GREEN
PLANET GAMING BİLGİSAYAR

GREEN MEDEL GP1000B-GXD

Serial Number

Lab ID GE10002672

Certification ID 252672

Test Result Report ID: 24PS2672A

Certificate Issue Date: Dec 11, 2024

Scheme: ETA-EMI PSU

115V: CYBENETICS GOLD

230V: CYBENETICS PLATINUM 230v

Scheme: LAMBDA PSU

115V: CYBENETICS STANDARD++

230V: CYBENETICS STANDARD++ 230v

CYBENETICS ATX 3.1 PASS

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	GREEN MEDEL
Model	GP1000B-GXD
OEM/ODM	No Info
Serial Number	
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	6-12

Rated Frequency (Hz)	50-60
Rated Power (W)	1000
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	120mm Fluid Dynamic Bearing Fan (D12BM-12FDB)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	GE10002672
Date of receipt	Nov 21, 2024
Testing Date	Dec 10, 2024
Report Issued Date	Dec 11, 2024
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors(Non-accredited measurements)

Modular Cables				
Description	**Cable Count**	**Connector Count (Total)**	**Gauge**	In Cable Capacitors
ATX connector 20+4 pin (600mm)	1	1	16-22AWG	No
4+4 pin EPS12V (700mm)	2	2	18AWG	No
6+2 pin PCIe (550mm+150mm)	2	4	16-18AWG	No
6+2 pin PCIe (550mm)	1	1	16AWG	No
12+4 pin PCIe (550mm) (600W)	1	1	16-26AWG	No
SATA (505mm+145mm+145mm+145mm)	3	12	18AWG	No
4-pin Molex (500mm+150mm+150mm)	1	3	18AWG	No

AC Power Cord (1350mm) - C13 coupler	1	1	16AWG	-

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	22	22	83.3	3	0.3
	Watts	110		1000	15	3.6
Total Max. Power (W)		1000				

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)	88.813%
Average Noise Output (>1450 Load Combinations)	30.99dBA
Average PF (>1450 Load Combinations)	0.989
Efficiency With 10W (≤500W) or 2% (>500W) Load	61.116%
Standby Power Consumption	0.0615W
Non-Accredited	
12V Ripple (Full Load)	43.92mV
5V Ripple (Full Load)	18.62mV
3.3V Ripple (Full Load)	29.37mV
5VSB Ripple (Full Load)	14.87mV
12V Load Regulation	0.76%
5V Load Regulation	0.57%
3.3V Load Regulation	0.60%
5VSB Load Regulation	2.05%
Inrush Current	53.800A

230V

Accredited	
Average Efficiency (>1450 load combinations)	91.193%
Average Noise Output (>1450 Load Combinations)	30.56dBA
Average PF (>1450 Load Combinations)	0.955
Efficiency With 10W (≤500W) or 2% (>500W) Load	62.512%
Standby Power Consumption	0.1656W
Non-Accredited	
12V Ripple (Full Load)	27.92mV
5V Ripple (Full Load)	17.55mV
3.3V Ripple (Full Load)	28.58mV

5VSB Ripple (Full Load)	12.73mV	
12V Load Regulation	0.74%	
5V Load Regulation	0.57%	
3.3V Load Regulation	0.57%	
5VSB Load Regulation	2.05%	
Inrush Current	66.900A	
12V Transient Response (200%)	11.42V	
5V Transient Response (200%)	4.995V	
3.3V Transient Response (200%)	3.234V	
5VSB Transient Response (200%)	4.976V	
Hold-Up Time & PWR_OK Signal	18.20ms	
AC Loss to PWR_OK Hold Up Time	16.70ms	
PWR_OK Inactive to DC Loss Delay	1.50ms	
PSU Timings: T1 (20% / 100%)	95.0ms	94.0ms
PSU Timings: T3 (20% / 100%)	121.0ms	121.0ms
12V OCP (29.7°C / 43.2°C)	118.60A (142.38%), 12.011V	117.00A (140.46%), 12.022V
5V OCP (29.7°C / 43.2°C)	30.3A (137.73%), 5.022V	28.6A (130.00%), 5.033V
3.3V OCP (29.7°C / 43.2°C)	29.6A (134.55%), 3.332V	29.5A (134.09%), 3.332V
5VSB OCP (29.7°C / 43.2°C)	3.9A (130.00%), 5.07V	3.8A (126.67%), 5.068V
OPP (30.28°C / 43.21°C)	142.51%	124.27%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	18.2
AC Loss to PWR_OK Hold Up Time (ms)	16.7
PWR_OK Inactive to DC Loss Delay (ms)	1.5

