Gamemax GX-1050 PRO

Lab ID GM10502654

Certification ID 252654

Test Result Report ID: 24PS2654A

Certificate Issue Date: Nov 20, 2024

Scheme: ETA-EMI PSU

115V



230V



Scheme: LAMBDA PSU

115V



230V





Aristeidis Bitziopoulos, Certification Body General Manager

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	Gamemax
Model	GX-1050 PRO
OEM/ODM	Sohoo
Serial Number	
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	100-240
□□□□ (Arms)	15-8
□□□□ (Hz)	50-60

□□□□ (W)	1050
Operating Temperature (Continuous Full Load) (°C)	
□□	ATX12V
□□□□	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
□□	135mm Hydro Dynamic Bearing Fan (DF1352512FDHN)
□□□□□	✓
Cybenetics Testing Information	
Lab ID	GM10502654
Date of receipt	Nov 5, 2024
Testing Date	Nov 19, 2024
Report Issued Date	Nov 20, 2024
□□□□□	No -12V Rail, despite the label saying it has one. During OCP testing under normal and cold conditions, the +12V rail reached 127A (>145% load) without shutting down. This forces us to not provide an ATX v3.1 compliance.
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□□ (Non-accredited measurements)

□□□□□				
□□	□□□□	□□□□□□	**Gauge**	In Cable Capacitors
ATX □□ 20+4 pin (500mm)	1	1	16-20AWG	□
4+4 pin EPS 12V □□ (500mm)	2	2	16AWG	□
6+2pin PCIe□□ (510mm)	2	2	16AWG	□
12+4 pin PCIe (650mm) (600W)	1	1	16-24AWG	□
SATA□□ (505mm+150mm+150mm+150mm)	1	4	18AWG	□

SATA□□ (505mm+150mm+150mm)	1	3	18AWG	□
4-pin Molex (500mm+150mm+150mm)	2	6	16-18AWG	□

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
□□□□	□□	20	20	87.5	2.5	0.3
	□	100		1050	12.5	3.6
□□□□□ (W)		1050				

Parts Description

General Data	
Manufacturer (OEM)	Sohoo
PCB Type	Double-Sided
Primary Side	
Transient Filter	6x Y caps, 3x X caps, 2x CM chokes, 1x MOV
Inrush Protection	1x NTC Thermistor NTC-5D20 (5 ohm) & Relay
Bridge Rectifier(s)	2x Kanghong PBU1506L (600V, 15A @ 25°C)
APFC MOSFETs	2x no info
APFC Boost Diode	2x GPT G3S06506D (650V, 15.3A @ 100°C)

Bulk Cap(s)	1x Nichicon (400V, 1000uF, 2000h @ 105°C, GG(M))
Main Switchers	2x Sanrise Tech SRC60R068BS (600V, 21.5A @ 125°C, Rds(on): 68mOhm)
Resonant Controller	MPS HR1213
APFC Controller	Infineon ICE2PCS01
Topology	Primary side: APFC, Half-Bridge & LLC Resonant Converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	6x Infineon IAUC120N04S6N006 (40V, 120A @ 25°C, Rds(on): 0.60mOhm)
5V & 3.3V	DC-DC Converters: 4x AII Power AP180N03G (30V, 115A @ 100°C, Rds(on): 2.1mOhm) PWM Controller(s): MicrouP3861P
Filtering Capacitors	Electrolytic: 2x Teapo (3-3,000 @ 105°C, SC) 1x Chengx (2-3,000h @105°C, GR) Polymer: 24x Teapo
IC Driver	MPS MP6924B
Supervisor IC	Grenergy GR8313F (OVP, UVP, PG)
Fan Model	DF1352512FDHN (135 mm, 12V, 0.34A, Fluid Dynamic Bearing Fan)
5VSB	
Rectifier	ER2EL60CS
Standby PWM Controller	Chipown PN8141

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	✓

Performance Summary

115V

Accredited	
□□□□ (>1450 load combinations)	89.789%
Average Noise Output (>1450 Load Combinations)	21.86dBA
PF□□□ (>1450 Load Combinations)	0.990
Efficiency With 10W (≤500W) or 2% (>500W) Load	72.324%
□□□□□□	0.0682W
Non-Accredited	
12V Ripple (Full Load)	32.08mV
5V Ripple (Full Load)	19.60mV
3.3V Ripple (Full Load)	23.48mV
5VSB Ripple (Full Load)	13.35mV
12V Load Regulation	0.71%
5V Load Regulation	0.74%
3.3V Load Regulation	0.75%
5VSB Load Regulation	2.87%
Inrush Current	92.110A

230V

Accredited	
□□□□ (>1450 load combinations)	91.528%
Average Noise Output (>1450 Load Combinations)	21.92dBA
PF□□□ (>1450 Load Combinations)	0.960
Efficiency With 10W (≤500W) or 2% (>500W) Load	70.951%
□□□□□□	0.1515W
Non-Accredited	
12V Ripple (Full Load)	28.43mV
5V Ripple (Full Load)	19.68mV
3.3V Ripple (Full Load)	23.97mV

