GIGABYTE™

# Gigabyte GP-AE1000PM PG5 / PG5 ICE

-

Lab ID GB10003053

Certification ID 253053

Test Result Report ID: 25PS3053A

Certificate Issue Date: Dec 8, 2025

Scheme: ETA-EMI PSU

115V




230V

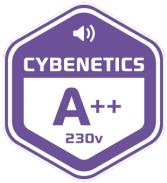



Scheme: LAMBDA PSU

115V




230V







Outside Validation Scope



# General Information

## Test Equipment

| | |
|---|---|
| Electronic Loads | Chroma 63601-5 x2<br>Chroma 63600-2<br>Chroma 63640-80-80 x10<br>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-AE1000PM PG5 / PG5 ICE |
| OEM/ODM | XIAMEN CASTEC ELECTRONIC INDUSTRY |
| Serial Number | - |
| Product Specifications | |
| Manufacturer-Provided Information | |
| □□□□ (Vrms) | 100 - 240 |
| □□□□ (Arms) | 6.5 - 15 |

| | |
|---|---|
| □□□□ (Hz) | 50 - 60 |
| □□□□ (W) | 1000 |
| 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 140mm |
| Weight | 1.77 kg (3.90 lbs) |
| □□ | 120mm Fluid Dynamic Bearing Fan (HA1225M12F-Z) |
| □□□□□ | ✓ |
| Cybenetics Testing Information | |
| Lab ID | GB10003053 |
| Date of receipt | Nov 7, 2025 |
| Testing Date | Nov 29, 2025 |
| Report Issued Date | Dec 8, 2025 |
| □□□□□ | The results apply to the ICE models too, as they are identical. |
| Engineer Name | Okeke Ugochukwu Onyedikachukwu |
| Authorized By the Laboratory Technical Manager | Aristeidis Bitziopoulos |
| Signature |  |

## □□□□ (Non-accredited measurements)

| □□□□□ | | | | |
|---|---|---|---|---|
| □□ | □□□□ | □□□□□□ | **Gauge** | **Cable Type** |
| ATX □□ 20+4 pin (645mm) | 1 | 1 | 16AWG | Tinned Copper |
| 4+4 pin EPS 12V □□ (700mm) | 2 | 2 | 16AWG | Tinned Copper |
| 6+2pin PCIe□□ (750mm) | 2 | 2 | 16AWG | Tinned Copper |
| 6+2pin PCIe□□ (650mm+150mm) | 2 | 4 | 16AWG | Tinned Copper |
| 12+4 pin PCIe (700mm) (600W) | 1 | 1 | 16-26AWG | Tinned Copper |
| SATA□□ (600mm+150mm+150mm+150mm) | 2 | 8 | 18AWG | Tinned Copper |

| | | | | |
|---|---|---|---|---|
| 4-pin Molex (500mm+145mm+145mm+150mm) | 1 | 4 | 18AWG | Tinned Copper |
| AC Power Cord (1370mm) - C13 coupler | 1 | 1 | 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 |
|---|---|---|---|---|---|---|
| □□□□ | □□ | 25 | 25 | 83.3 | 3 | 0.3 |
| | □ | 125 | | 999.6 | 15 | 3.6 |
| □□□□□ (W) | | 1000 | | | | |

## Parts Description

| | |
|---|---|
| **General Data** | |
| Manufacturer (OEM) | Xiamen Castec Electronic Industry |
| PCB Type | Double-Sided |
| **Primary Side** | |
| Transient Filter | 4x Y caps, 2x X caps, 2x CM chokes, 1x MOV |
| Inrush Protection | NTC Thermistor NTC 5D-15 (5 Ohm @ 25°C) & Relay |
| Bridge Rectifier | 2x GBU1506 (600V, 15A @ 100°C) |
| APFC MOSFETs | 2x Infineon IPP60R099P7 (600V, 31A @ 25°C, Rds(on): 0.099Ohm) |
| APFC Boost Diode | STMicroelectronics STPSC10H065 (650V, 10A @ 135°C) |
| Bulk Cap(s) | Nippon Chemi-Con (400V, 1000uF, 2000h @ 105°C,KMW ) |
| Main Switchers | 4x Infineon IPP60R160P7 (600V, 20A @ 25°C, Rds(on): 0.160Ohm) |

| | |
|---|---|
| APFC Controller | Champion CM6500UNX &<br>Champion CM03X (reducing no load consumption) |
| Resonant Controller | Champion CU6901VACN |
| Topology | Primary side: APFC, Full-Bridge & LLC Resonant Converter<br>Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters |
| **Secondary Side** | |
| +12V MOSFETs | 6x Nexperia PSMN1R4-40YLD (40V, 240A @ 25°C, Rds(on): 1.4mOhm) |
| 5V & 3.3V | DC-DC Converters: no info<br>PWM Controller(s): 2x UPI-Semi uP9303 |
| Filtering Capacitors | Electrolytic:<br>3x Nippon Chemi-Con (@ 105°C, W)<br>Nippon Chemi-Con (6-10,000h @ 105°C, KY )<br>4x Rubycon (4-10,000 @ 105°C, YXJ )<br>Rubycon (6-10,000 @ 105°C, ZLH )<br>Rubycon (4-10,000 @ 105°C, YXF )<br>Polymer:<br>28x Nippon Chemi-con, 7x FPCAP |
| Supervisor IC | Weltrend WT7502R (OVP, UVP, OCP, PG) |
| Fan Model | Hong Hua HA1225M12F-Z (120mm, 12V, 0.45A, Fluid Dynamic Bearing Fan) |
| **5VSB Circuit** | |
| Rectifier | Rectron Semiconductor ES1J (600V, 1A) |
| Standby PWM Controller | Dongke DK025G (650V, 0.8Ohm) |

# 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) | 90.506% |
| Average Noise Output (>1450 Load Combinations) | 12.74dBA |
| PF□□□ (>1450 Load Combinations) | 0.984 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 63.716% |
| □□□□□□ | 0.0256W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 20.97mV |
| 5V Ripple (Full Load) | 20.32mV |
| 3.3V Ripple (Full Load) | 14.30mV |
| 5VSB Ripple (Full Load) | 25.65mV |
| 12V Load Regulation | 0.19% |
| 5V Load Regulation | 0.64% |
| 3.3V Load Regulation | 1.06% |
| 5VSB Load Regulation | 1.93% |
| Inrush Current | 32.900A |