Tables

115V

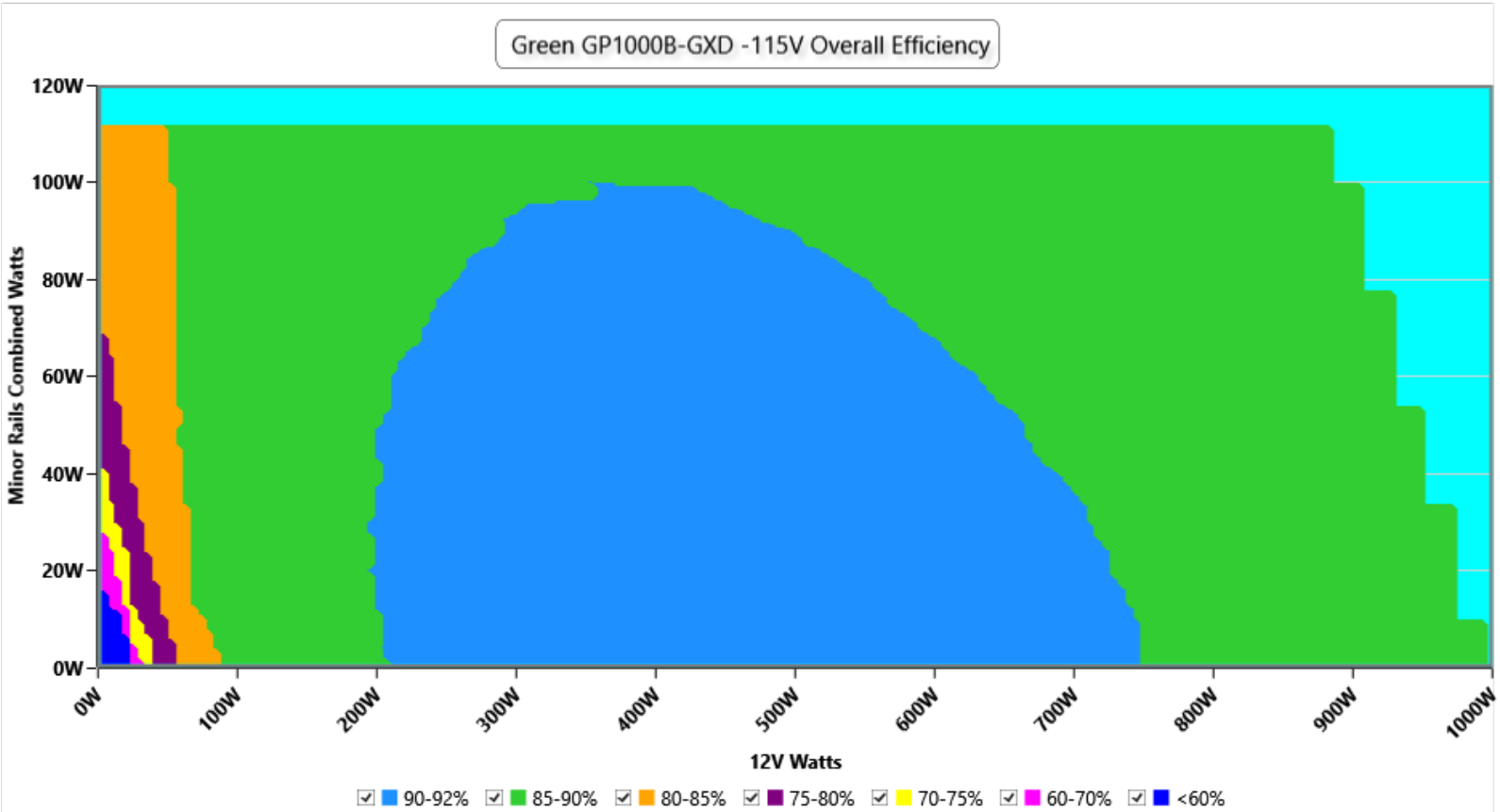
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.05 V	115.02 V	113.85 V	115.10 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.96 Hz	59.40 Hz	60.02 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.416	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.14 %	0.11 %	N/A	0.20 %	2.00 %	PASS
Real Power:	0.062 W	0.008 W	N/A	0.101 W	N/A	N/A
Apparent Power:	8.750 W	8.635 W	N/A	8.879 W	N/A	N/A
Power Factor:	0.007	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	230.92 V	227.70 V	231.07 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	0.24 %	2.00 %	PASS
Real Power:	0.166 W	0.125 W	N/A	0.218 W	N/A	N/A
Apparent Power:	29.407 W	29.173 W	N/A	29.705 W	N/A	N/A
Power Factor:	0.006	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