5VSB Ripple (Full Load)		14.34mV
12V Load Regulation		0.76%
5V Load Regulation		0.68%
3.3V Load Regulation		0.75%
5VSB Load Regulation		2.87%
Inrush Current		152.200A
12V Transient Response (200%)		11.26V
5V Transient Response (200%)		4.940V
3.3V Transient Response (200%)		3.240V
5VSB Transient Response (200%)		4.901V
□□□□ & PG□□		22.20ms
AC Loss to PWR_OK Hold Up Time		19.90ms
PWR_OK Inactive to DC Loss Delay		2.30ms
PSU Timings: T1 (20% / 100%)	68.0ms	67.0ms
PSU Timings: T3 (20% / 100%)	128.0ms	127.0ms
12V OCP (30.7°C / 42.3°C)	127.00A (145.14%), 11.886V*	127.00A (145.14%), 11.893V*
5V OCP (30.7°C / 42.3°C)		
3.3V OCP (30.7°C / 42.3°C)	28.6A (143.00%), 5.003V	28.1A (140.50%), 4.998V
5VSB OCP (30.7°C / 42.3°C)	28.7A (143.50%), 3.342V	28A (140.00%), 3.343V
OPP (30.65°C / 43.38°C)	139.50%	114.17%

□□□□ & PG□□

Hold-Up Time (ms)	22.2
AC Loss to PWR_OK Hold Up Time (ms)	19.9
PWR_OK Inactive to DC Loss Delay (ms)	2.3

Tables

115V

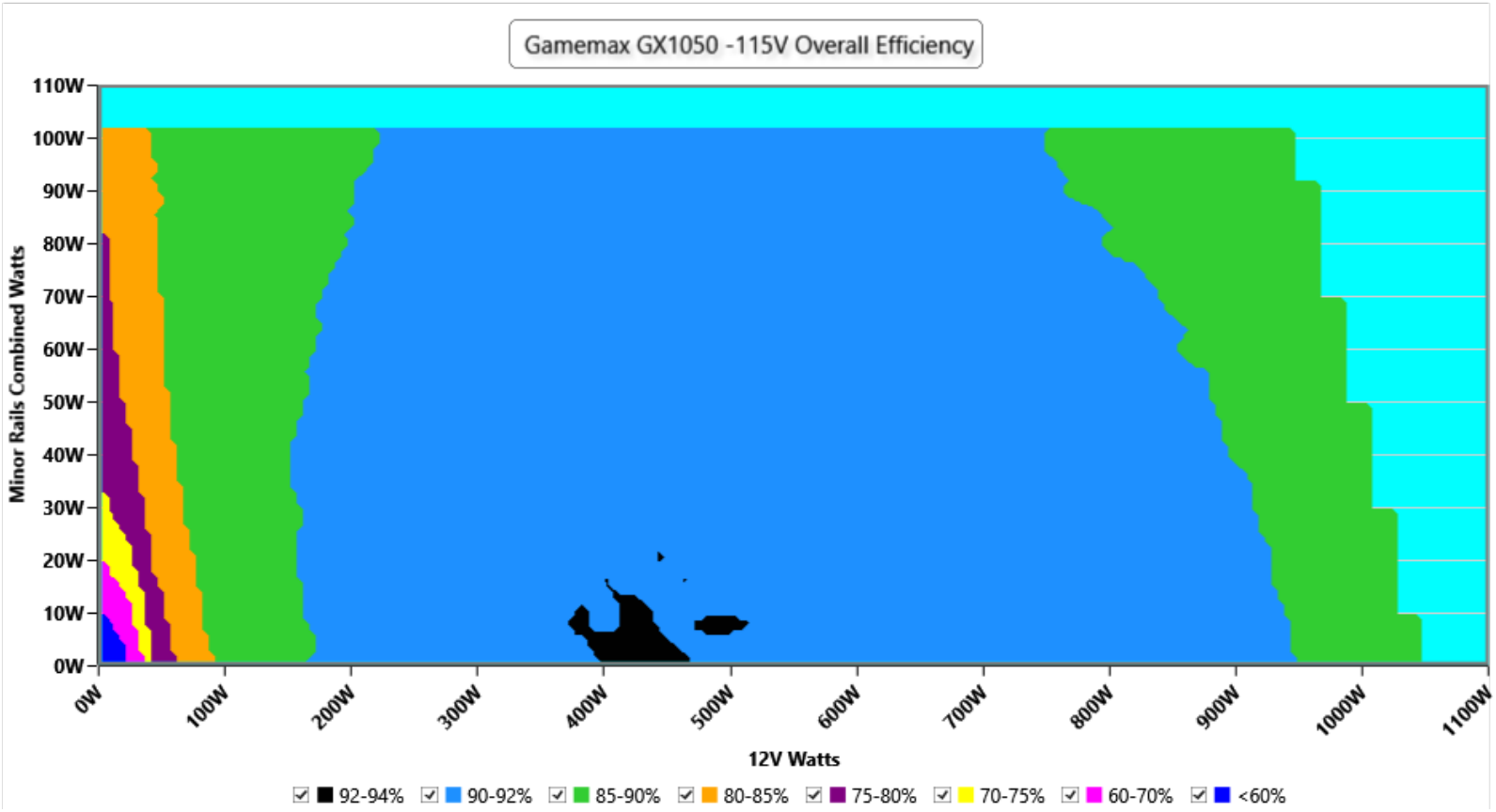
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.06 V	115.03 V	113.85 V	115.10 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.99 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.09 %	N/A	0.18 %	2.00 %	PASS
Real Power:	0.068 W	-0.000 W	N/A	0.125 W	N/A	N/A
Apparent Power:	15.366 W	15.279 W	N/A	15.458 W	N/A	N/A
Power Factor:	0.005	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	231.01 V	230.93 V	227.70 V	231.08 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 %	0.14 %	N/A	0.23 %	2.00 %	PASS
Real Power:	0.152 W	0.106 W	N/A	0.214 W	N/A	N/A
Apparent Power:	52.648 W	52.370 W	N/A	53.006 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