### 230V

| | |
|---|---|
| Accredited | |
| □□□□ (>1450 load combinations) | 92.485% |
| Average Noise Output (>1450 Load Combinations) | 11.14dBA |
| PF□□□ (>1450 Load Combinations) | 0.954 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 63.591% |
| □□□□□□ | 0.0555W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 22.95mV |
| 5V Ripple (Full Load) | 22.02mV |
| 3.3V Ripple (Full Load) | 14.64mV |

| | | |
|---|---|---|
| 5VSB Ripple (Full Load) | | 26.38mV |
| 12V Load Regulation | | 0.24% |
| 5V Load Regulation | | 0.62% |
| 3.3V Load Regulation | | 1.07% |
| 5VSB Load Regulation | | 1.91% |
| Inrush Current | | 63.140A |
| 12V Transient Response (200%) | | 11.42V |
| 5V Transient Response (200%) | | 4.943V |
| 3.3V Transient Response (200%) | | 3.218V |
| 5VSB Transient Response (200%) | | 4.969V |
| □□□□ & PG□□ | | 17.60ms |
| AC Loss to PWR_OK Hold Up Time | | 16.40ms |
| PWR_OK Inactive to DC Loss Delay | | 1.20ms |
| PSU Timings: T1 (20% / 100%) | 53.0ms | 51.0ms |
| PSU Timings: T3 (20% / 100%) | 129.0ms | 128.0ms |
| 12V OCP (29.8°C / 45.1°C) | 103.20A (123.89%), 12.046V | 103.20A (123.89%), 12.055V |
| 5V OCP (29.8°C / 45.1°C) | 32.86A (131.44%), 4.773V | 31.5A (126.00%), 4.807V |
| 3.3V OCP (29.8°C / 45.1°C) | 31A (124.00%), 3.289V | 30.4A (121.60%), 3.285V |
| 5VSB OCP (29.8°C / 45.1°C) | 3.7A (123.33%), 5.002V | 3.8A (126.67%), 4.998V |
| OPP (30.93°C / 42.47°C) | 122.51% | 122.51% |

## □□□□ & PG□□

| | |
|---|---|
| Hold-Up Time (ms) | 17.6 |
| AC Loss to PWR_OK Hold Up Time (ms) | 16.4 |
| PWR_OK Inactive to DC Loss Delay (ms) | 1.2 |

## Tables

### 115V

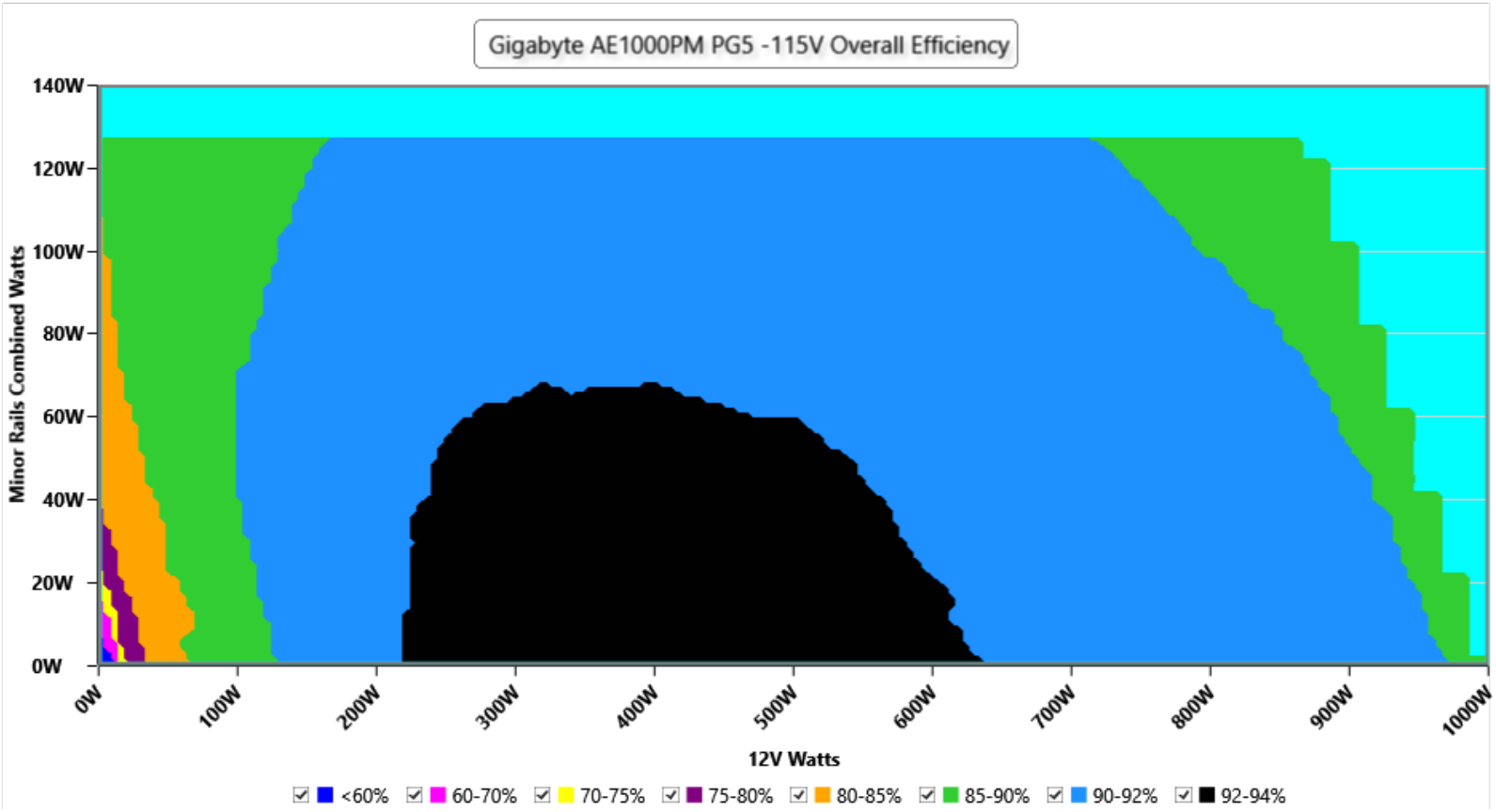
| Detailed Results | | | | | | |
|---|---|---|---|---|---|---|
| | Average | Min | Limit Min | Max | Limit Max | Result |
| Mains Voltage RMS: | 115.02 V | 115.00 V | 113.85 V | 115.12 V | 116.15 V | PASS |
| Mains Frequency: | 60.00 Hz | 59.94 Hz | 59.40 Hz | 60.01 Hz | 60.60 Hz | PASS |
| Mains Voltage 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: | 0.026 W | -0.008 W | N/A | 0.057 W | N/A | N/A |
| Apparent Power: | 8.944 W | 8.922 W | N/A | 8.972 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: | 230.03 V | 230.03 V | 227.70 V | 230.07 V | 232.30 V | PASS |
| Mains Frequency: | 50.00 Hz | 50.00 Hz | 49.50 Hz | 50.00 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: | 0.056 W | 0.015 W | N/A | 0.112 W | N/A | N/A |
| Apparent Power: | 29.117 W | 29.081 W | N/A | 29.151 W | N/A | N/A |
| Power Factor: | 0.002 | N/A | N/A | N/A | N/A | N/A |

