



# XPG Pylon II 650W

Serial Number -

Lab ID AD65003029

Certification ID 253029

Test Result Report ID: 25PS3029A

Certificate Issue Date: Nov 13, 2025

Scheme: ETA-EMI PSU

115V

230V

115V

230V

Scheme: LAMBDA PSU

Outside Validation Scope

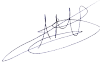
## General Information

### 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                             | XPG           |
| Model                             | Pylon II 650W |
| OEM/ODM                           | CWT           |
| Serial Number                     | -             |
| Product Specifications            |               |
| Manufacturer-Provided Information |               |
| Rated Voltage (Vrms)              | 100-240       |
| Rated Current (Arms)              | 10            |

|                                                   |                                                                                     |
|---------------------------------------------------|-------------------------------------------------------------------------------------|
| Rated Frequency (Hz)                              | 50-60                                                                               |
| Rated Power (W)                                   | 650                                                                                 |
| Operating Temperature (Continuous Full Load) (°C) | 0-50                                                                                |
| Type                                              | ATX12V                                                                              |
| Cable Design                                      | Fixed cables                                                                        |
| Warranty                                          | No Info                                                                             |
| Cybenetics Measurements                           |                                                                                     |
| Dimensions (W x H x D)                            | 150 x 85 x 150mm                                                                    |
| Weight                                            | 1.85 kg (4.08lb)                                                                    |
| Cooling                                           | 135mm Fluid Dynamic Bearing Fan (CWT13525H12F-9)                                    |
| Semi-Passive Operation                            | X                                                                                   |
| Cybenetics Testing Information                    |                                                                                     |
| Lab ID                                            | AD65003029                                                                          |
| Date of receipt                                   | Oct 17, 2025                                                                        |
| Testing Date                                      | Nov 12, 2025                                                                        |
| Report Issued Date                                | Nov 13, 2025                                                                        |
| Engineer Name                                     | Ioannis Kalyviotis                                                                  |
| Authorized By the Laboratory Technical Manager    | Aristeidis Bitziopoulos                                                             |
| Signature                                         |  |

### Cables and Connectors(Non-accredited measurements)

| Captive Cables                                  |             |                         |          |               |
|-------------------------------------------------|-------------|-------------------------|----------|---------------|
| Description                                     | Cable Count | Connector Count (Total) | Gauge    | Cable Type    |
| ATX connector 24 pin (570mm)                    | 1           | 1                       | 18-22AWG | Tinned Copper |
| 8 pin EPS12V (600mm) / 4+4 pin EPS12V (+150mm)  | 1           | 1 / 1                   | 18AWG    | Copper        |
| 6+2 pin PCIe (550mm+150mm)                      | 1           | 2                       | 18AWG    | Copper        |
| 12+4 pin PCIe (590mm) (450W)                    | 1           | 1                       | 16-24AWG | Tinned Copper |
| SATA (430mm+150mm+150mm) / 4-pin Molex (+150mm) | 2           | 6 / 2                   | 18AWG    | Copper        |

### Protection Features(Manufacturer)

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

### Power Specifications

|                      |       |      |    |     |      |      |
|----------------------|-------|------|----|-----|------|------|
| Rail                 |       | 3.3V | 5V | 12V | 5VSB | -12V |
| Max. Power           | Amps  | 20   | 20 | 54  | 3    | 0.3  |
|                      | Watts | 120  |    | 648 | 15   | 3.6  |
| Total Max. Power (W) |       | 650  |    |     |      |      |

