GIGABYTE™

Gigabyte GP-UD1300GM PG5

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Lab ID GB13003306

Certification ID 263306

Test Result Report ID: 26PS3306A

Certificate Issue Date: Jun 10, 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-UD1300GM PG5
OEM/ODM	Guangzhou Pansheng Electronic Technology Co., Ltd
Serial Number	-
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	100-240
□□□□ (Arms)	7.5-15

□□□□ (Hz)	50-60
□□□□ (W)	1300
Operating Temperature (Continuous Full Load) (°C)	0 - 50
□□	ATX12V
□□□□	Fully Modular
Warranty	10 years
Cybenetics Measurements	
Dimensions (W x H x D)	150 x 85 x 160mm
Weight	2.04 kg (4.50 lb)
□□	140mm Dual Ball Bearing Fan (PLA14025B12H)
□□□□□	✓
Cybenetics Testing Information	
Lab ID	GB13003306
Date of receipt	May 6, 2026
Testing Date	Jun 5, 2026
Report Issued Date	Jun 10, 2026
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 (610mm)	1	1	16-22AWG	Tinned Copper
4+4 pin EPS 12V □□ (650mm)	2	2	16AWG	Tinned Copper
6+2pin PCIe□□ (650mm+150mm)	3	6	16AWG	Tinned Copper
6+2pin PCIe□□ (650mm)	2	2	16AWG	Tinned Copper
12+4 pin PCIe (700mm) (600W)	2	2	16-26AWG	Tinned Copper
SATA□□ (650mm+150mm+150mm+150mm)	3	12	18AWG	Tinned Copper
4-pin Molex (600mm+150mm+150mm) / FDD (+150mm)	2	6 / 2	18AWG	Tinned Copper

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AC Power Cord (1360mm) - C19 coupler	1	1	15AWG	-

Protection Features(Manufacturer)

Over Power Protection	✓
Over Current (+12V) Protection	✓
Over Temperature Protection	✓
Short Circuit Protection	✓
Surge Protection	✓
Inrush Current Protection	✓
Fan Failure Protection	✗

□□□□

□		3.3V	5V	12V	5VSB	-12V
□□□□	□□	25	25	108.3	3.5	0.3
	□	125		1300	17.5	3.6
□□□□□ (W)		1300				

Parts Description

General Data	
Manufacturer (OEM)	Guangzhou Pansheng Electronic Technology Co., Ltd
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor SCK205R0 (5Ohm @ 25°C) & Relay
Bridge Rectifier	2x RS2505M-U3 (1000V, 25A @ 100°C)
APFC MOSFETs	2x CRMicro CRJQ99N65G2F (650V, 30A @ 25°C, Rds(on): 0.90Ohm)
APFC Boost Diode	1x Wolfspeed C6D10065A (650V, 10A @ 125°C)

Bulk Cap(s)	1x Nippon Chemi-con (400V, 820µF, 2000h @ 105°C, KMW) 1x Rubycon(400V, 390µF, 3000h @ 105°C, MXK)
Main Switchers	4x Alpha and Omega Semiconductor AOTF160A60L (700V, 15A @ 100°C, Rds(on): 0.16Ohm)
IC Drivers	Texas Instruments UCC21541
APFC Controller	Champion CU6510VC Champion CM03AX (reducing no load consumption)
Resonant Controller	Champion CU6901VACC
Topology	Primary side: APFC, Full-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	8x Nexperia PSMN1R0-40YLD (40V, 280A @ 25°C, Rds(on): 1.1mOhm)
5V & 3.3V	DC-DC Converters: 8x Alpha and Omega Semiconductor GP4626 PWM Controller(s): 2x ON Semi NCP5230
Filtering Capacitors	Electrolytic: 8x Toshin Kogyo (@ 105°C, AZ) 5x Nippon Chemi-con (@ 105°C, W) 2x Nippon Chemi-con (@ 105°C, KZE) 2x Rubycon (@ 105°C, ZLH) Polymer: 31x Teapo
Supervisor IC	WIetrend WT7502R
Fan Power Switch	Niko Semiconductor PD515BA
Fan Model	Power Logic PLA14025B12H (140mm, 12V, 0.5A, Dual Ball Bearing Fan)
5VSB Circuit	
Rectifier	PANJIT SVM1045V2B (45V, 10A)
Standby PWM Controller	Chipown PN8160