## □□□□□□

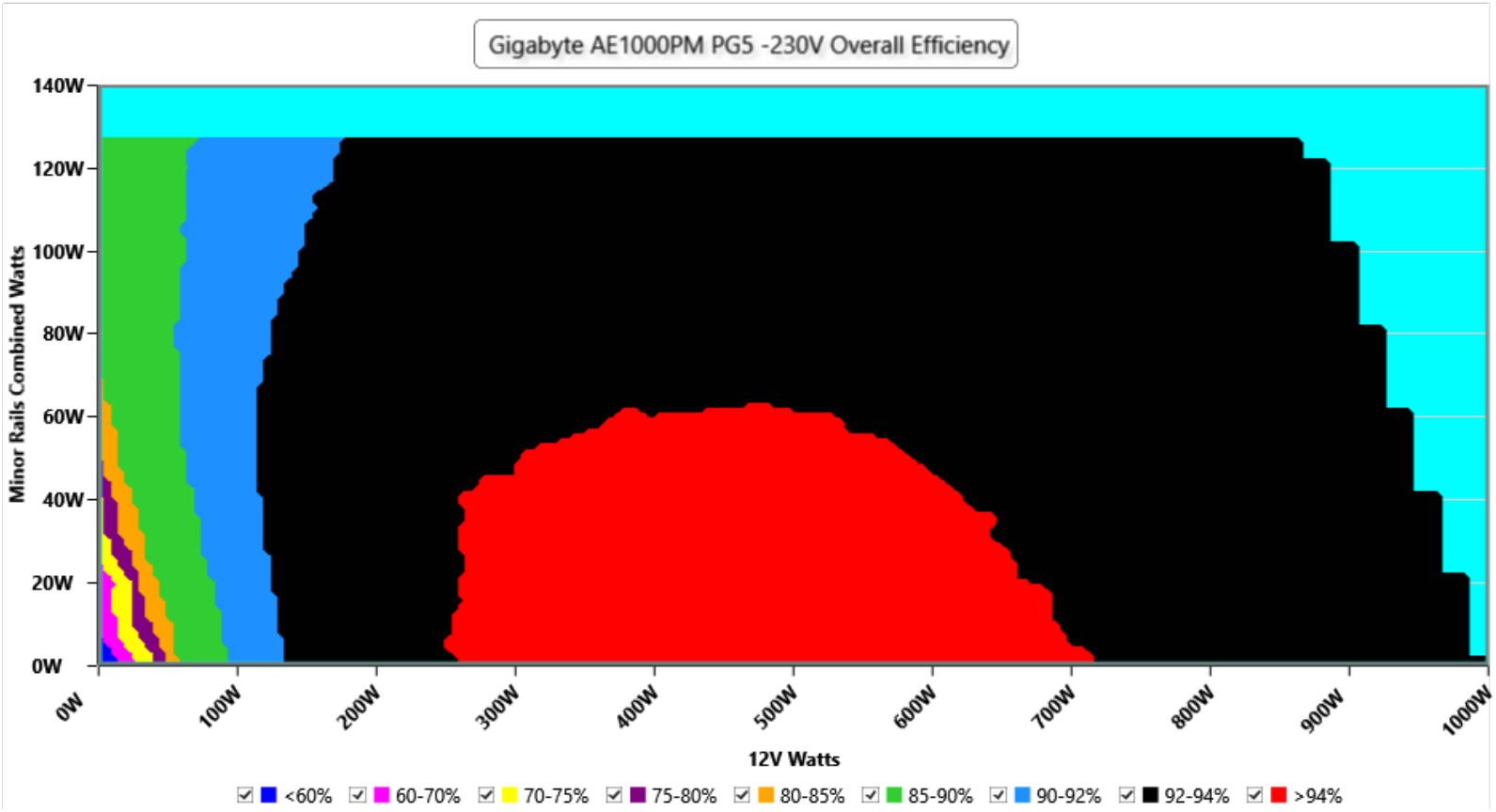
**115V**




□□

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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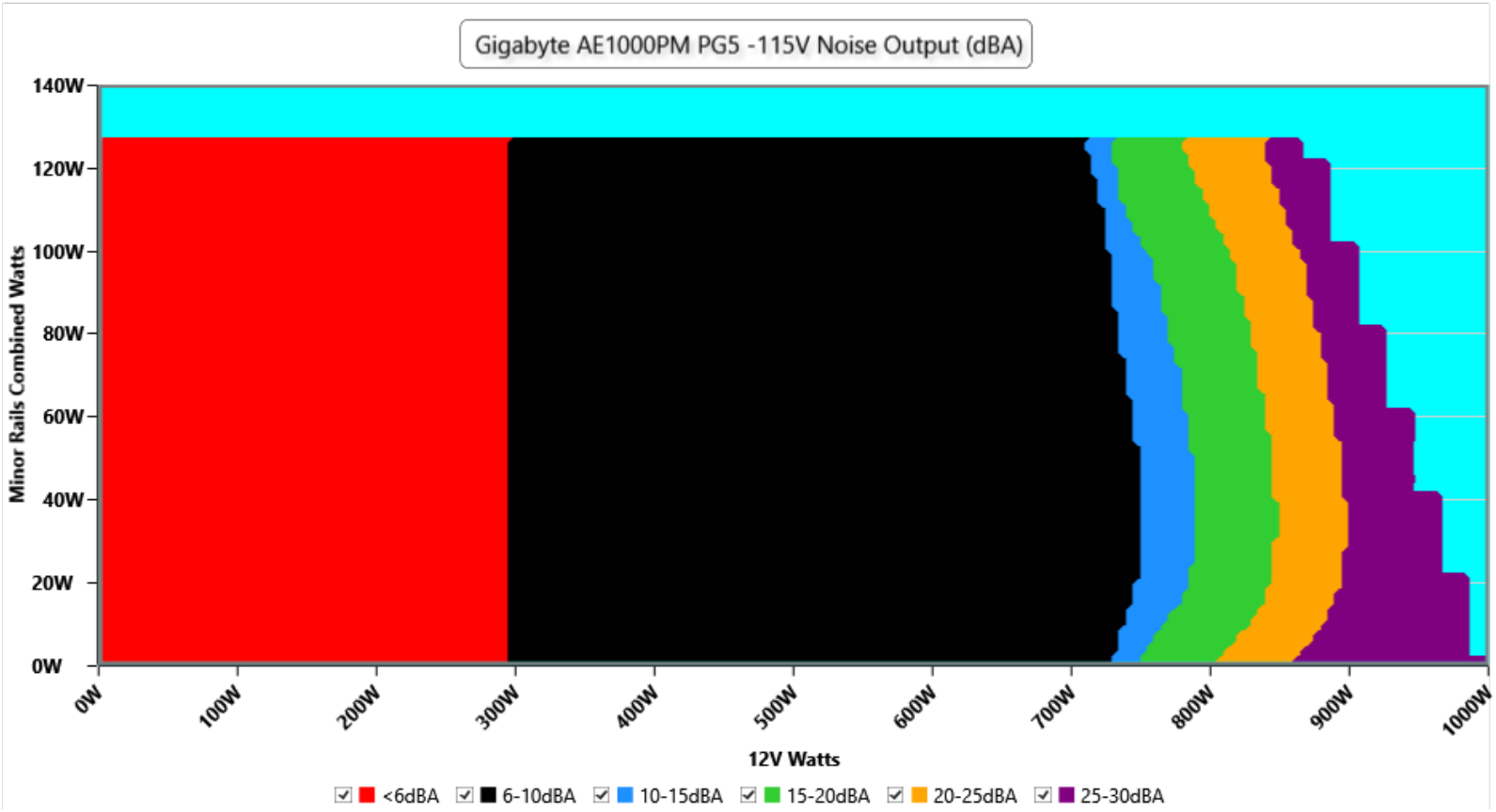
## □□□□□