### Parts Description

|                                   |                                                                                                                                          |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General Data</b>               |                                                                                                                                          |
| Manufacturer (OEM)                | CWT                                                                                                                                      |
| PCB Type                          | Single-Sided                                                                                                                             |
| <b>Primary Side</b>               |                                                                                                                                          |
| Transient Filter                  | 4x Y caps, 2x X caps, 2x CM chokes, 1x MOV, 1x Sync PowerSP687 (X Capacitor Bleeder)                                                     |
| Inrush Protection                 | NTC Thermistor SCK0512 (5 Ohm @ 25°C)                                                                                                    |
| Bridge Rectifier(s)               | Yangzhou GBU1506 (600V, 15A @ 100°C)                                                                                                     |
| APFC MOSFETs                      | 2x CMS60R180D                                                                                                                            |
| APFC Boost Diode                  | CRMicr CRXI06D065G2 (650V, 6A @ 167°C)                                                                                                   |
| Bulk Cap(s)                       | Nippon Chemi-Con (400V, 470uF, 2000h @ 105°C, KMW)                                                                                       |
| Main Switchers                    | 2x InPower ITA20N50R (500V, 12.5A @ 100°C, Rds(on): 0.30hm)                                                                              |
| PFC/LLC Resonant Combo Controller | NXP TEA2017AAT/2                                                                                                                         |
| Topology                          | Primary side: APFC, Half-Bridge & LLC Resonant Converter<br>Secondary side: [12V] Passive Rectification & [Minor Rails] DC-DC converters |

|                        |                                                                                                                                            |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Secondary Side</b>  |                                                                                                                                            |
| +12V MOSFETs           | 4x PFC PFR30L45CT (45V, 30A @ 25°C)                                                                                                        |
| 5V & 3.3V              | DC-DC Converters: 4x UBIQ Semi QM3054M6 (30V, 61A @ 100°C, Rds(on): 4.8mOhm)<br>PWM Controller(s): ANPEC APW7159C                          |
| Filtering Capacitors   | Electrolytic:<br>5x Elite (2-5,000h @ 105°C, ED)<br>2x Jun Fu (2,000h @ 105°C, WG)<br>2x Jun Fu (@ 105°C, WL)<br>Polymer:<br>8x Elite (RP) |
| Supervisor IC          | IN1S4291-DCG                                                                                                                               |
| Fan Model              | CWT13525H12F-9 (135mm, 12V, 0.4A, Fluid Dynamic Bearing Fan)                                                                               |
| <b>5VSB Circuit</b>    |                                                                                                                                            |
| Rectifier              | Galaxy Microelectronics D10PS45L (45V, 10A)                                                                                                |
| Standby PWM Controller | On-Bright OB2365T                                                                                                                          |

## 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

|                                                |          |
|------------------------------------------------|----------|
| <b>115V</b>                                    |          |
| Accredited                                     |          |
| Average Efficiency (>1450 load combinations)   | 85.524%  |
| Average Noise Output (>1450 Load Combinations) | 29.24dBA |
| Average PF (>1450 Load Combinations)           | 0.996    |

|                                                             |         |
|-------------------------------------------------------------|---------|
| Efficiency With 10W ( $\leq 500W$ ) or 2% ( $> 500W$ ) Load | 71.269% |
| Standby Power Consumption                                   | 0.0264W |
| Non-Accredited                                              |         |
| 12V Ripple (Full Load)                                      | 55.30mV |
| 5V Ripple (Full Load)                                       | 31.95mV |
| 3.3V Ripple (Full Load)                                     | 27.81mV |
| 5VSB Ripple (Full Load)                                     | 27.33mV |
| 12V Load Regulation                                         | 1.30%   |
| 5V Load Regulation                                          | 1.36%   |
| 3.3V Load Regulation                                        | 2.11%   |
| 5VSB Load Regulation                                        | 3.64%   |
| Inrush Current                                              | 33.070A |