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	✓
Conducted Emissions EN 55032 & CISPR 32	Passed

Performance Summary 115V

Accredited	
□□□□ (>1450 load combinations)	89.952%
Average Noise Output (>1450 Load Combinations)	37.91dBA
PF□□□ (>1450 Load Combinations)	0.973
Efficiency With 10W (≤500W) or 2% (>500W) Load	74.856%
□□□□□□	0.0245W
Non-Accredited	
12V Ripple (Full Load)	39.99mV
5V Ripple (Full Load)	31.31mV
3.3V Ripple (Full Load)	26.63mV
5VSB Ripple (Full Load)	27.45mV
12V Load Regulation	0.21%
5V Load Regulation	0.52%
3.3V Load Regulation	0.54%
5VSB Load Regulation	1.30%
Inrush Current	34.740A

□□□□ & PG□□

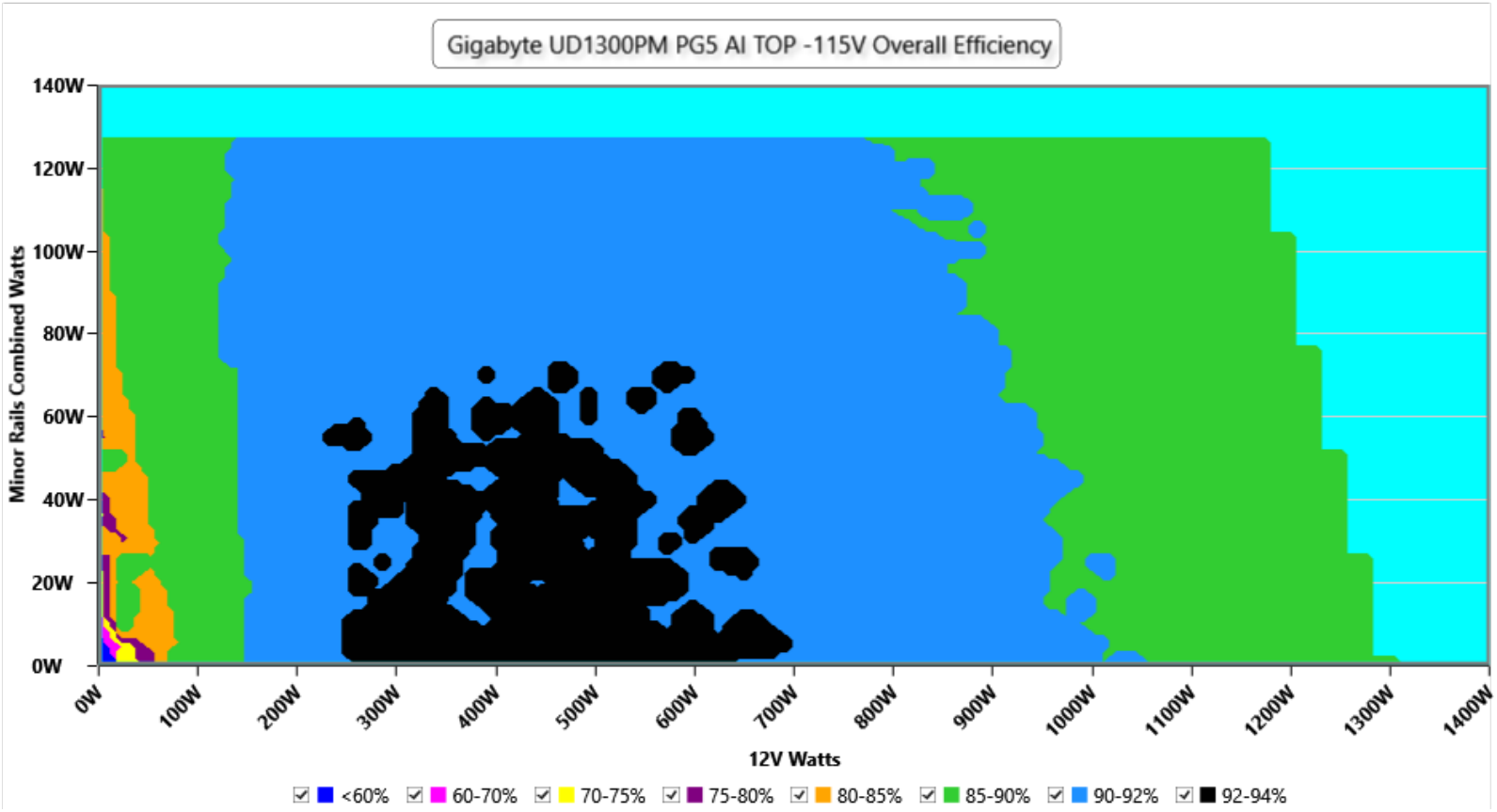
Hold-Up Time (ms)	24
AC Loss to PWR_OK Hold Up Time (ms)	19.4
PWR_OK Inactive to DC Loss Delay (ms)	4.6