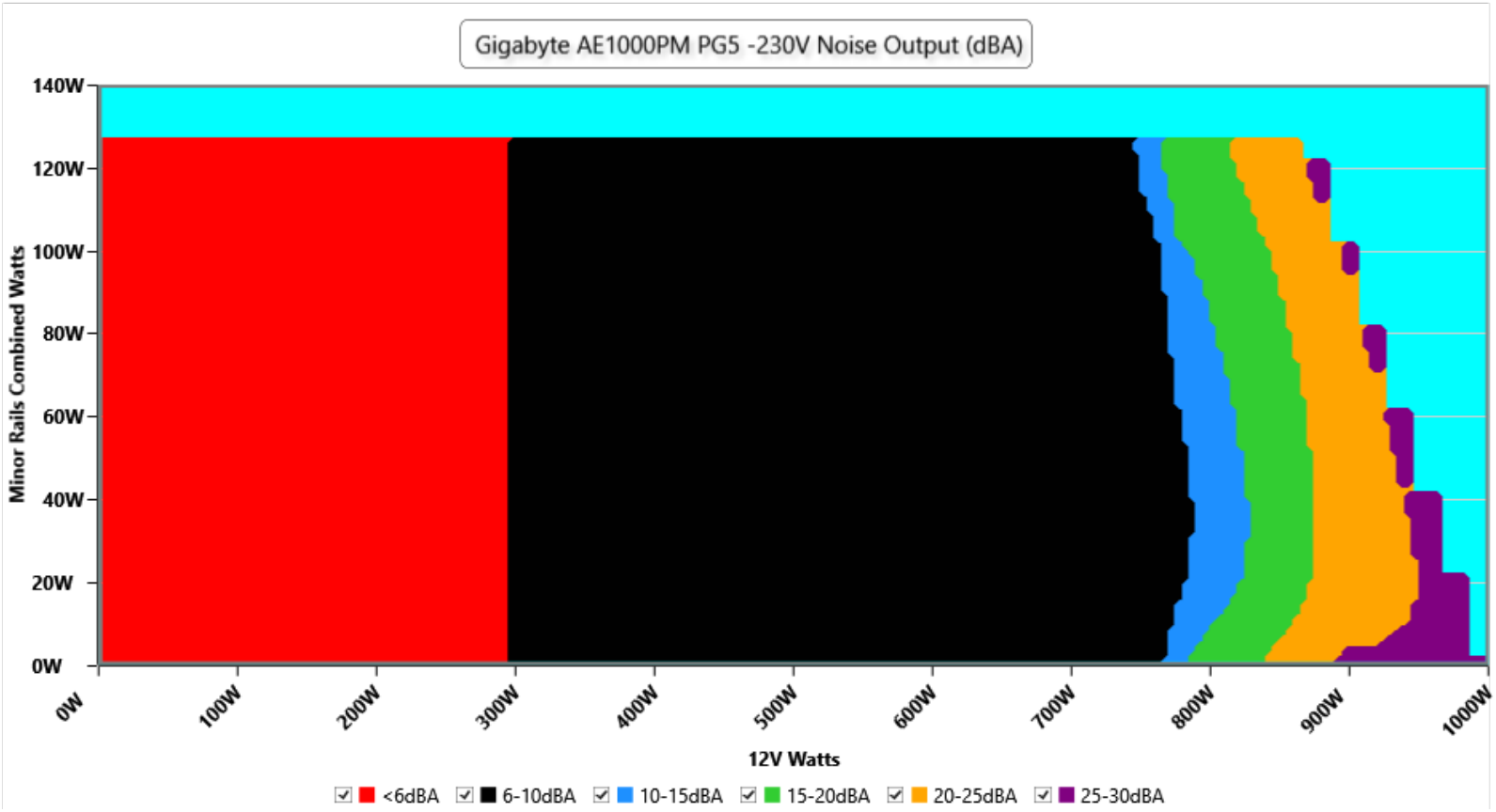
**115V**




□□

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<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 0 RPM · <6.0 dB(A) · 32.7 °C | 0 RPM · <6.0 dB(A) · 45.5 °C | fan off in both |
| 20% | 0 RPM · <6.0 dB(A) · 34.1 °C | 0 RPM · <6.0 dB(A) · 47.1 °C | fan off in both |
| 50% | 1186 RPM · 26.4 dB(A) · 30.4 °C | 591 RPM · <6.0 dB(A) · 42.5 °C | - |
| 100% | 1780 RPM · 39.0 dB(A) · 30.2 °C | 1606 RPM · 35.7 dB(A) · 45.3 °C | **-3.3 dB(A)** |

### 230V

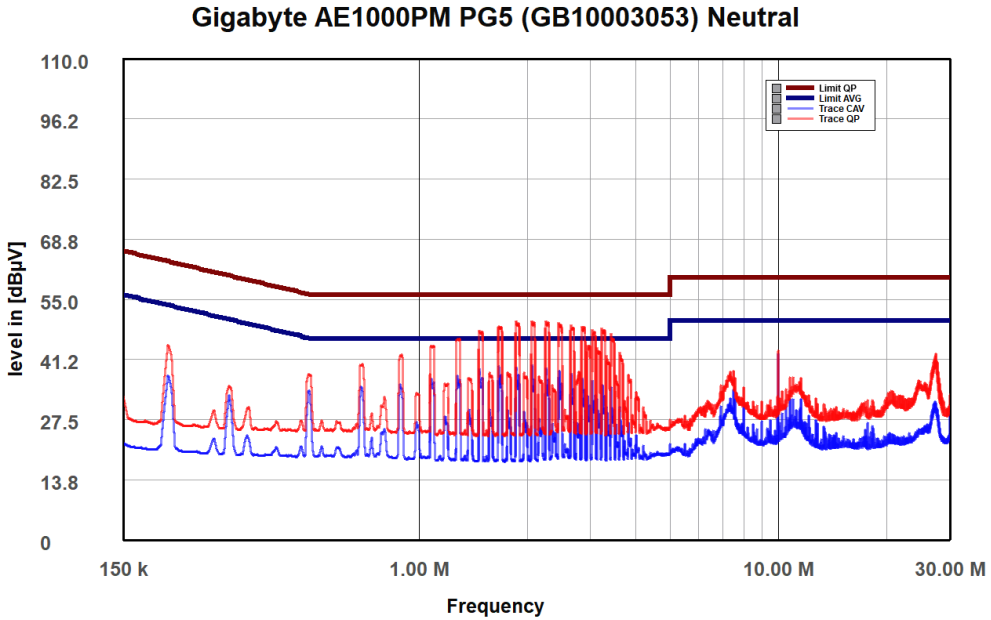
| Load | Normal ambient<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 0 RPM · <6.0 dB(A) · 32.0 °C | 0 RPM · <6.0 dB(A) · 49.7 °C | fan off in both |
| 20% | 0 RPM · <6.0 dB(A) · 32.9 °C | 0 RPM · <6.0 dB(A) · 50.3 °C | fan off in both |
| 50% | 568 RPM · 7.4 dB(A) · 30.2 °C | 596 RPM · 6.3 dB(A) · 42.4 °C | **-1.1 dB(A)** |
| 100% | 586 RPM · 6.5 dB(A) · 30.3 °C | 1618 RPM · 35.8 dB(A) · 45.6 °C | **+29.3 dB(A)** |