## 230V

|                                                             |          |
|-------------------------------------------------------------|----------|
| Accredited                                                  |          |
| Average Efficiency ( $> 1450$ load combinations)            | 87.581%  |
| Average Noise Output ( $> 1450$ Load Combinations)          | 28.96dBA |
| Average PF ( $> 1450$ Load Combinations)                    | 0.985    |
| Efficiency With 10W ( $\leq 500W$ ) or 2% ( $> 500W$ ) Load | 71.027%  |
| Standby Power Consumption                                   | 0.0728W  |
| Non-Accredited                                              |          |
| 12V Ripple (Full Load)                                      | 52.40mV  |
| 5V Ripple (Full Load)                                       | 33.25mV  |
| 3.3V Ripple (Full Load)                                     | 28.06mV  |
| 5VSB Ripple (Full Load)                                     | 25.32mV  |
| 12V Load Regulation                                         | 1.31%    |
| 5V Load Regulation                                          | 1.33%    |
| 3.3V Load Regulation                                        | 1.99%    |
| 5VSB Load Regulation                                        | 3.66%    |
| Inrush Current                                              | 63.750A  |
| 12V Transient Response (200%)                               | 11.42V   |
| 5V Transient Response (200%)                                | 4.895V   |

|                                  |                           |                           |
|----------------------------------|---------------------------|---------------------------|
| 3.3V Transient Response (200%)   | 3.202V                    |                           |
| 5VSB Transient Response (200%)   | 5.004V                    |                           |
| Hold-Up Time & PWR_OK Signal     | 20.20ms                   |                           |
| AC Loss to PWR_OK Hold Up Time   | 18.80ms                   |                           |
| PWR_OK Inactive to DC Loss Delay | 1.40ms                    |                           |
| PSU Timings: T1 (20% / 100%)     | 127.0ms                   | 96.0ms                    |
| PSU Timings: T3 (20% / 100%)     | 123.0ms                   | 122.0ms                   |
| 12V OCP (28.5°C / 43.2°C)        | 66.40A (122.96%), 12.012V | 64.80A (120.00%), 12.008V |
| 5V OCP (28.5°C / 43.2°C)         | 23.7A (118.50%), 4.977V   | 23.6A (118.00%), 4.98V    |
| 3.3V OCP (28.5°C / 43.2°C)       | 24.3A (121.50%), 3.238V   | 24.4A (122.00%), 3.245V   |
| 5VSB OCP (28.5°C / 43.2°C)       | 4.7A (156.67%), 5.012V    | 4.6A (153.33%), 5.008V    |
| OPP (31.10°C / 42.42°C)          | 140.18%                   | 135.86%                   |

### Hold-Up Time & PWR\_OK Signal

|                                       |      |
|---------------------------------------|------|
| Hold-Up Time (ms)                     | 20.2 |
| AC Loss to PWR_OK Hold Up Time (ms)   | 18.8 |
| PWR_OK Inactive to DC Loss Delay (ms) | 1.4  |

### Stromverbrauch im Ruhezustand

#### Tables

#### 115V

| Detailed Results   |          |          |           |          |           |        |
|--------------------|----------|----------|-----------|----------|-----------|--------|
|                    | Average  | Min      | Limit Min | Max      | Limit Max | Result |
| Mains Voltage RMS: | 115.02 V | 114.98 V | 113.85 V  | 115.10 V | 116.15 V  | PASS   |
| Mains Frequency:   | 60.00 Hz | 59.98 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  | -0.000 W | N/A       | 0.051 W  | N/A       | N/A    |