□□□□

Tables 115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.00 V	114.97 V	113.85 V	115.03 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.96 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 %	0.10 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.025 W	-0.006 W	N/A	0.050 W	N/A	N/A
Apparent Power:	10.659 W	10.631 W	N/A	10.685 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

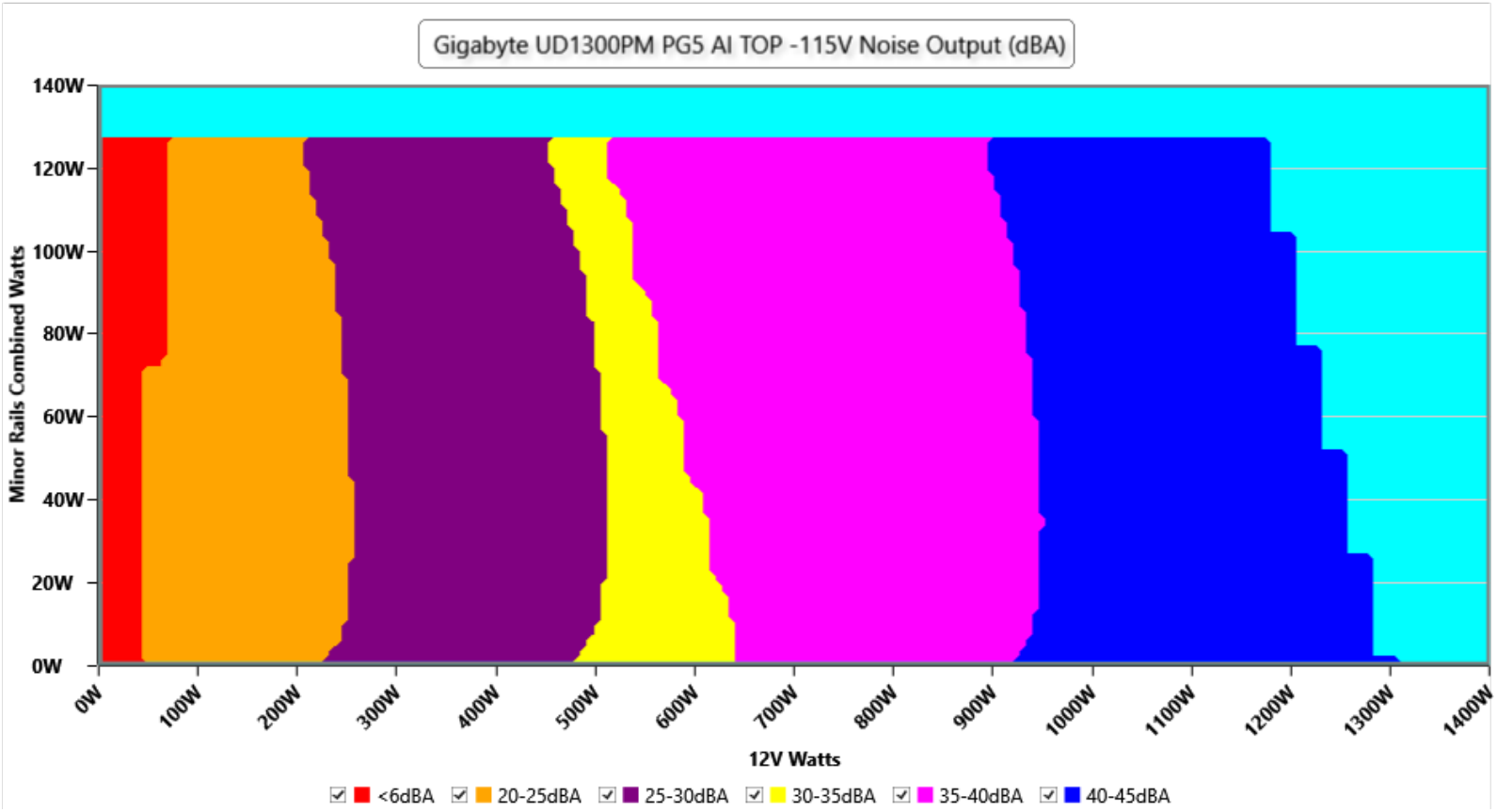
115V



□□

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

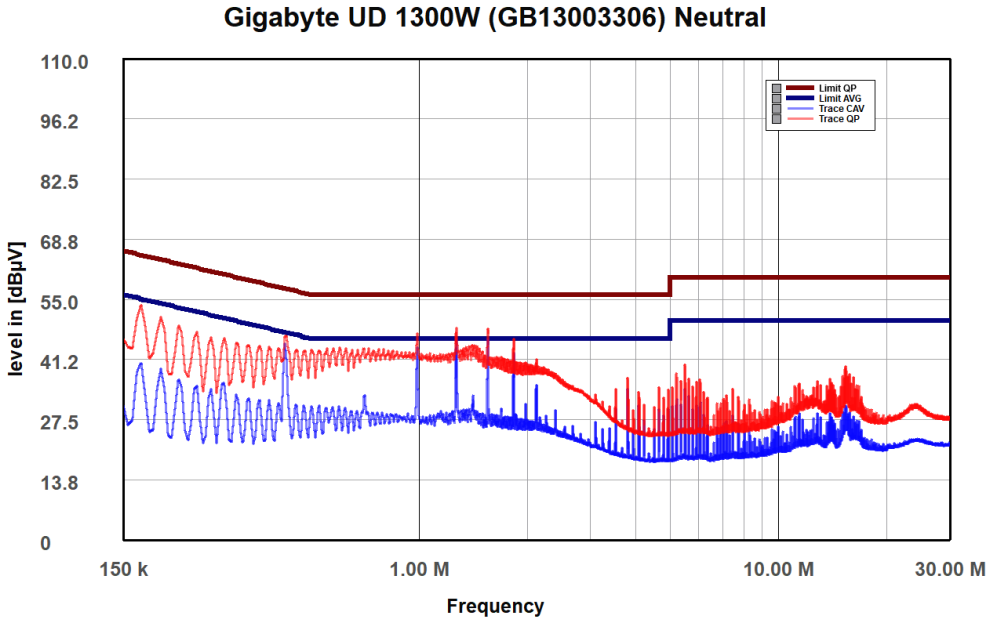
115V



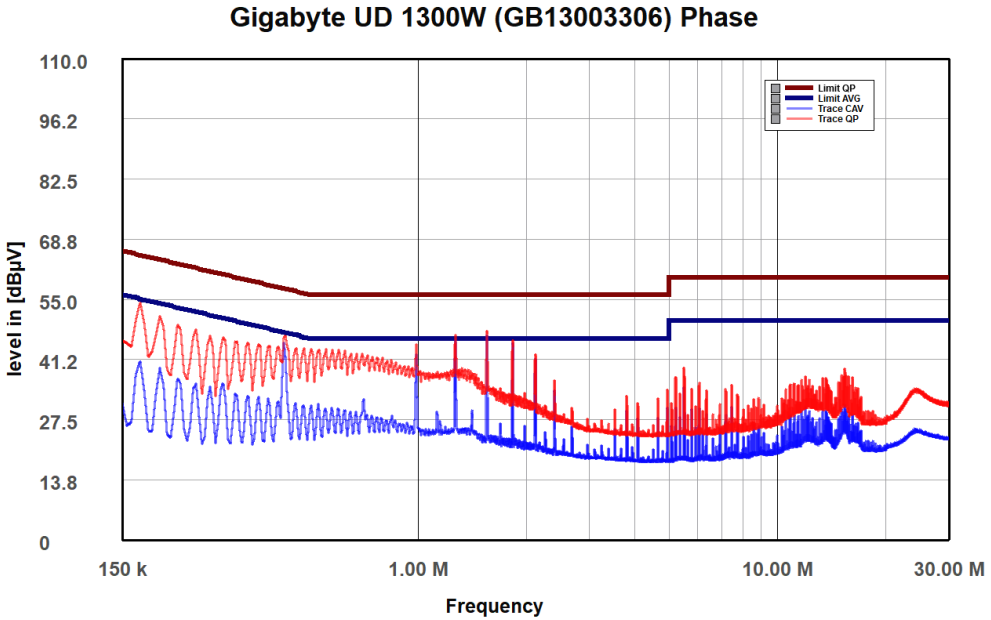
□□