□□□□□□

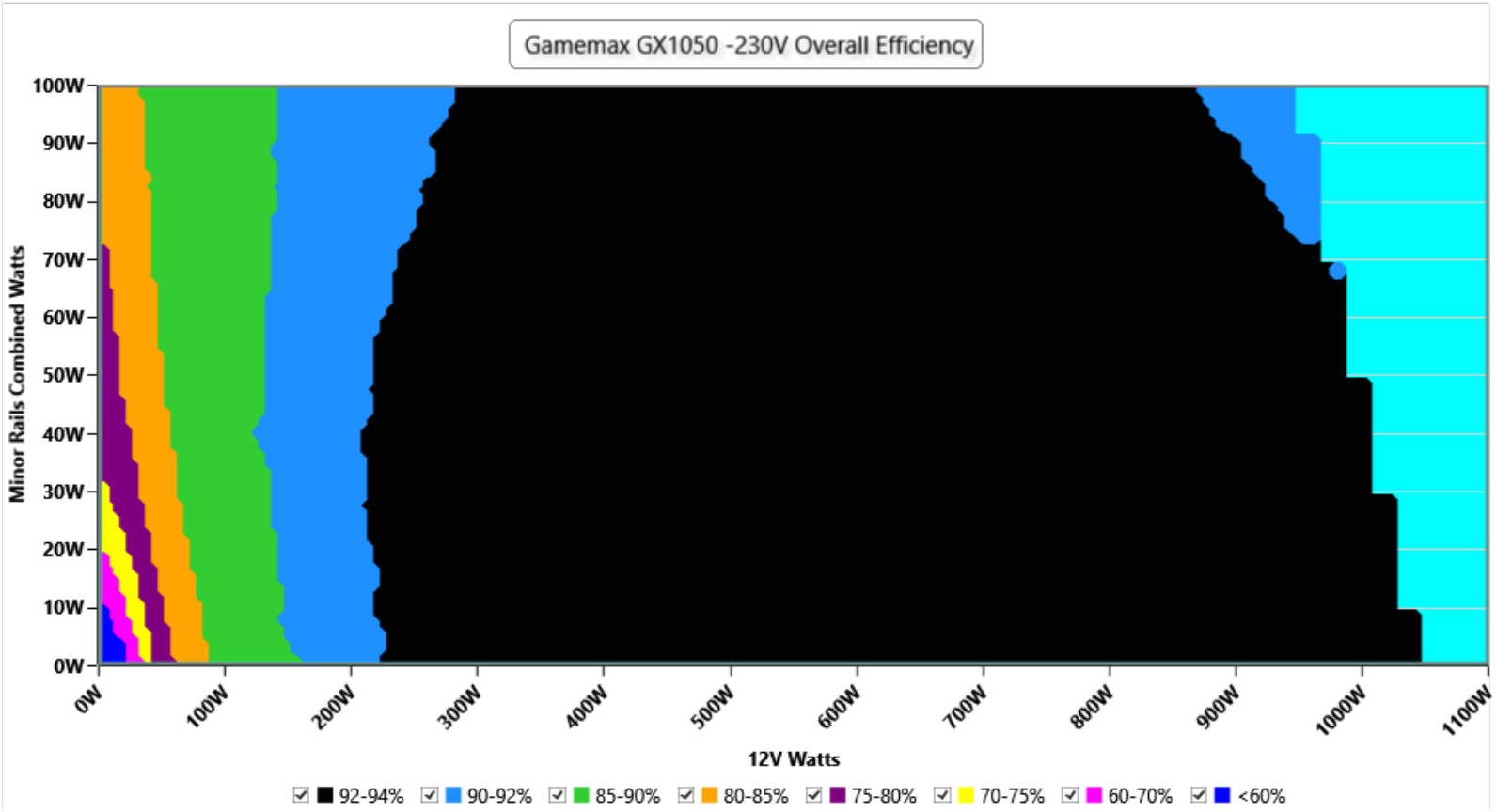
115V



□□

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

230V