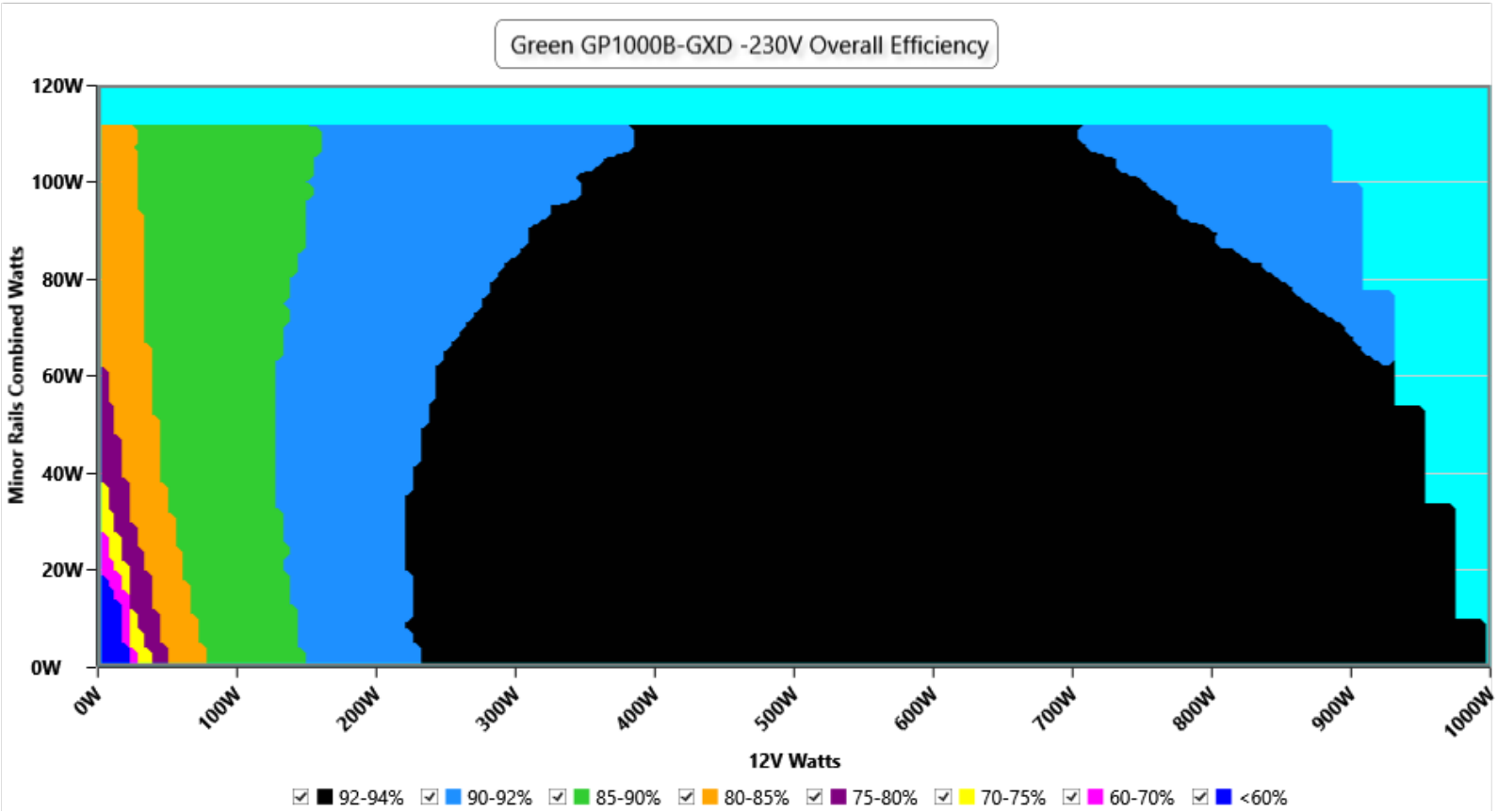
115V



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

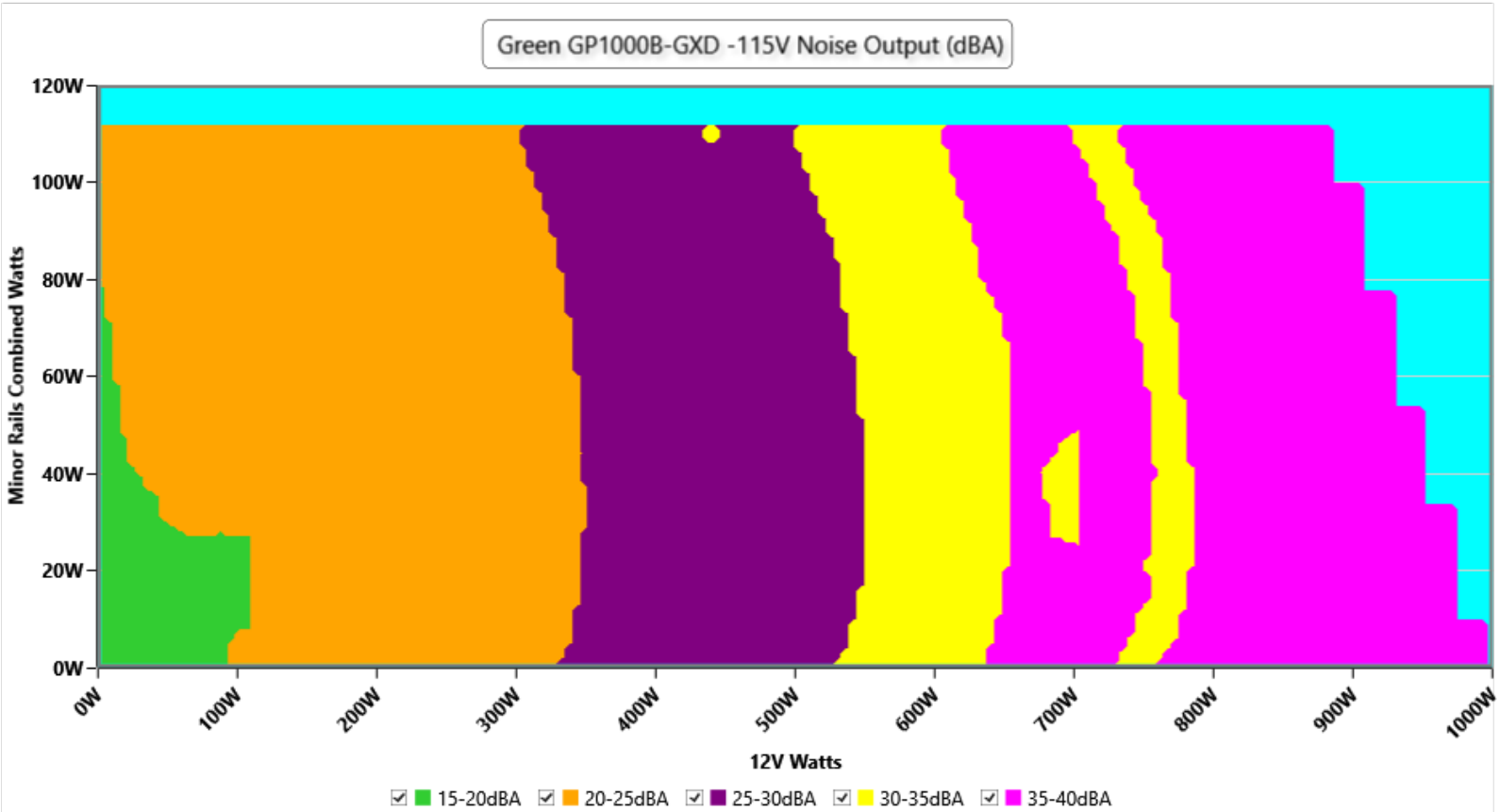


INFO

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

Noise Graph

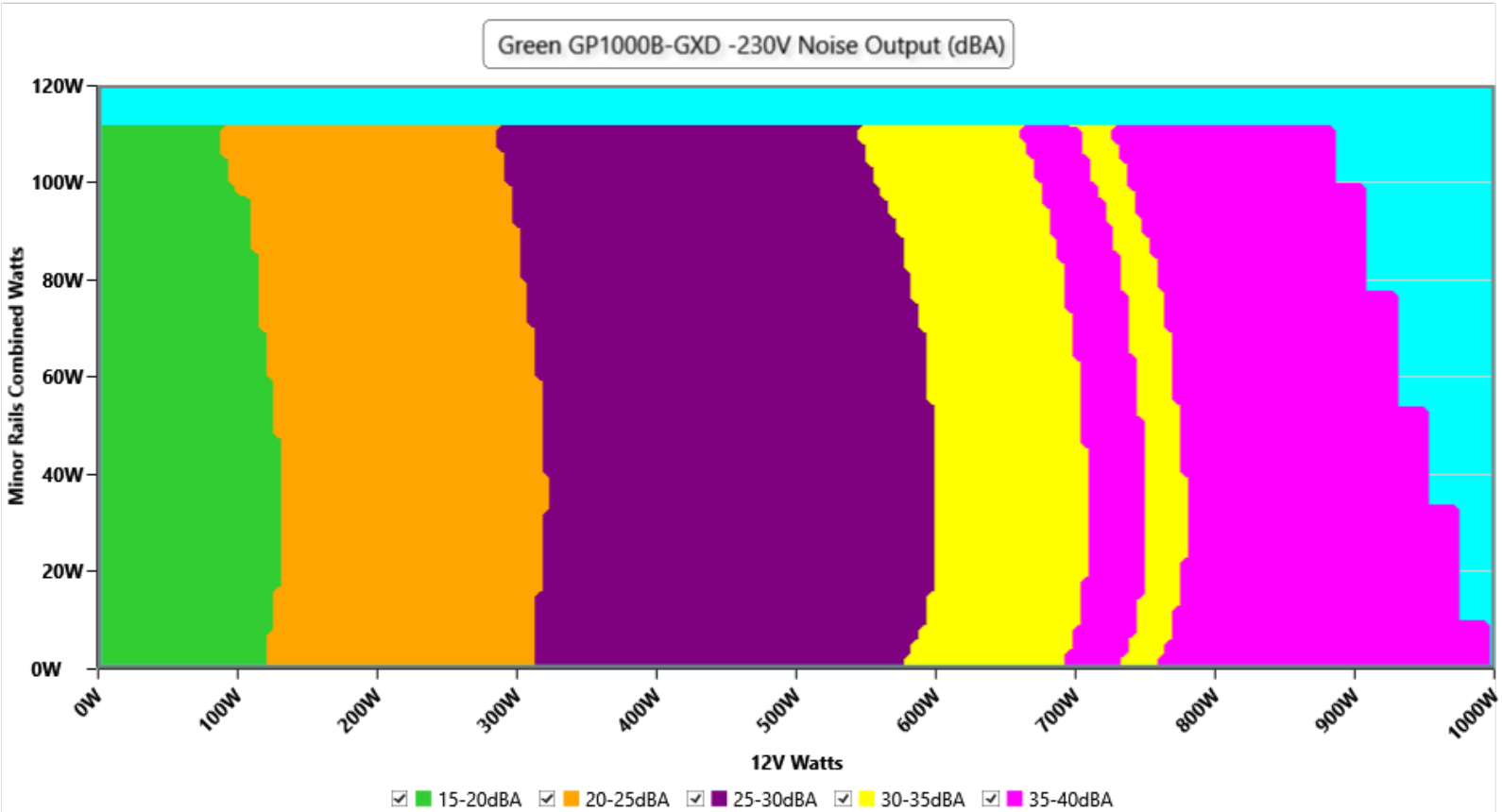
115V



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

Indicative Performance

5VSB Efficiency (ERP LOT 3/6 & CEC)

115V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.231W	60.767%	0.042
	5.129V	0.379W		114.86V
2	**0.09A**	0.462W	69.139%	0.073
	5.128V	0.668W		114.85V
3	**0.55A**	2.817W	80.673%	0.286
	5.121V	3.492W		114.84V
4	**1A**	5.115W	80.88%	0.369
	5.114V	6.324W		114.84V
5	**1.5A**	7.661W	80.665%	0.423
	5.107V	9.497W		114.84V
6	**3A**	15.252W	78.541%	0.489
	5.084V	19.42W		114.83V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.231W	46.563%	0.016
	5.129V	0.496W		229.83V
2	**0.09A**	0.462W	55.934%	0.027
	5.128V	0.826W		229.83V
3	**0.55A**	2.817W	76.492%	0.115
	5.121V	3.683W		229.83V
4	**1A**	5.115W	77.513%	0.189
	5.115V	6.599W		229.83V