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

Conducted Emissions EN 55032 & CISPR 32

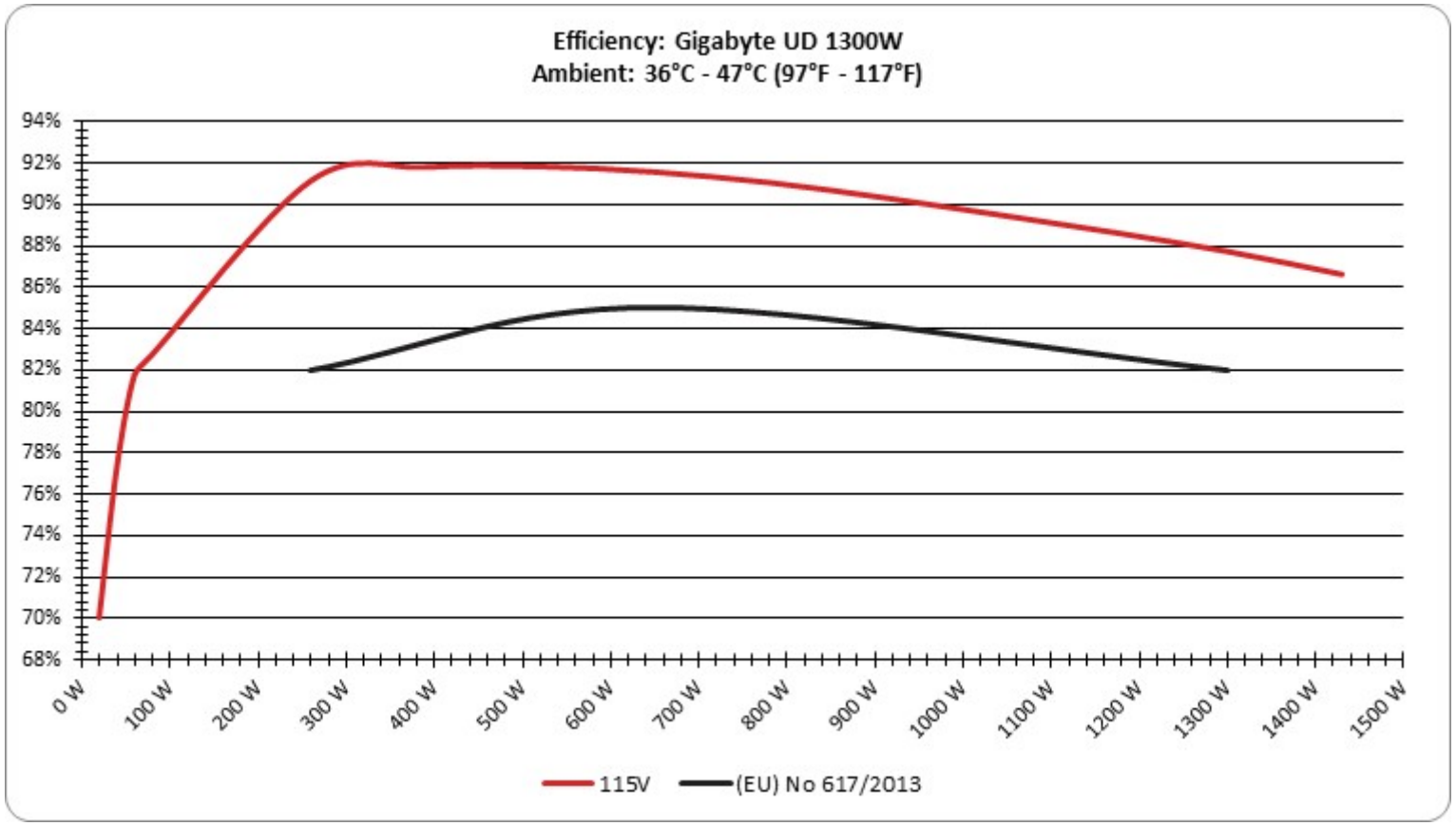


NEUTRAL



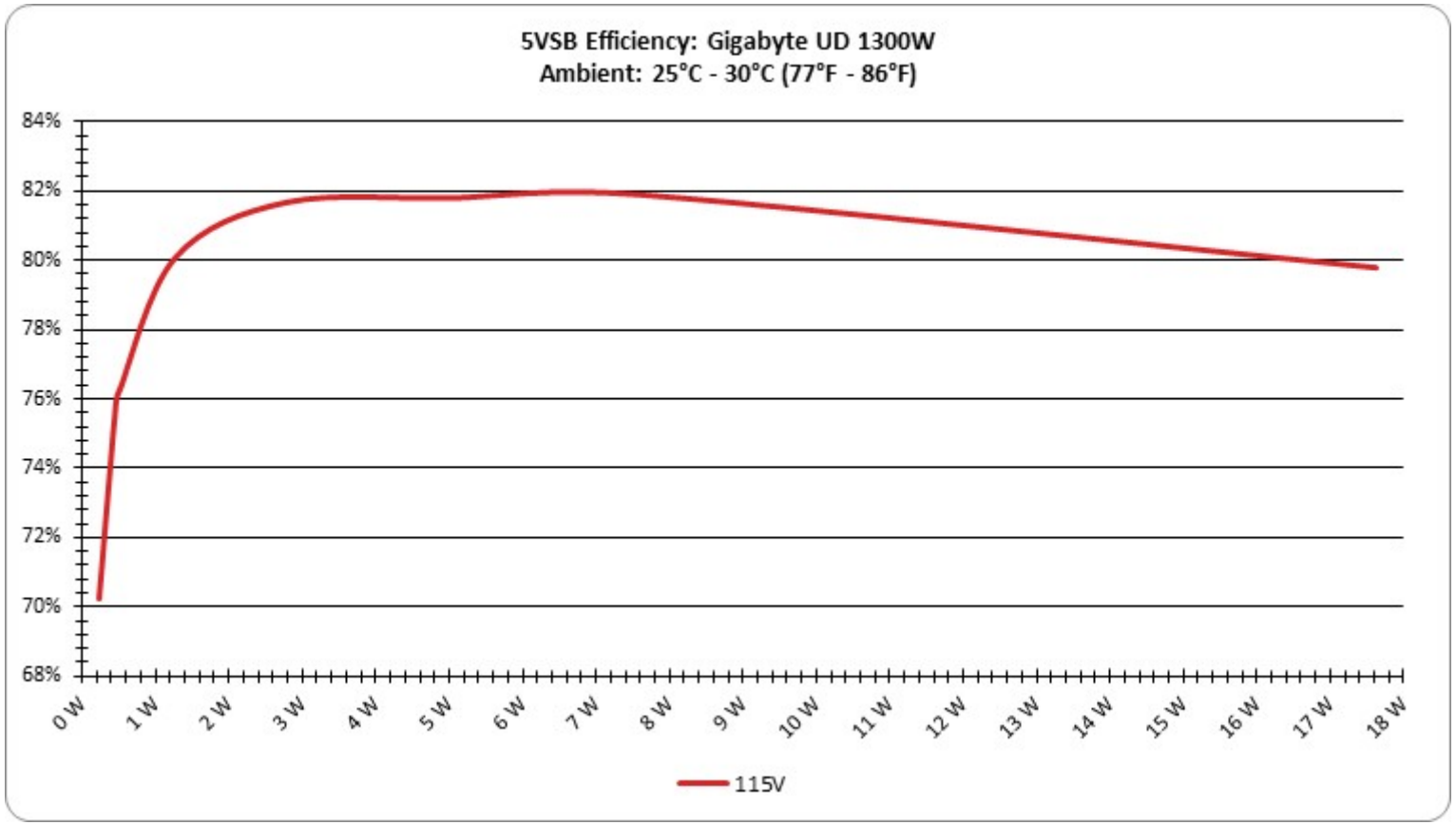
PHASE

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**	0.228W	70.252%	0.03
	5.076V	0.325W		114.88V

2	**0.09A**	0.457W	75.893%	0.055
	5.075V	0.602W		114.88V
3	**0.1A**	0.508W	76.269%	0.061
	5.075V	0.666W		114.87V
4	**0.25A**	1.268W	80.084%	0.136
	5.073V	1.584W		114.87V
5	**0.55A**	2.788W	81.672%	0.25
	5.07V	3.414W		114.87V
6	**1A**	5.065W	81.797%	0.351
	5.065V	6.192W		114.86V
7	**1.5A**	7.589W	81.892%	0.396