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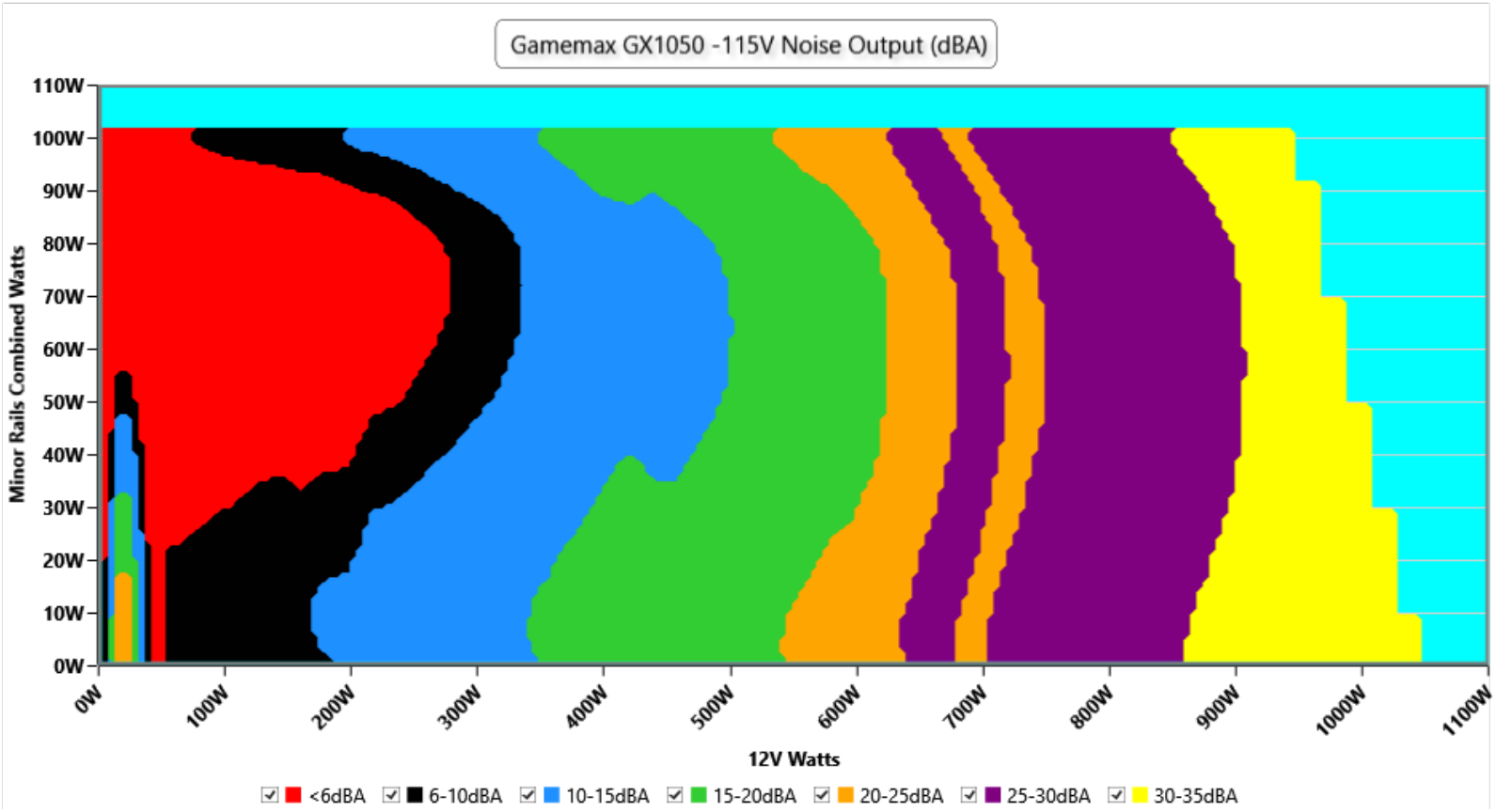
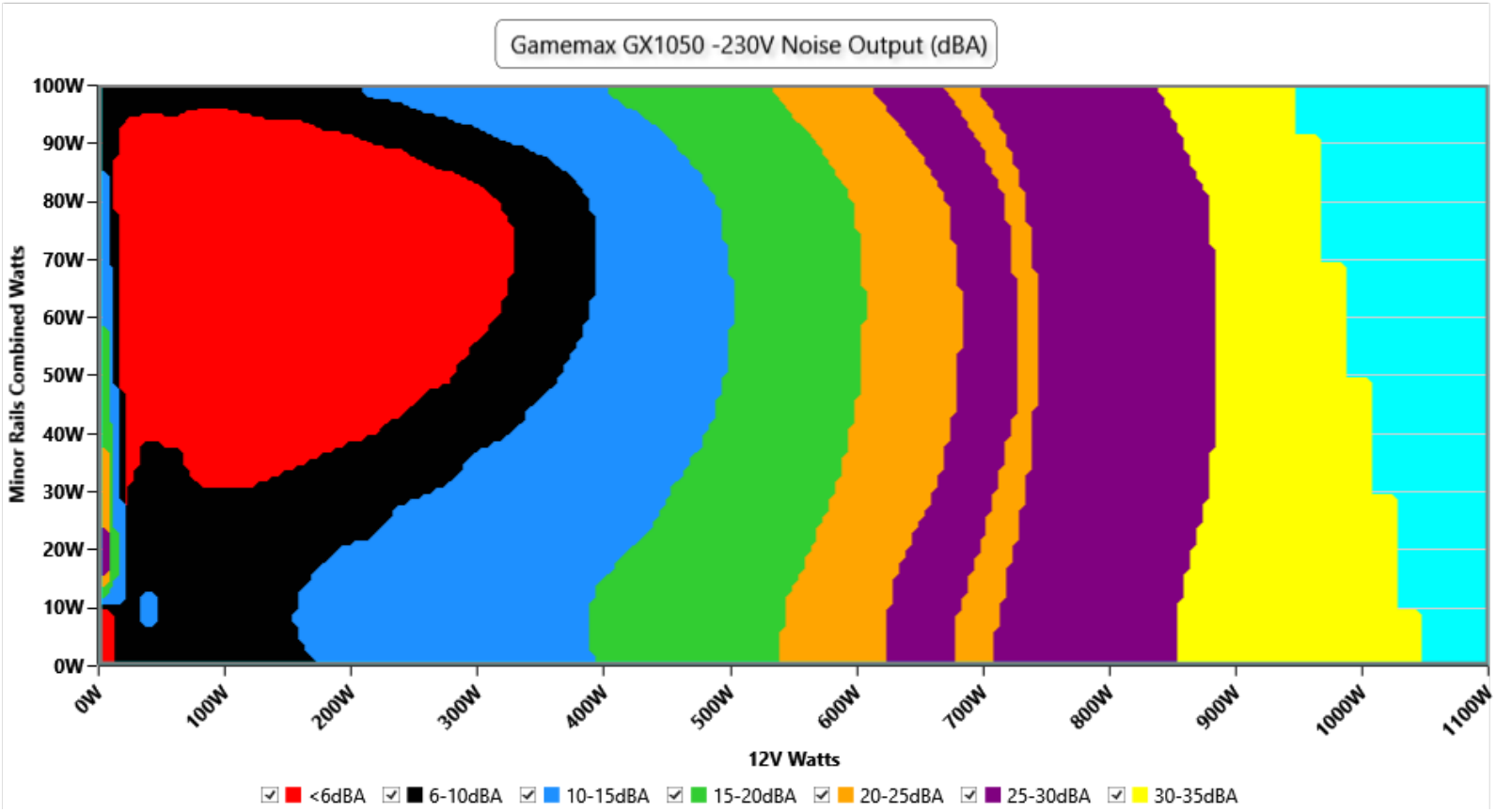
115V



