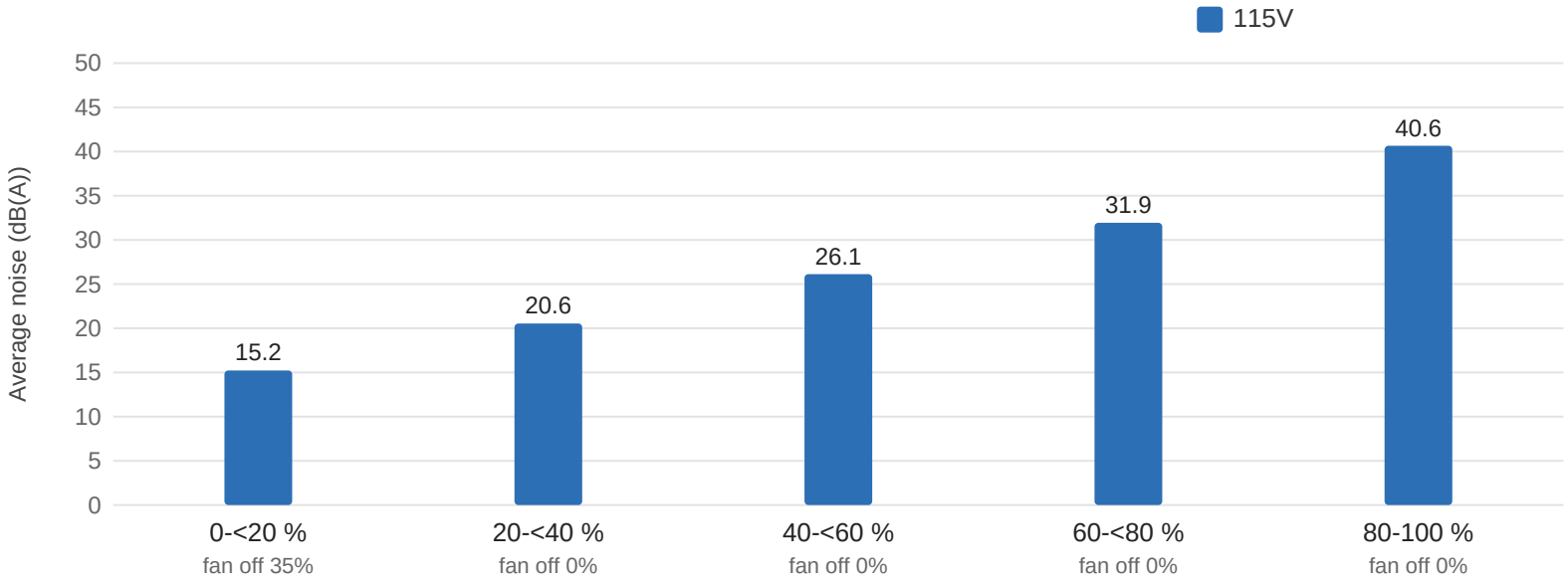
□□

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 **39.3 dB(A)** at 115V · loudest point 44.2 dB(A)

Efficiency 88.91% · power factor 0.994 (115V)



Load range	Noise 115V avg (loudest)	Fan off 115V
0-<20 %	15.2 (19.6)	35%
20-<40 %	20.6 (23.4)	0%
40-<60 %	26.1 (30.1)	0%
60-<80 %	31.9 (40.2)	0%
80-100 %	40.6 (44.2)	0%
70-100 % (High-Load)	39.3 (44.2)	0%
All (published average)	34.7 (44.2)	5%