	5.059V	9.267W		114.87V
8	**3.5A**	17.621W	79.79%	0.488
	5.034V	22.084W		114.86V

Protection Features

OCP (Normal @ 27.1°C)	12V: 139.80A (129.09%), 12.102V 5V: 44.9A (179.60%), 4.976V 3.3V: 42.6A (170.40%), 3.3V 5VSB: 4.4A (125.71%), 5.023V
OCP (Hot @ 41.8°C)	12V: 126.20A (116.53%), 12.121V 5V: 44.8A (179.20%), 4.973V 3.3V: 43A (172.00%), 3.299V 5VSB: 4.3A (122.86%), 5.003V
OPP (Normal @ 27.6°C)	1664.08W (128.01%)
OPP (Hot @ 42.1°C)	1489.11W (114.55%)
OTP	✓ (144°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%	**8.923A**	**1.99A**	**1.98A**	**0.988A**	129.978	87.204%	714	25.8	40.17°C	0.843
	12.146V	5.026V	3.333V	5.062V	143.414				41.47°C	114.49V
20%	**18.870A**	**2.986A**	**2.973A**	**1.186A**	259.927	91.175%	782	28.5	40.77°C	0.988
	12.138V	5.022V	3.33V	5.057V	285.085				42.91°C	114.78V
30%	**29.125A**	**3.485A**	**3.47A**	**1.386A**	389.497	91.834%	850	30.9	41.42°C	0.995
	12.136V	5.021V	3.328V	5.052V	424.135				44.39°C	114.74V
40%	**39.416A**	**3.984A**	**3.967A**	**1.585A**	519.456	91.871%	932	33.4	41.56°C	0.997
	12.133V	5.019V	3.327V	5.048V	565.413				46°C	114.69V
50%	**49.382A**	**4.983A**	**4.962A**	**1.785A**	649.627	91.604%	1035	35.9	42.5°C	0.998
	12.132V	5.017V	3.326V	5.043V	709.106				47.7°C	114.66V
60%	**59.345A**	**5.982A**	**5.958A**	**1.985A**	779.768	91.093%	1159	38.6	42.96°C	0.998
	12.132V	5.015V	3.324V	5.038V	856.07				49.3°C	114.6V
70%	**69.310A**	**6.982A**	**6.955A**	**2.186A**	909.833	90.362%	1298	40.9	43.25°C	0.999
	12.131V	5.013V	3.322V	5.033V	1006.86				50.98°C	114.56V
80%	**79.274A**	**7.982A**	**7.951A**	**2.287A**	1039.465	89.543%	1460	43.5	43.87°C	0.998
	12.130V	5.01V	3.32V	5.029V	1160.766				53.12°C	114.5V
90%	**89.632A**	**8.484A**	**8.436A**	**2.388A**	1169.724	88.692%	1607	45.5	44.18°C	0.999
	12.130V	5.009V	3.318V	5.025V	1318.928				54.64°C	114.46V