□□

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

230V



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%	0 RPM · <6.0 dB(A) · 30.2 °C	427 RPM · 7.7 dB(A) · 40.3 °C	fan starts (<6.0 → 7.7)
20%	0 RPM · <6.0 dB(A) · 32.9 °C	631 RPM · 17.6 dB(A) · 40.9 °C	fan starts (<6.0 → 17.6)
50%	0 RPM · <6.0 dB(A) · 35.4 °C	991 RPM · 25.8 dB(A) · 42.4 °C	fan starts (<6.0 → 25.8)
100%	1095 RPM · 28.6 dB(A) · 30.2 °C	1435 RPM · 36.0 dB(A) · 45.1 °C	**+7.4 dB(A)**

230V

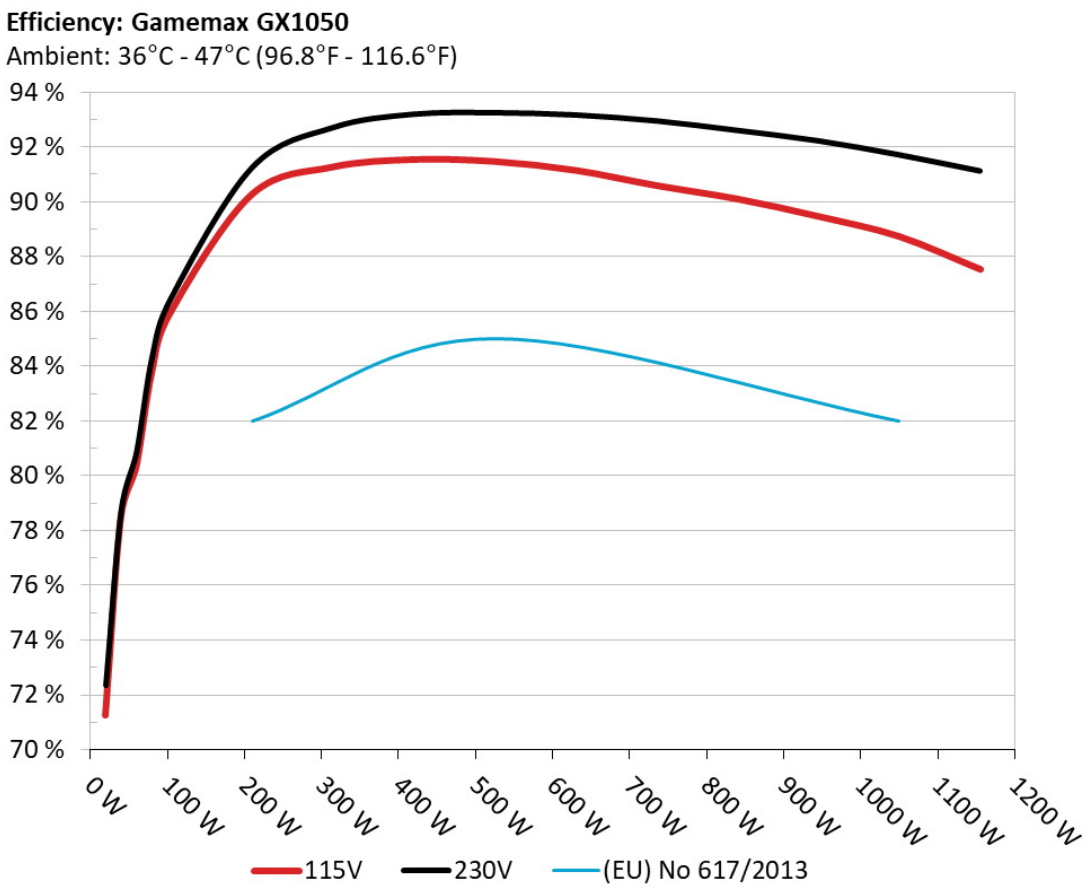
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	216 RPM · <6.0 dB(A) · 30.4 °C	415 RPM · 7.5 dB(A) · 40.4 °C	<6.0 → 7.5 dB(A)
20%	280 RPM · <6.0 dB(A) · 30.8 °C	611 RPM · 14.5 dB(A) · 40.8 °C	<6.0 → 14.5 dB(A)
50%	632 RPM · 17.6 dB(A) · 31.2 °C	984 RPM · 26.1 dB(A) · 42.1 °C	**+8.5 dB(A)**
100%	1192 RPM · 30.9 dB(A) · 30.7 °C	1448 RPM · 36.5 dB(A) · 45.1 °C	**+5.6 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.