5	**1.5A**	7.661W	78.675%	0.233
	5.107V	9.738W		229.83V
6	**3A**	15.253W	78.973%	0.341
	5.084V	19.314W		229.83V

Protection Features

OCP (Normal @ 29.7°C)	12V: 118.60A (142.38%), 12.011V 5V: 30.3A (137.73%), 5.022V 3.3V: 29.6A (134.55%), 3.332V 5VSB: 3.9A (130.00%), 5.07V
OCP (Hot @ 43.2°C)	12V: 117.00A (140.46%), 12.022V 5V: 28.6A (130.00%), 5.033V 3.3V: 29.5A (134.09%), 3.332V 5VSB: 3.8A (126.67%), 5.068V
OPP (Normal @ 30.3°C)	1425.14W (142.51%)
OPP (Hot @ 43.2°C)	1242.74W (124.27%)
OTP	✓ (95°C @ Heat Sink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Proper Operation
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%	**6.500A**	**1.965A**	**1.969A**	**0.979A**	99.986	85.379%	790	24	40.31°C	0.97
	12.060V	5.089V	3.352V	5.108V	117.114				42.54°C	114.81V
20%	**14.014A**	**2.949A**	**2.955A**	**1.177A**	199.934	89.315%	911	25.4	40.87°C	0.982
	12.062V	5.086V	3.35V	5.099V	223.848				43.45°C	114.77V
30%	**21.890A**	**3.443A**	**3.449A**	**1.375A**	299.984	90.625%	1025	28.8	41.22°C	0.99
	12.057V	5.083V	3.349V	5.09V	331.018				44.16°C	114.77V
40%	**29.730A**	**3.936A**	**3.944A**	**1.575A**	399.511	90.919%	1128	31.5	41.96°C	0.993
	12.052V	5.081V	3.347V	5.081V	439.415				45.09°C	114.71V
50%	**37.249A**	**4.923A**	**4.933A**	**1.775A**	499.236	90.81%	1239	35.4	42.33°C	0.994
	12.047V	5.079V	3.345V	5.072V	549.759				45.63°C	114.68V
60%	**44.840A**	**5.911A**	**5.923A**	**1.975A**	599.766	90.398%	1353	35.5	42.75°C	0.995
	12.042V	5.076V	3.343V	5.063V	663.476				46.23°C	114.65V
70%	**52.371A**	**6.9A**	**6.915A**	**2.177A**	699.496	89.843%	1471	37.9	43.45°C	0.996
	12.037V	5.073V	3.341V	5.054V	778.581				47.26°C	114.61V
80%	**59.969A**	**7.89A**	**7.907A**	**2.279A**	799.509	89.186%	1603	42.2	43.91°C	0.996
	12.033V	5.069V	3.338V	5.046V	896.455				48.35°C	114.58V
90%	**67.911A**	**8.387A**	**8.391A**	**2.382A**	899.312	88.47%	1737	42.4	44.92°C	0.996
	12.028V	5.067V	3.337V	5.038V	1016.524				49.67°C	114.53V
100%	**75.656A**	**8.885A**	**8.905A**	**2.987A**	999.326	87.52%	1790	43.4	45.77°C	0.996
	12.024V	5.064V	3.335V	5.022V	1141.827				51.36°C	114.49V
110%	**83.321A**	**9.881A**	**9.992A**	**2.992A**	1099.95	86.741%	1797	43.5	46.71°C	0.997
	12.022V	5.06V	3.333V	5.015V	1268.088				53.62°C	114.44V
CL1	**0.115A**	**13.067A**	**13.086A**	**0A**	111.291	81.426%	987	28.1	40.01°C	0.971
	12.065V	5.066V	3.339V	5.12V	136.671				42.52°C	114.8V

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**	**21.779A**	**0A**	**0A**	111.279	80.186%	972	27.6	40.23°C	0.971
	12.070V	5.046V	3.343V	5.121V	138.777				42.63°C	114.78V
CL4	**83.137A**	**0A**	**0A**	**0A**	999.892	88.424%	1775	43	45.15°C	0.997
	12.027V	5.079V	3.345V	5.071V	1130.796				50.1°C	114.49V