100%	**99.536A**	**8.987A**	**8.953A**	**3.494A**	1299.44	87.766%	1758	47.6	45.37°C	0.999
	12.129V	5.007V	3.317V	5.009V	1480.539				56.92°C	114.4V
110%	**109.554A**	**9.991A**	**10.043A**	**3.496A**	1429.655	86.654%	1912	49.3	46.57°C	0.999
	12.130V	5.004V	3.315V	5.006V	1649.852				59.67°C	114.34V
CL1	**0.115A**	**15.039A**	**14.937A**	**0A**	126.295	83.086%	1054	36.4	41.41°C	0.882
	12.170V	5.007V	3.32V	5.075V	151.877				52.62°C	113.41V
CL2	**0.114A**	**24.965A**	**0A**	**0A**	126.237	82.917%	935	33.5	41.85°C	0.869
	12.161V	5.001V	3.33V	5.075V	151.07				49.49°C	112.86V
CL3	**0.114A**	**0A**	**24.88A**	**0A**	83.877	78.194%	876	31.8	40.69°C	0.835
	12.167V	5.019V	3.316V	5.075V	107.268				47.59°C	113.72V
CL4	**107.211A**	**0A**	**0A**	**0.001A**	1299.873	88.375%	1685	46.5	45.15°C	0.999
	12.124V	5.018V	3.326V	5.052V	1470.922				54.17°C	114.41V

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	**1.222A**	**0.497A**	**0.495A**	**0.197A**	19.994	70.042%	0	<6.0	39.32°C	0.556
	12.151V	5.033V	3.335V	5.074V	28.557				36.07°C	114.86V
40W	**2.690A**	**0.696A**	**0.693A**	**0.296A**	39.995	77.303%	648	22.5	37.68°C	0.635
	12.152V	5.031V	3.335V	5.072V	51.897				38.15°C	114.79V
60W	**4.158A**	**0.894A**	**0.891A**	**0.394A**	59.995	81.791%	672	23.7	38.02°C	0.738
	12.153V	5.03V	3.334V	5.071V	73.354				38.59°C	114.95V
80W	**5.619A**	**1.093A**	**1.089A**	**0.493A**	79.928	82.772%	687	24.5	39.5°C	0.799
	12.155V	5.029V	3.334V	5.069V	96.568				40.8°C	114.3V

The results above are not used in the certification process

□□□□ 115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	29.51mV	22.73mV	20.57mV	14.67mV	Pass
20% Load	39.02mV	24.53mV	23.91mV	14.21mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
30% Load	37.13mV	25.50mV	24.32mV	15.03mV	Pass
40% Load	35.85mV	26.43mV	23.04mV	15.85mV	Pass
50% Load	33.19mV	23.87mV	24.78mV	15.50mV	Pass
60% Load	31.50mV	26.79mV	19.96mV	16.32mV	Pass
70% Load	33.55mV	27.77mV	24.01mV	21.60mV	Pass
80% Load	37.18mV	29.77mV	25.04mV	23.19mV	Pass
90% Load	37.34mV	29.00mV	24.27mV	24.68mV	Pass
100% Load	39.99mV	31.31mV	26.63mV	27.45mV	Pass
110% Load	40.41mV	31.31mV	26.58mV	27.56mV	Pass
Crossload1	29.36mV	27.51mV	22.32mV	15.75mV	Pass
Crossload2	31.76mV	26.28mV	26.93mV	14.93mV	Pass
Crossload3	20.97mV	19.24mV	20.32mV	12.37mV	Pass
Crossload4	75.03mV	23.15mV	36.78mV	19.70mV	Pass

The results above are not used in the certification process









Gigabyte GP-UD1300GM PG5

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（机箱隔音）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

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