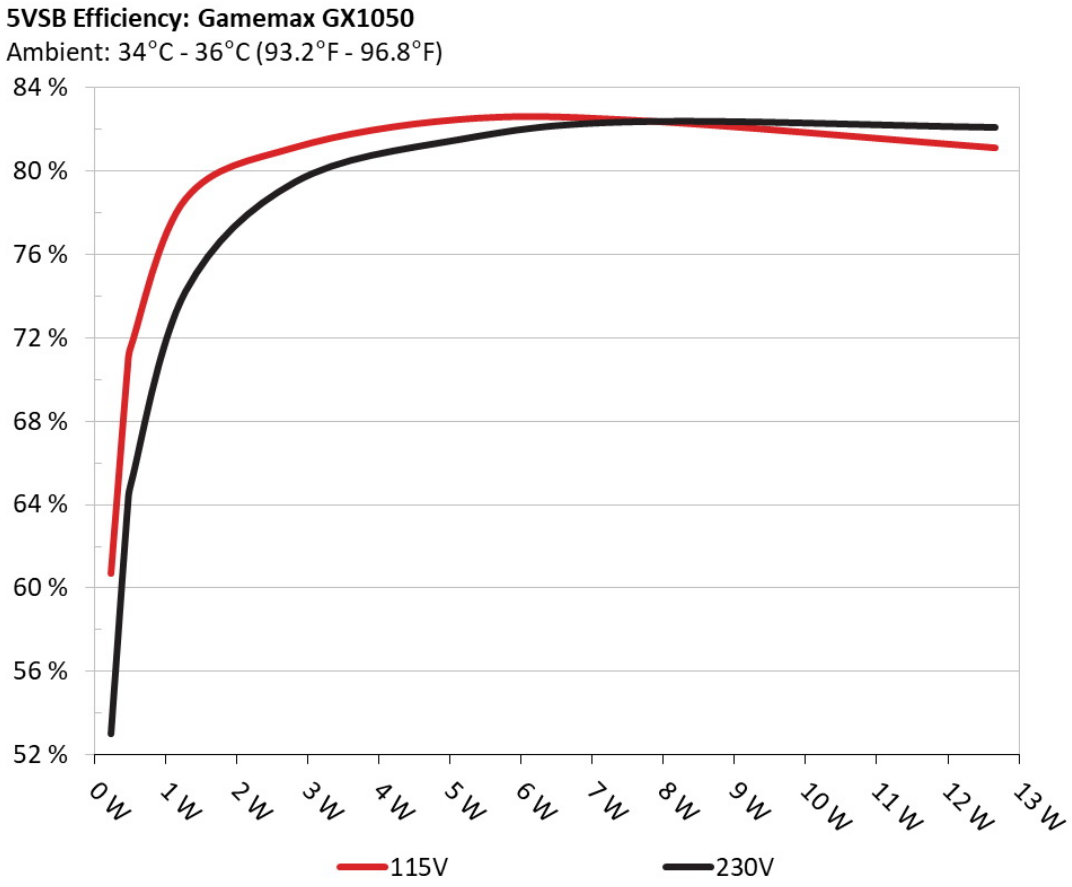
Informational. Not part of the ETA or LAMBDA rating.

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**	0.231W	60.684%	0.025
	5.132V	0.381W		114.86V
2	**0.09A**	0.462W	70.449%	0.043
	5.13V	0.656W		114.86V
3	**0.55A**	2.815W	81.106%	0.2
	5.119V	3.471W		114.85V
4	**1A**	5.107W	82.442%	0.303
	5.107V	6.195W		114.84V
5	**1.5A**	7.642W	82.401%	0.366
	5.094V	9.274W		114.86V
6	**2.5A**	12.669W	81.091%	0.446
	5.067V	15.623W		114.85V

230V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	**0.045A**	0.231W	52.995%	0.008
	5.132V	0.437W		229.82V
2	**0.09A**	0.462W	63.736%	0.013
	5.131V	0.725W		229.83V
3	**0.55A**	2.816W	79.477%	0.064
	5.118V	3.544W		229.83V
4	**1A**	5.108W	81.509%	0.11
	5.107V	6.267W		229.83V
5	**1.5A**	7.642W	82.379%	0.156
	5.094V	9.277W		229.83V
6	**2.501A**	12.669W	82.105%	0.234
	5.066V	15.43W		229.83V

Protection Features

OCP (Normal @ 30.7°C)	12V: 127.00A (145.14%), 11.886V* *Didn't shut down 5V: 28.6A (143.00%), 5.003V 3.3V: 28.7A (143.50%), 3.342V 5VSB: 4.9A (196.00%), 4.993V
OCP (Hot @ 42.3°C)	12V: 127.00A (145.14%), 11.893V* *Didn't shut down 5V: 28.1A (140.50%), 4.998V 3.3V: 28A (140.00%), 3.343V 5VSB: 4.9A (196.00%), 4.993V
OPP (Normal @ 30.6°C)	1464.76W (139.50%)
OPP (Hot @ 43.4°C)	1198.76W (114.17%)
OTP	✓ (120°C @ Heat Sink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓
PWR_OK	Proper Operation
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%	**6.943A**	**1.982A**	**1.957A**	**0.981A**	104.958	86.006%	427	7.7	40.29°C	0.971
	12.007V	5.045V	3.372V	5.099V	122.033				47.21°C	114.83V