### INFO

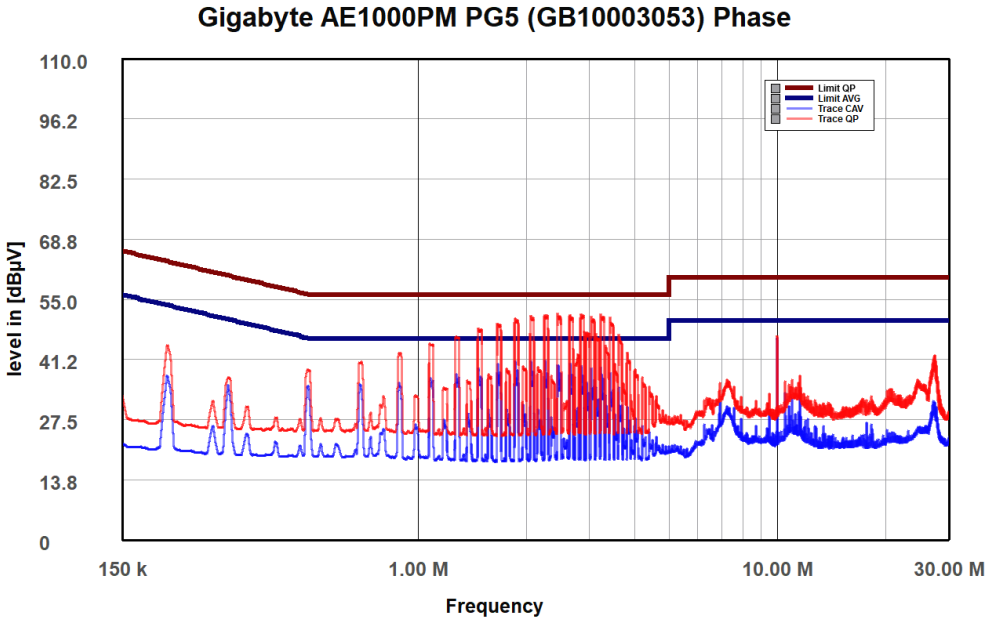
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative of how the fan behaves when it is hot. "<6.0" is the floor of our sound meter, with the fan stopped; 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