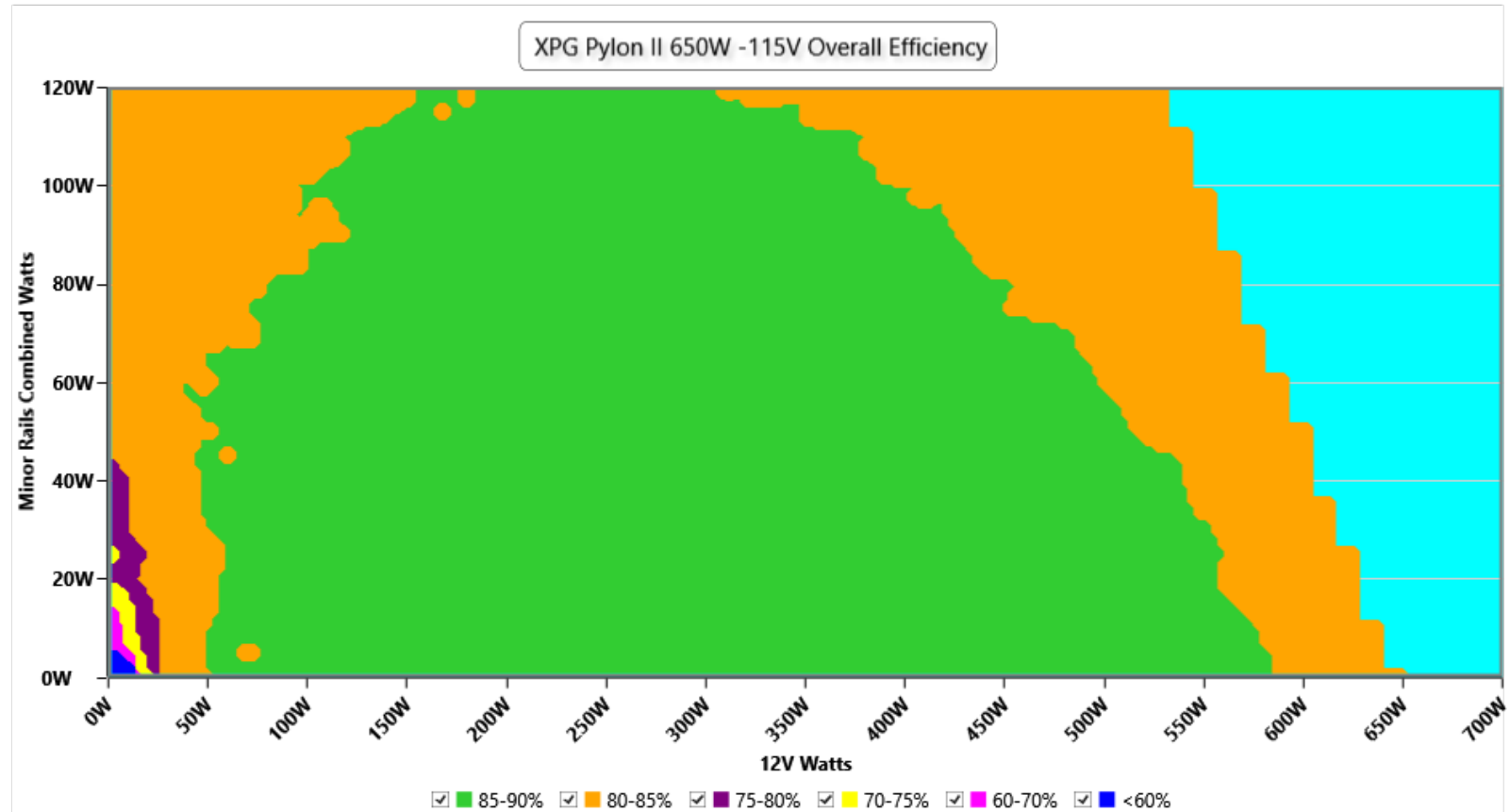
|                 |          |          |     |          |     |     |
|-----------------|----------|----------|-----|----------|-----|-----|
| Apparent Power: | 10.249 W | 10.223 W | N/A | 10.278 W | N/A | N/A |
| Power Factor:   | 0.004    | N/A      | N/A | N/A      | N/A | N/A |

## 230V

| Detailed Results   |          |          |           |          |           |        |
|--------------------|----------|----------|-----------|----------|-----------|--------|
|                    | Average  | Min      | Limit Min | Max      | Limit Max | Result |
| Mains Voltage RMS: | 230.00 V | 229.96 V | 227.70 V  | 230.01 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:  | 1.416    | 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:        | 0.073 W  | 0.032 W  | N/A       | 0.111 W  | N/A       | N/A    |
| Apparent Power:    | 33.558 W | 33.525 W | N/A       | 33.608 W | N/A       | N/A    |
| Power Factor:      | 0.001    | N/A      | N/A       | N/A      | N/A       | N/A    |