20%	**14.918A**	**2.975A**	**2.938A**	**1.18A**	209.956	90.283%	631	17.6	40.9°C	0.992
	12.002V	5.042V	3.37V	5.086V	225.917				47.6°C	111.88V
30%	**23.247A**	**3.473A**	**3.43A**	**1.38A**	314.979	91.286%	818	20.5	41.03°C	0.987
	11.998V	5.039V	3.368V	5.073V	295.592				49.03°C	100.7V
40%	**31.550A**	**3.972A**	**3.922A**	**1.581A**	419.59	91.559%	873	21.6	41.93°C	0.994
	11.993V	5.036V	3.366V	5.059V	458.271				49.31°C	114.74V
50%	**39.575A**	**4.968A**	**4.907A**	**1.784A**	524.923	91.487%	991	25.8	42.38°C	0.995
	11.988V	5.033V	3.363V	5.046V	573.759				50.5°C	114.71V
60%	**47.541A**	**5.966A**	**5.893A**	**1.988A**	629.454	91.166%	1080	28.9	42.71°C	0.995
	11.982V	5.029V	3.36V	5.032V	690.443				50.81°C	114.68V
70%	**55.624A**	**6.971A**	**6.884A**	**2.083A**	734.281	90.611%	1232	31.7	43.21°C	0.995
	11.968V	5.022V	3.356V	5.02V	810.428				54.61°C	114.64V
80%	**63.715A**	**7.971A**	**7.874A**	**2.298A**	839.614	90.12%	1296	33.8	43.53°C	0.995
	11.955V	5.018V	3.353V	5.006V	931.655				55.5°C	114.62V
90%	**72.238A**	**8.475A**	**8.357A**	**2.403A**	944.999	89.48%	1312	33.6	44.23°C	0.995
	11.940V	5.015V	3.35V	4.995V	1056.087				58.45°C	114.58V
100%	**80.678A**	**8.979A**	**8.872A**	**2.509A**	1049.684	88.748%	1435	36	45.05°C	0.995
	11.930V	5.012V	3.348V	4.983V	1182.789				55.15°C	114.54V
110%	**88.923A**	**9.987A**	**9.959A**	**2.514A**	1155.128	87.546%	1520	38.2	46.1°C	0.995
	11.913V	5.006V	3.343V	4.974V	1319.467				57.95°C	114.5V
CL1	**0.117A**	**11.996A**	**11.83A**	**0A**	101.3	80.751%	1168	30.5	41.79°C	0.973
	12.003V	5.019V	3.355V	5.12V	125.447				48.07°C	114.82V
CL2	**0.116A**	**19.943A**	**0A**	**0A**	101.349	79.762%	1139	30	40.56°C	0.973
	12.005V	5.012V	3.36V	5.122V	127.063				46.33°C	114.81V
CL3	**0.115A**	**0A**	**19.679A**	**0A**	67.387	73.257%	1011	25.8	39.76°C	0.963
	12.004V	5.034V	3.354V	5.122V	91.987				45.3°C	114.82V
CL4	**87.963A**	**0A**	**0A**	**0A**	1049.602	89.45%	1374	34.7	44.76°C	0.995
	11.932V	5.031V	3.356V	5.06V	1173.395				53.81°C	114.54V

The results above are not used in the certification process

230V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
10%	**6.943A**	**1.982A**	**1.958A**	**0.981A**	104.968	86.5%	415	7.5	40.38°C	0.846
	12.007V	5.045V	3.371V	5.099V	121.338				46.21°C	229.8V
20%	**14.919A**	**2.976A**	**2.938A**	**1.18A**	209.972	91.252%	611	14.5	40.81°C	0.933
	12.002V	5.041V	3.369V	5.086V	230.109				46.59°C	229.8V
30%	**23.249A**	**3.473A**	**3.43A**	**1.38A**	314.992	92.709%	740	17.8	41.02°C	0.965
	11.998V	5.039V	3.368V	5.073V	339.767				47.17°C	229.78V
40%	**31.553A**	**3.972A**	**3.923A**	**1.581A**	419.618	93.194%	891	23.3	41.91°C	0.98
	11.993V	5.036V	3.366V	5.06V	450.261				48.76°C	229.76V
50%	**39.578A**	**4.968A**	**4.907A**	**1.784A**	524.938	93.249%	984	26.1	42.08°C	0.985
	11.987V	5.033V	3.363V	5.046V	562.933				48.7°C	229.74V
60%	**47.545A**	**5.966A**	**5.894A**	**1.988A**	629.463	93.166%	1091	28.5	42.78°C	0.989
	11.981V	5.029V	3.36V	5.032V	675.636				49.67°C	229.73V
70%	**55.619A**	**6.966A**	**6.883A**	**2.193A**	734.805	92.95%	1187	30.9	43.17°C	0.991
	11.969V	5.025V	3.357V	5.018V	790.536				50.84°C	229.71V
80%	**63.714A**	**7.966A**	**7.873A**	**2.297A**	839.614	92.605%	1285	34.4	43.86°C	0.99
	11.956V	5.021V	3.353V	5.007V	906.662				52.8°C	229.69V
90%	**72.240A**	**8.47A**	**8.357A**	**2.403A**	945.002	92.224%	1371	34.7	44.06°C	0.989
	11.940V	5.018V	3.35V	4.995V	1024.69				54.71°C	229.68V
100%	**80.733A**	**8.975A**	**8.873A**	**2.509A**	1049.725	91.713%	1448	36.5	45.09°C	0.988
	11.922V	5.014V	3.347V	4.984V	1144.542				57.18°C	229.66V
110%	**88.987A**	**9.983A**	**9.96A**	**2.513A**	1155.165	91.123%	1509	37.8	46.84°C	0.987
	11.905V	5.009V	3.343V	4.975V	1267.689				59.45°C	229.64V
CL1	**0.117A**	**11.996A**	**11.83A**	**0A**	101.306	80.97%	1184	30.9	42.3°C	0.852
	12.003V	5.019V	3.355V	5.12V	125.113				51.5°C	229.81V
CL2	**0.117A**	**19.944A**	**0A**	**0A**	101.351	80.241%	1124	29.2	41.49°C	0.853
	12.005V	5.012V	3.36V	5.122V	126.312				49.74°C	229.81V
CL3	**0.116A**	**0A**	**19.678A**	**0A**	67.387	73.646%	970	24.9	41.29°C	0.786
	12.004V	5.034V	3.354V	5.122V	91.497				48.39°C	229.82V