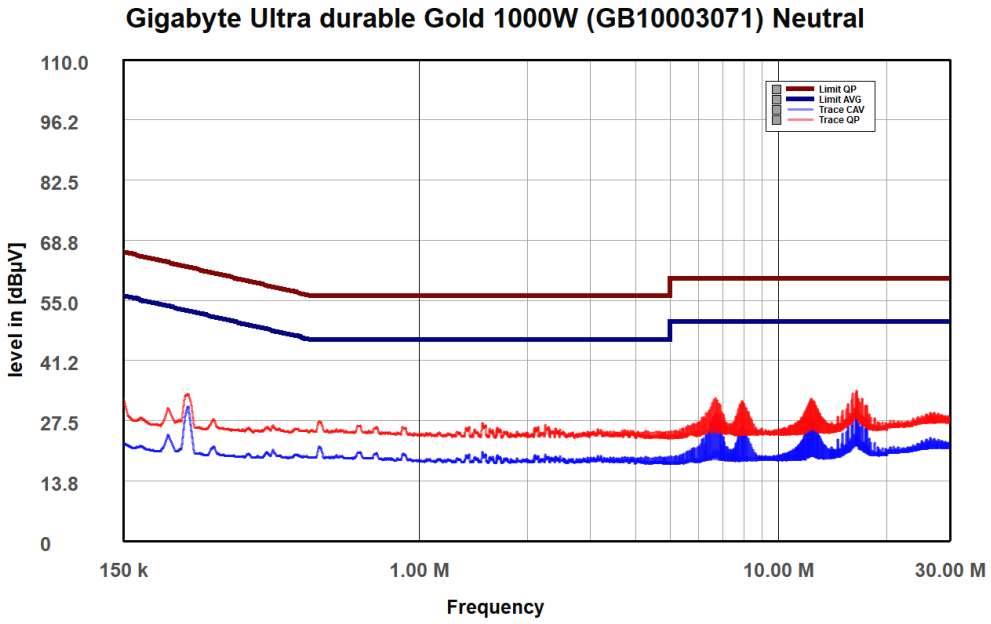
INFO

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 1458 (115V) 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

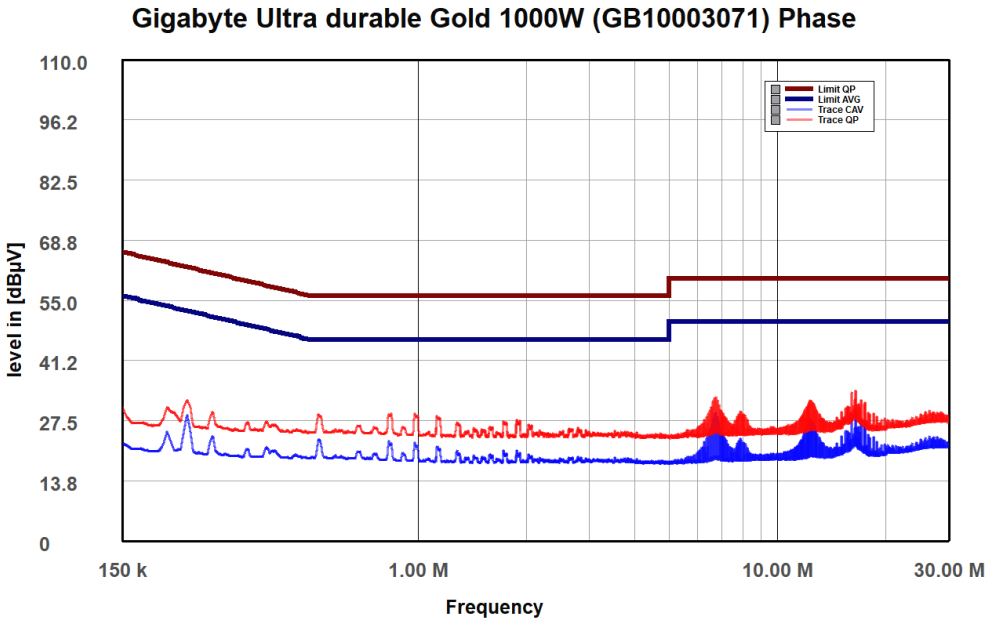
are under "Noise under high ambient temperature". Below 6 dB(A), the floor of our sound meter, the table and the chart show <6.0. In the averages a stopped fan counts as 5 dB(A), as in the published average.

Informational. Not part of the ETA or LAMBDA rating.