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%	**6.501A**	**1.965A**	**1.969A**	**0.979A**	99.999	86.79%	796	24.1	40.07°C	0.834
	12.060V	5.088V	3.352V	5.108V	115.22				42.84°C	229.81V
20%	**14.015A**	**2.95A**	**2.955A**	**1.177A**	199.951	90.903%	923	25.9	40.75°C	0.934
	12.062V	5.085V	3.35V	5.099V	219.961				43.55°C	229.8V
30%	**21.894A**	**3.443A**	**3.449A**	**1.375A**	300.002	92.306%	993	28.3	41.11°C	0.96
	12.056V	5.083V	3.349V	5.09V	325.006				42.98°C	229.78V
40%	**29.739A**	**3.936A**	**3.944A**	**1.575A**	399.563	92.837%	1093	30.8	41.75°C	0.973
	12.050V	5.082V	3.347V	5.081V	430.397				44.09°C	229.76V
50%	**37.256A**	**4.923A**	**4.933A**	**1.775A**	499.284	92.987%	1225	34.2	42.12°C	0.977
	12.046V	5.079V	3.345V	5.072V	536.938				44.65°C	229.75V
60%	**44.850A**	**5.911A**	**5.924A**	**1.976A**	599.826	92.849%	1335	35.1	42.61°C	0.98
	12.040V	5.076V	3.343V	5.063V	646.031				45.07°C	229.74V
70%	**52.380A**	**6.9A**	**6.916A**	**2.177A**	699.547	92.616%	1460	37.7	43.36°C	0.983
	12.036V	5.073V	3.341V	5.053V	755.32				46.06°C	229.71V
80%	**59.981A**	**7.889A**	**7.908A**	**2.28A**	799.557	92.322%	1581	40.2	43.57°C	0.986
	12.032V	5.07V	3.338V	5.045V	866.051				46.23°C	229.7V
90%	**67.921A**	**8.387A**	**8.391A**	**2.382A**	899.352	92.004%	1729	42.3	44.51°C	0.988
	12.027V	5.067V	3.337V	5.037V	977.51				47.33°C	229.68V
100%	**75.667A**	**8.884A**	**8.906A**	**2.988A**	999.375	91.596%	1790	43.4	45.37°C	0.989
	12.022V	5.065V	3.335V	5.021V	1091.066				48.39°C	229.66V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
110%	**83.334A**	**9.88A**	**9.992A**	**2.992A**	1099.98	91.142%	1797	43.5	46.33°C	0.991
	12.020V	5.061V	3.333V	5.015V	1206.893				49.94°C	229.65V
CL1	**0.116A**	**13.066A**	**13.085A**	**0A**	111.301	82.743%	1088	30.6	41.79°C	0.866
	12.064V	5.067V	3.339V	5.12V	134.513				43.82°C	229.81V
CL2	**0.115A**	**21.782A**	**0A**	**0A**	111.3	81.615%	1007	28.6	40.83°C	0.867
	12.069V	5.046V	3.343V	5.121V	136.375				42.96°C	229.81V
CL4	**83.153A**	**0A**	**0A**	**0A**	999.949	92.29%	1782	43.3	45.89°C	0.989
	12.025V	5.081V	3.345V	5.071V	1083.491				48.3°C	229.67V

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**	**0.492A**	**0.488A**	**0.197A**	20.008	63.904%	694	22	36.98°C	0.81
	12.103V	5.084V	3.385V	5.064V	31.308				42.44°C	114.97V
40W	**2.710A**	**0.687A**	**0.689A**	**0.293A**	39.995	77%	677	21.1	37.19°C	0.914
	12.059V	5.093V	3.354V	5.122V	51.943				39.8°C	114.82V
60W	**4.190A**	**0.883A**	**0.885A**	**0.391A**	59.996	80.831%	711	22.4	38.05°C	0.947
	12.060V	5.092V	3.354V	5.12V	74.224				40.31°C	114.81V
80W	**5.664A**	**1.08A**	**1.082A**	**0.489A**	79.934	84.754%	744	23.6	39.77°C	0.968
	12.060V	5.091V	3.354V	5.117V	94.316				41.64°C	114.82V