CL4	**87.998A**	**0A**	**0A**	**0A**	1049.59	92.419%	1345	34.3	44.55°C	0.988
	11.927V	5.03V	3.357V	5.061V	1135.677				53.94°C	229.66V

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	**1.236A**	**0.495A**	**0.489A**	**0.195A**	20.003	71.258%	0	<6.0	37.77°C	0.797
	12.015V	5.049V	3.371V	5.126V	28.067				36.66°C	114.84V
40W	**2.721A**	**0.693A**	**0.685A**	**0.293A**	40.001	78.495%	0	<6.0	41.07°C	0.906
	12.013V	5.049V	3.372V	5.122V	50.959				37.12°C	114.84V
60W	**4.208A**	**0.891A**	**0.881A**	**0.391A**	60.001	80.351%	0	<6.0	40.31°C	0.936
	12.010V	5.048V	3.373V	5.118V	74.677				38.9°C	114.84V
80W	**5.689A**	**1.09A**	**1.076A**	**0.489A**	79.944	83.768%	0	<6.0	40.99°C	0.962
	12.009V	5.047V	3.372V	5.115V	95.435				39.94°C	114.83V

The results above are not used in the certification process

230V

□□	12V	5V	3.3V	5VSB	DC/AC (□)	□□	□□□□ (RPM)	□□□□□□□□ (dB[A])	□□ (□□ /□□)	PF/AC □□
20W	**1.236A**	**0.495A**	**0.49A**	**0.195A**	20.007	72.346%	0	<6.0	40.65°C	0.362
	12.013V	5.048V	3.371V	5.127V	27.654				36.01°C	229.82V
40W	**2.722A**	**0.693A**	**0.685A**	**0.293A**	40.006	78.715%	0	<6.0	42.21°C	0.578
	12.012V	5.048V	3.371V	5.123V	50.827				37.58°C	229.82V
60W	**4.208A**	**0.891A**	**0.881A**	**0.391A**	60.006	80.871%	131	<6.0	38.11°C	0.714
	12.009V	5.048V	3.372V	5.118V	74.211				45.32°C	229.82V
80W	**5.690A**	**1.09A**	**1.077A**	**0.489A**	79.955	84.308%	301	<6.0	39.45°C	0.795
	12.008V	5.047V	3.372V	5.114V	94.834				45.97°C	229.82V

The results above are not used in the certification process

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	20.1 mV	18.1 mV	20.6 mV	10.6 mV	Pass
20% Load	19.0 mV	17.4 mV	20.1 mV	11.1 mV	Pass
30% Load	19.6 mV	17.7 mV	20.7 mV	10.5 mV	Pass
40% Load	19.3 mV	19.6 mV	21.4 mV	11.6 mV	Pass
50% Load	21.3 mV	18.6 mV	21.3 mV	11.0 mV	Pass
60% Load	21.3 mV	18.9 mV	19.8 mV	11.8 mV	Pass
70% Load	20.4 mV	17.0 mV	17.8 mV	11.8 mV	Pass
80% Load	26.2 mV	18.8 mV	21.7 mV	12.1 mV	Pass
90% Load	37.7 mV	19.0 mV	23.7 mV	11.9 mV	Pass
100% Load	32.1 mV	19.6 mV	23.5 mV	13.4 mV	Pass
110% Load	33.7 mV	19.6 mV	23.7 mV	14.0 mV	Pass
Crossload 1	18.9 mV	19.4 mV	20.6 mV	14.3 mV	Pass
Crossload 2	20.8 mV	24.5 mV	20.4 mV	12.2 mV	Pass
Crossload 3	20.1 mV	18.6 mV	21.2 mV	12.5 mV	Pass
Crossload 4	28.6 mV	18.6 mV	22.1 mV	15.3 mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	17.0 mV	16.5 mV	19.6 mV	10.6 mV	Pass
20% Load	16.2 mV	15.7 mV	18.5 mV	10.1 mV	Pass
30% Load	15.2 mV	14.4 mV	17.4 mV	9.4 mV	Pass
40% Load	18.4 mV	18.0 mV	19.9 mV	11.2 mV	Pass
50% Load	19.5 mV	19.7 mV	20.6 mV	11.9 mV	Pass
60% Load	20.4 mV	18.7 mV	20.2 mV	12.1 mV	Pass





Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	20.6 mV	18.2 mV	21.7 mV	12.0 mV	Pass
80% Load	21.8 mV	19.7 mV	21.7 mV	12.9 mV	Pass
90% Load	25.7 mV	18.7 mV	24.2 mV	12.0 mV	Pass
100% Load	28.4 mV	19.7 mV	24.0 mV	14.3 mV	Pass
110% Load	30.9 mV	20.9 mV	24.1 mV	14.0 mV	Pass
Crossload 1	20.3 mV	19.4 mV	21.4 mV	15.5 mV	Pass
Crossload 2	19.8 mV	23.8 mV	19.7 mV	12.7 mV	Pass
Crossload 3	18.3 mV	18.1 mV	20.6 mV	13.3 mV	Pass
Crossload 4	27.0 mV	19.2 mV	22.2 mV	15.5 mV	Pass

The results above are not used in the certification process

Gamemax GX-1050 PRO

Top side

Power specifications label

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