Conducted Emissions EN 55032 & CISPR 32

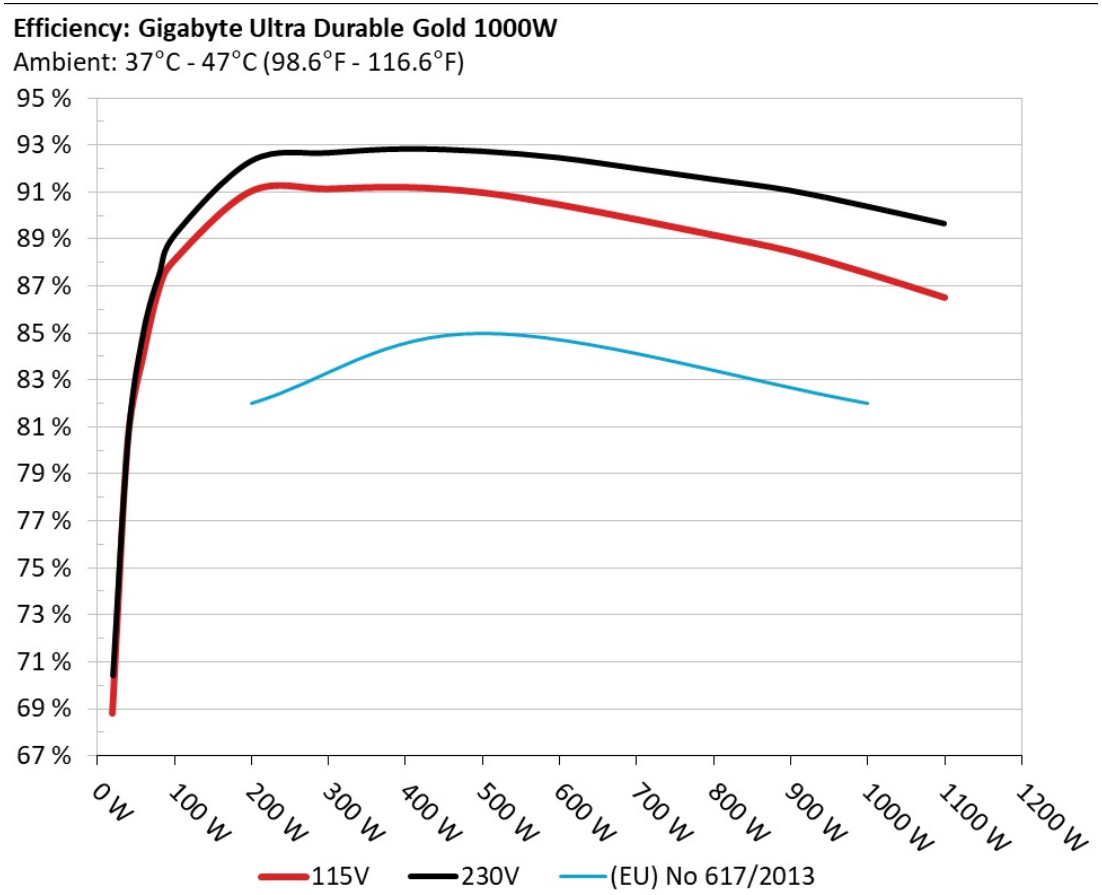


NEUTRAL



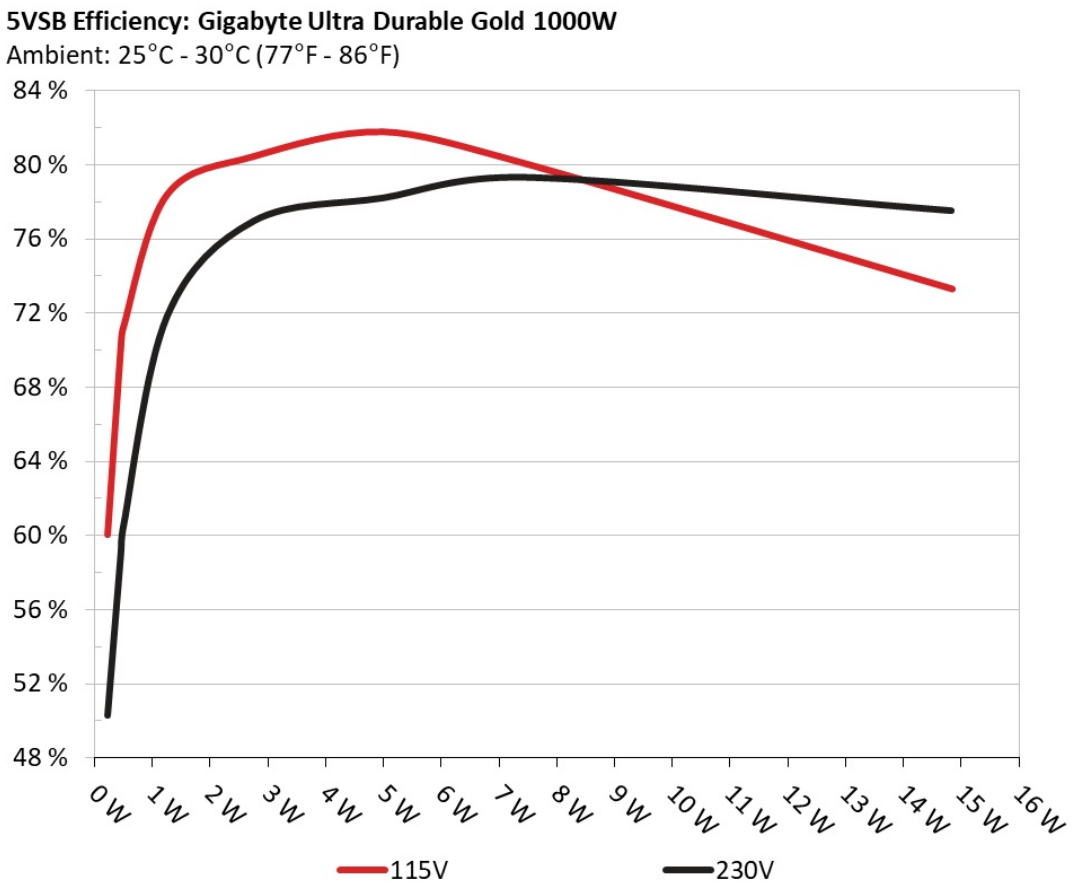
PHASE

Indicative Performance



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□□□□



□□

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

□□□□ □□ 5Vsb □□ (ErP Lot3/6 & CEC) 115V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	**0.045A**	0.226W	60.044%	0.019
	5.025V	0.376W		115.04V

2	**0.09A**	0.452W	70.053%	0.032
	5.024V	0.645W		115.04V
3	**0.55A**	2.756W	80.436%	0.154
	5.012V	3.426W		115.04V
4	**1A**	4.999W	81.761%	0.237
	5V	6.114W		115.04V
5	**1.5A**	7.48W	80.02%	0.298
	4.986V	9.348W		115.04V
6	**3A**	14.838W	73.288%	0.377
	4.947V	20.246W		115.03V

Protection Features

OCP (Normal @ 28.7°C)	12V: 100.8A (121.01%), 11.845V 5V: 29.2A (116.8%), 5.115V 3.3V: 31.004A (124.02%), 3.249V 5VSB: 3.8A (126.67%), 4.922V
OCP (Hot @ 44.8°C)	12V: 96.8A (116.21%), 11.85V 5V: 28.7A (114.8%), 5.108V 3.3V: 31.1A (124.4%), 3.248V 5VSB: 3.7A (123.33%), 4.924V
OPP (Normal @ 31.4°C)	1273.083W (127.31%)
OPP (Hot @ 44.6°C)	1225.062W (122.51%)
OTP	✓ (128°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)

10-110%□□□□ 115V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	**6.614A**	**1.977A**	**2.007A**	**1A**	100.009	88.09%	739	21.1	40.43°C	0.965
	11.855V	5.059V	3.288V	4.999V	113.531				42.3°C	115.01V