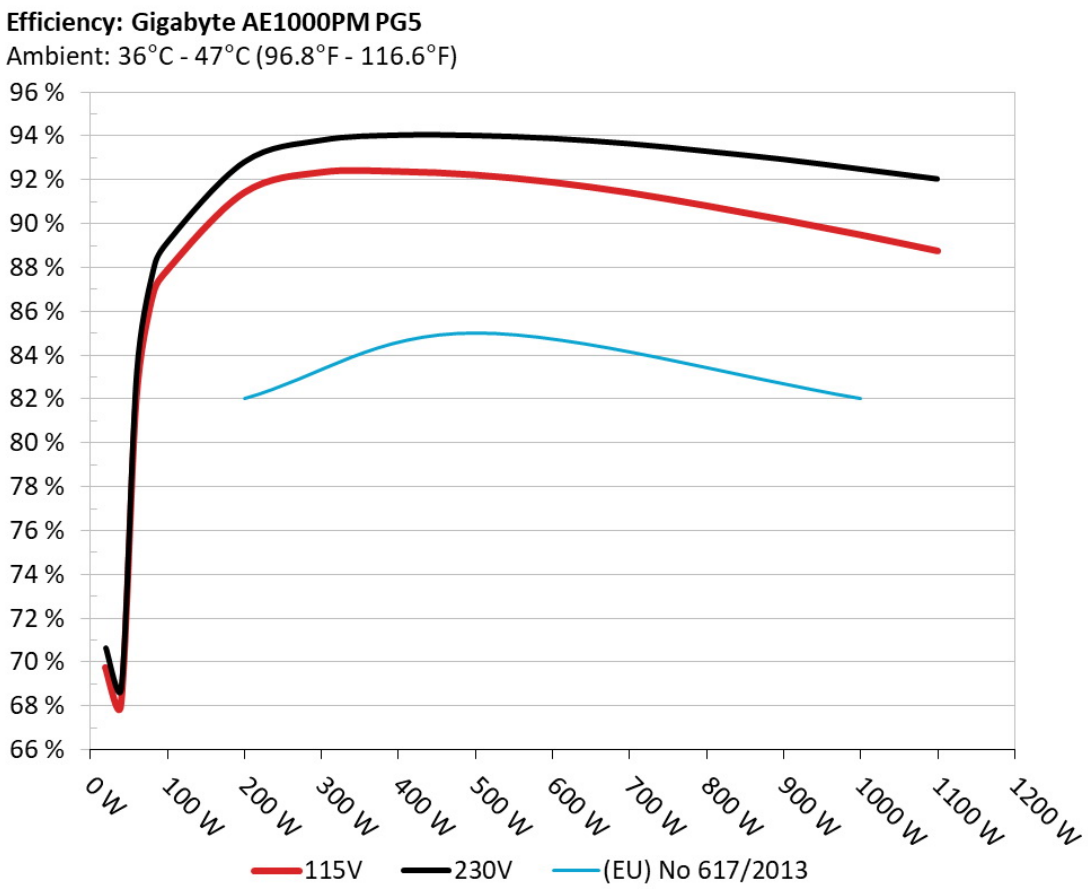



NEUTRAL



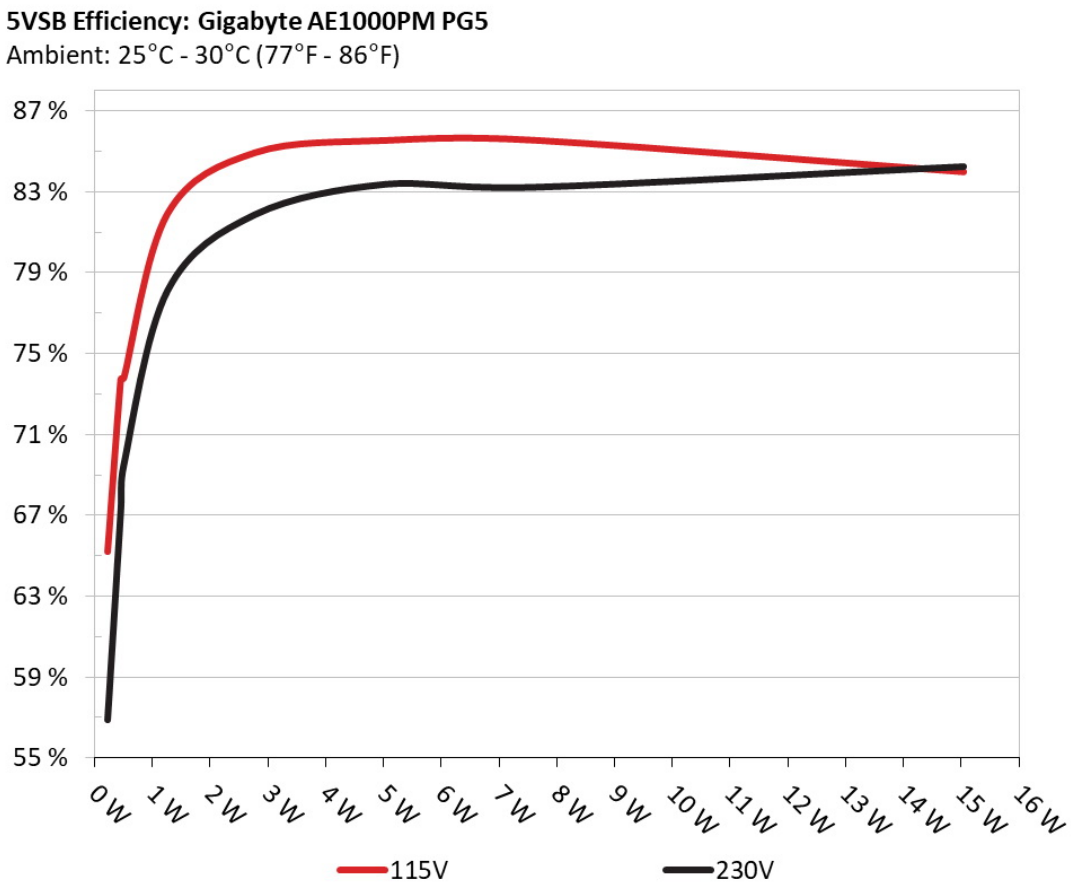

PHASE

## Indicative Performance




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 | 65.194% | 0.04 |
| | 5.067V | 0.35W | | 115.07V |
| **2** | **0.09A** | 0.456W | 73.726% | 0.069 |
| | 5.066V | 0.619W | | 115.07V |
| **3** | **0.55A** | 2.782W | 84.907% | 0.277 |
| | 5.058V | 3.277W | | 115.07V |
| **4** | **1A** | 5.051W | 85.51% | 0.371 |
| | 5.05V | 5.908W | | 115.06V |
| **5** | **1.5A** | 7.563W | 85.526% | 0.418 |
| | 5.041V | 8.843W | | 115.06V |
| **6** | **3.001A** | 15.048W | 83.958% | 0.481 |
| | 5.015V | 17.923W | | 115.06V |

### 230V

| □□ # | 5VSB | DC/AC (□ ) | □□ | PF/AC □□ |
|---|---|---|---|---|
| **1** | **0.045A** | 0.228W | 56.867% | 0.014 |
| | 5.068V | 0.403W | | 230.33V |
| **2** | **0.09A** | 0.456W | 67.217% | 0.024 |
| | 5.067V | 0.678W | | 230.29V |
| **3** | **0.55A** | 2.782W | 81.884% | 0.112 |
| | 5.059V | 3.399W | | 230.25V |
| **4** | **1A** | 5.051W | 83.389% | 0.182 |
| | 5.051V | 6.058W | | 230.24V |
| **5** | **1.5A** | 7.563W | 83.232% | 0.244 |
| | 5.042V | 9.088W | | 230.24V |
| **6** | **3A** | 15.047W | 84.258% | 0.342 |
| | 5.015V | 17.859W | | 230.23V |

## Protection Features

| | |
|---|---|
| OCP (Normal @ 29.8°C) | 12V: 103.20A (123.89%), 12.046V<br>5V: 32.86A (131.44%), 4.773V<br>3.3V: 31A (124.00%), 3.289V<br>5VSB: 3.7A (123.33%), 5.002V |
| OCP (Hot @ 45.1°C) | 12V: 103.20A (123.89%), 12.055V<br>5V: 31.5A (126.00%), 4.807V<br>3.3V: 30.4A (121.60%), 3.285V<br>5VSB: 3.8A (126.67%), 4.998V |
| OPP (Normal @ 30.9°C) | 1225.07W (122.51%) |
| OPP (Hot @ 42.5°C) | 1225.06W (122.51%) |
| OTP | ✓ (115°C @ 12V Heatsink) |
| SCP | 12V to Earth: ✓<br>5V to Earth: ✓<br>3.3V to Earth: ✓<br>5VSB to Earth: ✓<br>-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<br>Inrush: NTC & Bypass Relay |

## Supplementary Tests (For Reference)

### 10-110%□□□□

#### 115V

| □□ | 12V | 5V | 3.3V | 5VSB | DC/AC (□ ) | □□ | □□□□ (RPM) | □□□□□□□ (dB[A]) | □□ (□□ /□□ ) | PF/AC □□ |
|---|---|---|---|---|---|---|---|---|---|---|
| **10%** | **6.502A** | **1.977A** | **1.989A** | **0.991A** | 100.011 | 87.865% | 0 | <6.0 | 45.47°C | 0.956 |
| | 12.058V | 5.06V | 3.319V | 5.044V | 113.824 | | | | 40.23°C | 115.02V |
| **20%** | **14.024A** | **2.969A** | **2.986A** | **1.192A** | 199.969 | 91.411% | 0 | <6.0 | 47.13°C | 0.975 |
| | 12.055V | 5.053V | 3.315V | 5.036V | 218.757 | | | | 40.74°C | 114.99V |
| **30%** | **21.902A** | **3.469A** | **3.488A** | **1.392A** | 300.027 | 92.34% | 0 | <6.0 | 48.17°C | 0.983 |
| | 12.053V | 5.046V | 3.312V | 5.028V | 324.916 | | | | 41.42°C | 114.95V |
| **40%** | **29.746A** | **3.969A** | **3.99A** | **1.594A** | 399.632 | 92.376% | 0 | <6.0 | 50.28°C | 0.985 |
| | 12.050V | 5.04V | 3.308V | 5.02V | 432.611 | | | | 41.83°C | 114.92V |
| **50%** | **37.257A** | **4.964A** | **4.993A** | **1.796A** | 499.361 | 92.222% | 591 | <6.0 | 42.46°C | 0.988 |
| | 12.047V | 5.038V | 3.305V | 5.011V | 541.485 | | | | 66.66°C | 114.88V |
| **60%** | **44.839A** | **5.959A** | **5.998A** | **1.999A** | 599.872 | 91.888% | 596 | 6.3 | 42.54°C | 0.989 |
| | 12.044V | 5.036V | 3.302V | 5.003V | 652.832 | | | | 51.63°C | 114.84V |
| **70%** | **52.353A** | **6.955A** | **7.006A** | **2.203A** | 699.597 | 91.411% | 602 | 7 | 43.14°C | 0.991 |
| | 12.043V | 5.034V | 3.298V | 4.994V | 765.325 | | | | 47.28°C | 114.8V |
| **80%** | **59.925A** | **7.949A** | **8.014A** | **2.306A** | 799.586 | 90.816% | 718 | 11.3 | 43.89°C | 0.992 |
| | 12.043V | 5.032V | 3.294V | 4.988V | 880.444 | | | | 48.84°C | 114.76V |
| **90%** | **67.839A** | **8.449A** | **8.507A** | **2.41A** | 899.358 | 90.171% | 1270 | 28.5 | 44.18°C | 0.993 |
| | 12.042V | 5.03V | 3.291V | 4.981V | 997.404 | | | | 52.11°C | 114.72V |
| **100%** | **75.569A** | **8.95A** | **9.033A** | **3.021A** | 999.355 | 89.489% | 1606 | 35.7 | 45.26°C | 0.994 |
| | 12.038V | 5.028V | 3.288V | 4.967V | 1116.73 | | | | 52.22°C | 114.68V |
| **110%** | **83.221A** | **9.949A** | **10.138A** | **3.024A** | 1099.955 | 88.753% | 1896 | 40.7 | 46.56°C | 0.994 |
| | 12.036V | 5.026V | 3.284V | 4.962V | 1239.34 | | | | 53.15°C | 114.64V |
| **CL1** | **0.116A** | **14.943A** | **14.99A** | **0A** | 126.303 | 85.199% | 0 | <6.0 | 54.85°C | 0.967 |
| | 12.073V | 5.039V | 3.309V | 5.051V | 148.244 | | | | 42.47°C | 115.02V |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CL2** | **0.116A** | **24.807A** | **0A** | **0A** | 126.258 | 83.323% | 0 | <6.0 | 55.43°C | 0.967 |
| | 12.080V | 5.034V | 3.313V | 5.057V | 151.526 | | | | 40.36°C | 115.02V |
| **CL3** | **0.116A** | **0A** | **25.039A** | **0A** | 83.884 | 78.667% | 0 | <6.0 | 56.92°C | 0.957 |
| | 12.075V | 5.042V | 3.294V | 5.048V | 106.63 | | | | 40.15°C | 115.03V |
| **CL4** | **83.009A** | **0A** | **0A** | **0A** | 999.93 | 90.002% | 1580 | 35.4 | 45.55°C | 0.994 |
| | 12.046V | 5.034V | 3.293V | 5.025V | 1111.006 | | | | 51.21°C | 114.69V |