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**	**0.492A**	**0.488A**	**0.196A**	20.008	64.257%	688	21.1	36.82°C	0.473
	12.102V	5.085V	3.385V	5.102V	31.136				42.24°C	230.09V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
40W	**2.712A**	**0.687A**	**0.689A**	**0.293A**	40.003	77.187%	669	20.8	37.47°C	0.598
	12.057V	5.093V	3.354V	5.122V	51.826				40.67°C	229.83V
60W	**4.190A**	**0.884A**	**0.886A**	**0.391A**	60.002	82.444%	708	22.3	38.04°C	0.713
	12.059V	5.092V	3.354V	5.119V	72.818				40.1°C	229.83V
80W	**5.665A**	**1.08A**	**1.082A**	**0.489A**	79.946	85.237%	730	23.1	38.99°C	0.789
	12.059V	5.091V	3.353V	5.117V	93.79				40.8°C	229.82V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	28.79mV	14.57mV	36.27mV	8.73mV	Pass
20% Load	38.41mV	17.14mV	38.12mV	9.13mV	Pass
30% Load	29.26mV	14.06mV	18.52mV	11.34mV	Pass
40% Load	29.56mV	16.47mV	32.32mV	13.34mV	Pass
50% Load	28.95mV	32.08mV	34.94mV	10.21mV	Pass
60% Load	28.85mV	35.51mV	33.81mV	11.39mV	Pass
70% Load	29.46mV	26.43mV	31.04mV	11.29mV	Pass
80% Load	29.82mV	18.42mV	31.40mV	11.75mV	Pass
90% Load	29.46mV	17.25mV	31.19mV	12.11mV	Pass
100% Load	43.92mV	18.62mV	29.37mV	14.87mV	Pass
110% Load	45.79mV	20.30mV	30.68mV	15.56mV	Pass
Crossload1	42.08mV	18.52mV	30.57mV	9.21mV	Pass
Crossload2	36.16mV	17.71mV	36.48mV	9.54mV	Pass
Crossload3	0.00mV	0.00mV	0.00mV	0.00mV	Pass
Crossload4	42.76mV	18.67mV	22.54mV	12.77mV	Pass

The results above are not used in the certification process

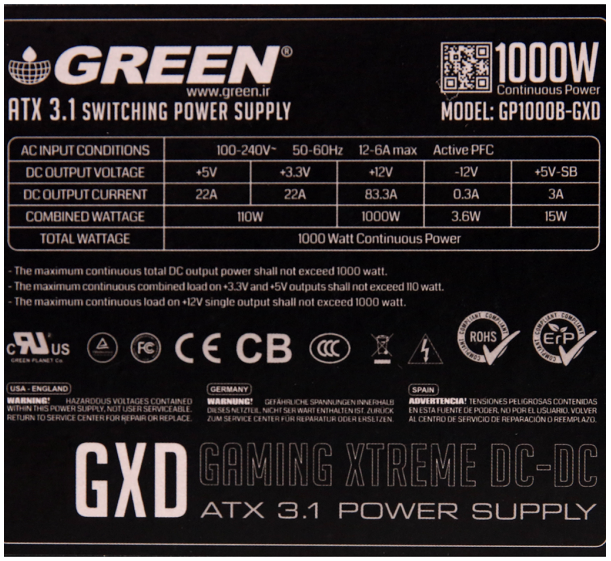
230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	28.28mV	14.88mV	30.83mV	9.13mV	Pass
20% Load	36.77mV	15.09mV	30.06mV	8.77mV	Pass
30% Load	32.37mV	14.98mV	29.29mV	11.55mV	Pass
40% Load	28.85mV	15.45mV	27.45mV	12.93mV	Pass
50% Load	26.80mV	32.90mV	30.06mV	10.31mV	Pass
60% Load	27.36mV	35.05mV	30.12mV	10.57mV	Pass
70% Load	28.39mV	37.67mV	31.55mV	11.34mV	Pass
80% Load	27.72mV	18.02mV	29.14mV	11.44mV	Pass
90% Load	28.08mV	17.86mV	29.86mV	12.21mV	Pass
100% Load	27.92mV	17.55mV	28.58mV	12.73mV	Pass
110% Load	29.77mV	17.81mV	30.12mV	13.34mV	Pass
Crossload1	32.73mV	17.40mV	32.12mV	8.98mV	Pass
Crossload2	33.86mV	18.58mV	33.50mV	8.21mV	Pass
Crossload3	0.00mV	0.00mV	0.00mV	0.00mV	Pass
Crossload4	30.38mV	16.93mV	24.73mV	11.24mV	Pass

The results above are not used in the certification process

GREEN MEDEL GP1000B-GXD

Top side



Power specifications label

Cybenetics □□□□□□□□□□□□□□□□□□ ETA□□□□ LAMBDA□□□□ SAFE□□□□□□□□□□□□□□□□□ DELTA□□□□□□□ PHI□□□□□□□□□

CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus

www.cybenetics.com - info@cybenetics.com