20%	**14.268A**	**2.966A**	**3.012A**	**1.202A**	199.962	91.039%	778	22.5	40.56°C	0.966
	11.849V	5.057V	3.287V	4.992V	219.644				43.04°C	114.97V
30%	**22.287A**	**3.465A**	**3.516A**	**1.404A**	300.022	91.138%	875	26.3	41.15°C	0.979
	11.844V	5.051V	3.285V	4.985V	329.189				45.88°C	114.94V
40%	**30.273A**	**3.964A**	**4.02A**	**1.607A**	399.598	91.207%	962	29.2	41.92°C	0.985
	11.839V	5.046V	3.284V	4.978V	438.12				46.62°C	114.9V
50%	**37.929A**	**4.957A**	**5.028A**	**1.811A**	499.324	90.985%	1042	31.5	42.32°C	0.989
	11.833V	5.044V	3.282V	4.97V	548.796				49.75°C	114.86V
60%	**45.662A**	**5.95A**	**6.038A**	**2A**	599.789	90.467%	1434	39.4	42.8°C	0.991
	11.827V	5.043V	3.28V	4.963V	662.995				50.94°C	114.83V
70%	**53.336A**	**6.944A**	**7.048A**	**2.22A**	699.582	89.84%	1735	43	43.27°C	0.993
	11.821V	5.041V	3.278V	4.956V	778.702				51.08°C	114.79V
80%	**61.086A**	**7.937A**	**8.059A**	**2.323A**	799.582	89.176%	1896	44.5	43.88°C	0.994
	11.814V	5.039V	3.276V	4.951V	896.636				51.7°C	114.75V
90%	**69.180A**	**8.444A**	**8.55A**	**2.426A**	899.347	88.485%	1900	44.6	44.24°C	0.995
	11.808V	5.032V	3.275V	4.947V	1016.383				53.84°C	114.71V
100%	**77.079A**	**8.954A**	**9.073A**	**3.045A**	999.366	87.547%	1904	44.7	45.14°C	0.996
	11.802V	5.024V	3.274V	4.927V	1141.515				56.35°C	114.66V
110%	**84.905A**	**9.956A**	**10.18A**	**3.046A**	1099.947	86.515%	1908	44.7	47.09°C	0.997
	11.798V	5.021V	3.271V	4.925V	1271.396				59.83°C	114.62V