The results above are not used in the certification process

## 230V

| □□ | **12V** | **5V** | **3.3V** | **5VSB** | **DC/AC (□ )** | □□ | □□□□ **(RPM)** | □□□□□□□ **(dB[A])** | □□ **(□□ /□□ )** | **PF/AC □□** |
|---|---|---|---|---|---|---|---|---|---|---|
| **10%** | **6.500A** | **1.977A** | **1.989A** | **0.991A** | 100.004 | 89.142% | 0 | <6.0 | 49.69°C | 0.861 |
| | 12.062V | 5.058V | 3.318V | 5.044V | 112.181 | | | | 40.2°C | 230.23V |
| **20%** | **14.020A** | **2.97A** | **2.987A** | **1.192A** | 199.959 | 92.801% | 0 | <6.0 | 50.25°C | 0.924 |
| | 12.059V | 5.052V | 3.314V | 5.035V | 215.47 | | | | 40.9°C | 230.22V |
| **30%** | **21.896A** | **3.469A** | **3.488A** | **1.393A** | 300.018 | 93.789% | 0 | <6.0 | 51.1°C | 0.949 |
| | 12.055V | 5.046V | 3.311V | 5.027V | 319.88 | | | | 41.15°C | 230.2V |
| **40%** | **29.737A** | **3.969A** | **3.991A** | **1.594A** | 399.603 | 94.021% | 0 | <6.0 | 52.42°C | 0.962 |
| | 12.052V | 5.04V | 3.308V | 5.02V | 425.012 | | | | 41.63°C | 230.18V |
| **50%** | **37.249A** | **4.965A** | **4.994A** | **1.796A** | 499.325 | 94.003% | 596 | 6.3 | 42.37°C | 0.969 |
| | 12.049V | 5.037V | 3.304V | 5.011V | 531.179 | | | | 58.76°C | 230.17V |
| **60%** | **44.833A** | **5.96A** | **5.999A** | **1.999A** | 599.849 | 93.87% | 599 | 7 | 42.79°C | 0.974 |
| | 12.046V | 5.035V | 3.301V | 5.003V | 639.021 | | | | 60.65°C | 230.15V |
| **70%** | **52.347A** | **6.956A** | **7.007A** | **2.203A** | 699.574 | 93.631% | 605 | 6.9 | 43.45°C | 0.978 |
| | 12.044V | 5.033V | 3.297V | 4.994V | 747.159 | | | | 63.29°C | 230.13V |
| **80%** | **59.923A** | **7.951A** | **8.016A** | **2.306A** | 799.568 | 93.29% | 846 | 16.3 | 43.81°C | 0.981 |
| | 12.044V | 5.031V | 3.293V | 4.988V | 857.074 | | | | 67.66°C | 230.11V |
| **90%** | **67.840A** | **8.451A** | **8.509A** | **2.409A** | 899.354 | 92.918% | 1281 | 29 | 44.84°C | 0.983 |
| | 12.041V | 5.029V | 3.291V | 4.982V | 967.907 | | | | 66.23°C | 230.09V |
| **100%** | **75.571A** | **8.952A** | **9.037A** | **3.021A** | 999.36 | 92.477% | 1618 | 35.8 | 45.56°C | 0.984 |
| | 12.038V | 5.027V | 3.286V | 4.967V | 1080.671 | | | | 65.3°C | 230.07V |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **110%** | **83.220A** | **9.951A** | **10.14A** | **3.024A** | 1099.955 | 92.024% | 1922 | 41.4 | 46.75°C | 0.986 |
| | 12.036V | 5.025V | 3.284V | 4.962V | 1195.286 | | | | 66.04°C | 230.05V |
| **CL1** | **0.116A** | **14.948A** | **15.001A** | **0A** | 126.297 | 86.482% | 0 | <6.0 | 48.33°C | 0.892 |
| | 12.074V | 5.037V | 3.306V | 5.051V | 146.045 | | | | 40.21°C | 230.23V |
| **CL2** | **0.115A** | **24.941A** | **0A** | **0A** | 126.259 | 84.511% | 0 | <6.0 | 52.95°C | 0.894 |
| | 12.080V | 5.007V | 3.313V | 5.057V | 149.407 | | | | 41.68°C | 230.22V |
| **CL3** | **0.115A** | **0A** | **25.034A** | **0A** | 83.881 | 79.942% | 0 | <6.0 | 51.09°C | 0.852 |
| | 12.075V | 5.041V | 3.295V | 5.048V | 104.928 | | | | 41.2°C | 230.23V |
| **CL4** | **83.012A** | **0A** | **0A** | **0A** | 999.899 | 93.011% | 1546 | 34.8 | 45.92°C | 0.984 |
| | 12.045V | 5.033V | 3.293V | 5.025V | 1075.027 | | | | 67.22°C | 230.07V |

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** | **1.232A** | **0.495A** | **0.497A** | **0.198A** | 20.007 | 69.755% | 0 | <6.0 | 39.11°C | 0.862 |
| | 12.060V | 5.047V | 3.323V | 5.063V | 28.67 | | | | 36.37°C | 115.06V |
| **40W** | **2.712A** | **0.694A** | **0.695A** | **0.296A** | 40.006 | 68.036% | 0 | <6.0 | 40.09°C | 0.925 |
| | 12.059V | 5.046V | 3.322V | 5.06V | 58.802 | | | | 37.32°C | 115.04V |
| **60W** | **4.191A** | **0.892A** | **0.894A** | **0.396A** | 60.006 | 81.968% | 0 | <6.0 | 42.39°C | 0.937 |
| | 12.058V | 5.046V | 3.321V | 5.057V | 73.204 | | | | 38.78°C | 115.04V |
| **80W** | **5.666A** | **1.09A** | **1.093A** | **0.495A** | 79.959 | 86.523% | 0 | <6.0 | 43.93°C | 0.948 |
| | 12.057V | 5.047V | 3.32V | 5.054V | 92.416 | | | | 39.42°C | 115.03V |