CL1	**0.118A**	**14.574A**	**15.173A**	**0A**	126.297	82.72%	1868	44.3	40.14°C	0.963
	11.867V	5.166V	3.269V	5.027V	152.678				43.82°C	114.99V
CL2	**0.118A**	**23.872A**	**0A**	**0A**	126.26	82.978%	925	28	40.69°C	0.962
	11.864V	5.231V	3.29V	5.027V	152.156				43.46°C	114.99V
CL3	**0.117A**	**0A**	**25.331A**	**0A**	83.898	74.883%	943	28.5	40.19°C	0.965
	11.864V	5.018V	3.257V	5.028V	112.038				44.23°C	115V
CL4	**84.754A**	**0A**	**0A**	**0.001A**	999.931	88.296%	1908	44.7	45.85°C	0.995
	11.798V	4.948V	3.287V	5.012V	1132.488				54.7°C	114.67V

The results above are not used in the certification process

20-80□□□□ 115V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
20W	**1.253A**	**0.495A**	**0.501A**	**0.199A**	20.01	68.813%	685	18.4	36.72°C	0.748
	11.860V	5.054V	3.291V	5.022V	29.079				39.27°C	115.03V
40W	**2.758A**	**0.693A**	**0.702A**	**0.299A**	40.005	80.421%	688	18.5	37.4°C	0.871
	11.857V	5.054V	3.29V	5.019V	49.748				39.62°C	115.02V
60W	**4.262A**	**0.89A**	**0.903A**	**0.399A**	60.003	84.043%	696	19.4	38.69°C	0.931
	11.857V	5.054V	3.29V	5.016V	71.399				40.82°C	115.02V
80W	**5.763A**	**1.088A**	**1.104A**	**0.499A**	79.954	86.827%	710	19.9	39.42°C	0.954
	11.856V	5.053V	3.289V	5.013V	92.09				41.4°C	115.01V

The results above are not used in the certification process

□□□□ 115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	29.06mV	24.83mV	24.81mV	23.02mV	Pass
20% Load	28.45mV	23.86mV	23.94mV	22.61mV	Pass
30% Load	30.70mV	23.45mV	23.43mV	22.61mV	Pass
40% Load	30.44mV	24.01mV	26.34mV	22.56mV	Pass
50% Load	30.49mV	28.00mV	26.45mV	23.73mV	Pass
60% Load	30.29mV	26.67mV	29.57mV	25.57mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	31.21mV	26.77mV	28.39mV	25.27mV	Pass
80% Load	31.87mV	27.38mV	31.15mV	27.01mV	Pass
90% Load	30.80mV	29.68mV	32.33mV	27.67mV	Pass
100% Load	32.46mV	27.75mV	26.18mV	28.43mV	Pass
110% Load	32.02mV	28.80mV	31.80mV	29.85mV	Pass
Crossload1	28.17mV	26.63mV	33.07mV	20.91mV	Pass
Crossload2	32.33mV	32.80mV	36.73mV	23.43mV	Pass
Crossload3	29.78mV	25.44mV	28.85mV	21.63mV	Pass
Crossload4	31.66mV	25.14mV	23.21mV	27.39mV	Pass

The results above are not used in the certification process

Gigabyte GP-UD1000GM PG5 V2 / ICE

Top side

Power specifications label

Fan

PSU Internals

本测试报告中包含的所有数据和图表均可在以下条件下由任何人使用：使用过程需提及测试结果由 Cybenetics提供。 Cybenetics 提供自愿性认证计划：电源方面有 ETA (效率)、 LAMBDA (噪声) 与 SAFE (安全与正确运行)；散热产品方面有 DELTA (机箱噪音) 与 PHI (风扇风量与静压)
在任何情况下都应提供原始测试结果文档的网站链接

CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus
www.cybenetics.com - info@cybenetics.com