The results above are not used in the certification process

## 230V

| □□ | 12V | 5V | 3.3V | 5VSB | DC/AC (□ ) | □□ | □□□□ (RPM) | □□□□□□□□ (dB[A]) | □□ (□□ /□□ ) | PF/AC □□ |
|---|---|---|---|---|---|---|---|---|---|---|
| **20W** | **1.231A** | **0.495A** | **0.497A** | **0.198A** | 20.005 | 70.634% | 0 | <6.0 | 42.67°C | 0.576 |
| | 12.067V | 5.047V | 3.321V | 5.062V | 28.32 | | | | 36.39°C | 230.24V |
| **40W** | **2.710A** | **0.694A** | **0.696A** | **0.296A** | 40.003 | 68.821% | 0 | <6.0 | 44.72°C | 0.752 |
| | 12.065V | 5.046V | 3.321V | 5.06V | 58.128 | | | | 37.62°C | 230.24V |
| **60W** | **4.189A** | **0.892A** | **0.894A** | **0.395A** | 60.002 | 83.16% | 0 | <6.0 | 46.47°C | 0.794 |
| | 12.063V | 5.046V | 3.32V | 5.057V | 72.155 | | | | 38.72°C | 230.24V |
| **80W** | **5.664A** | **1.09A** | **1.093A** | **0.495A** | 79.95 | 87.613% | 0 | <6.0 | 47.59°C | 0.833 |
| | 12.062V | 5.046V | 3.32V | 5.054V | 91.253 | | | | 39.27°C | 230.24V |

The results above are not used in the certification process

□□□□

## 115V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 15.16mV | 14.53mV | 11.12mV | 9.34mV | Pass |
| 20% Load | 16.86mV | 16.38mV | 12.31mV | 10.89mV | Pass |
| 30% Load | 19.23mV | 17.36mV | 11.84mV | 9.24mV | Pass |
| 40% Load | 21.09mV | 19.11mV | 12.93mV | 9.60mV | Pass |
| 50% Load | 21.70mV | 19.99mV | 11.84mV | 12.70mV | Pass |
| 60% Load | 21.96mV | 19.01mV | 12.93mV | 13.89mV | Pass |
| 70% Load | 21.45mV | 17.36mV | 13.08mV | 18.58mV | Pass |
| 80% Load | 21.76mV | 17.31mV | 13.29mV | 24.26mV | Pass |
| 90% Load | 21.81mV | 18.19mV | 13.86mV | 28.24mV | Pass |
| 100% Load | 20.97mV | 20.32mV | 14.30mV | 25.65mV | Pass |
| 110% Load | 22.54mV | 18.91mV | 14.66mV | 28.82mV | Pass |
| Crossload1 | 15.79mV | 13.23mV | 14.93mV | 13.09mV | Pass |
| Crossload2 | 15.11mV | 15.81mV | 12.36mV | 12.23mV | Pass |

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| Crossload3 | 15.52mV | 35.86mV | 16.60mV | 12.49mV | Pass |
| Crossload4 | 20.50mV | 11.10mV | 12.35mV | 29.34mV | Pass |

The results above are not used in the certification process

**230V**

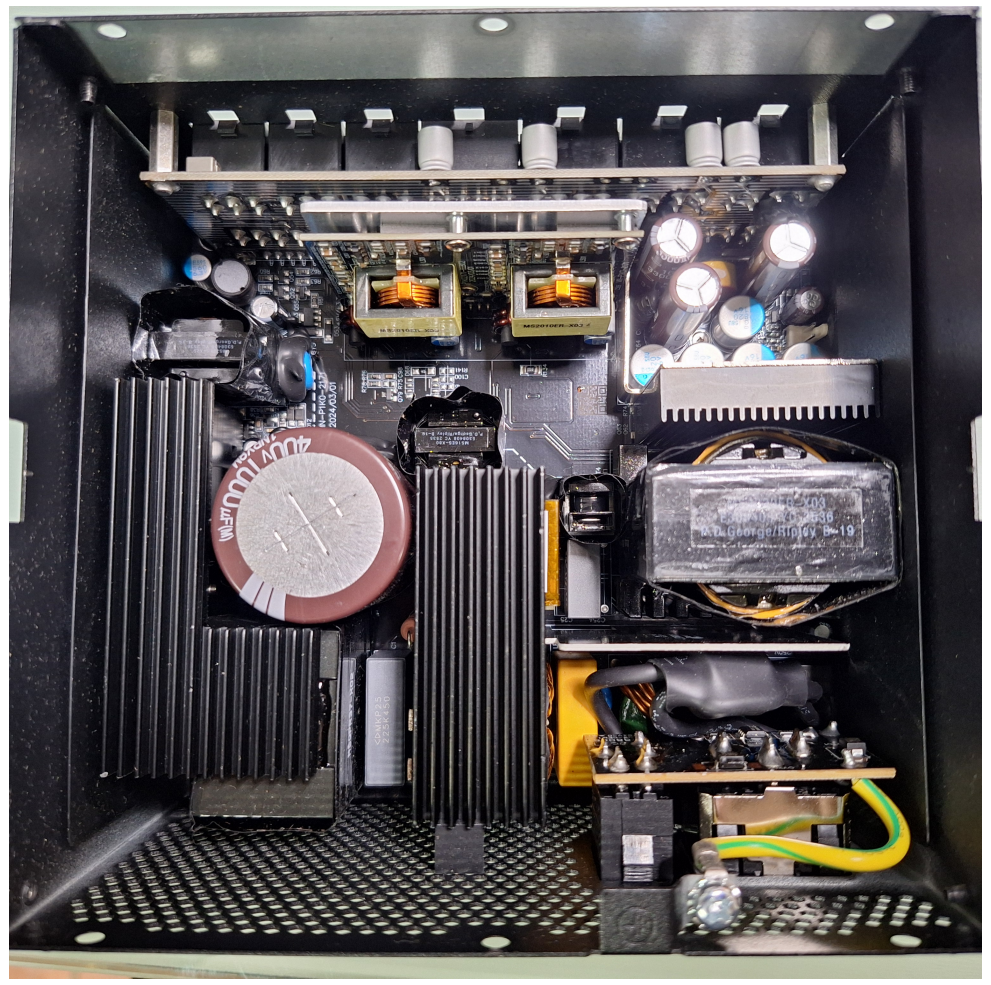
| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 16.14mV | 15.71mV | 12.36mV | 9.75mV | Pass |
| 20% Load | 18.77mV | 16.59mV | 12.67mV | 9.86mV | Pass |
| 30% Load | 20.26mV | 18.39mV | 12.20mV | 9.45mV | Pass |
| 40% Load | 22.94mV | 19.68mV | 13.14mV | 10.74mV | Pass |
| 50% Load | 24.28mV | 21.12mV | 13.70mV | 12.44mV | Pass |
| 60% Load | 23.66mV | 20.81mV | 13.86mV | 17.34mV | Pass |
| 70% Load | 23.92mV | 19.06mV | 14.17mV | 15.79mV | Pass |
| 80% Load | 23.15mV | 19.94mV | 15.46mV | 16.31mV | Pass |
| 90% Load | 24.03mV | 18.65mV | 15.00mV | 18.02mV | Pass |
| 100% Load | 22.95mV | 22.02mV | 14.64mV | 26.38mV | Pass |
| 110% Load | 24.06mV | 19.61mV | 15.24mV | 24.23mV | Pass |
| Crossload1 | 17.35mV | 13.61mV | 15.62mV | 13.96mV | Pass |
| Crossload2 | 18.15mV | 20.87mV | 12.56mV | 12.96mV | Pass |
| Crossload3 | 17.53mV | 36.99mV | 18.15mV | 13.99mV | Pass |
| Crossload4 | 20.51mV | 11.98mV | 13.21mV | 14.19mV | Pass |

The results above are not used in the certification process









## Gigabyte GP-AE1000PM PG5 / PG5 ICE

Top side

Power specifications label

FAN

PSU INTERNAL

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