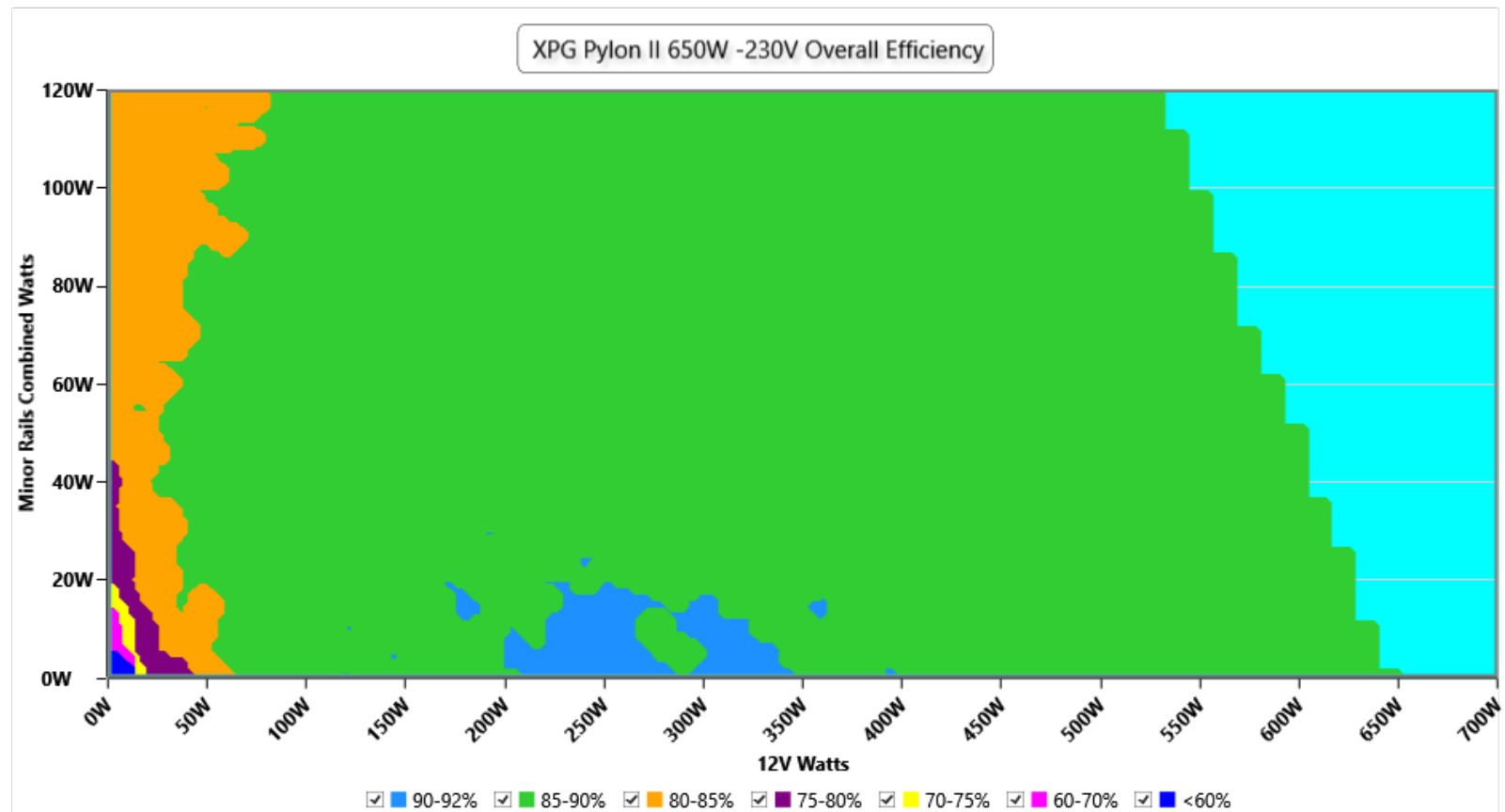
## Efficiency Graph

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

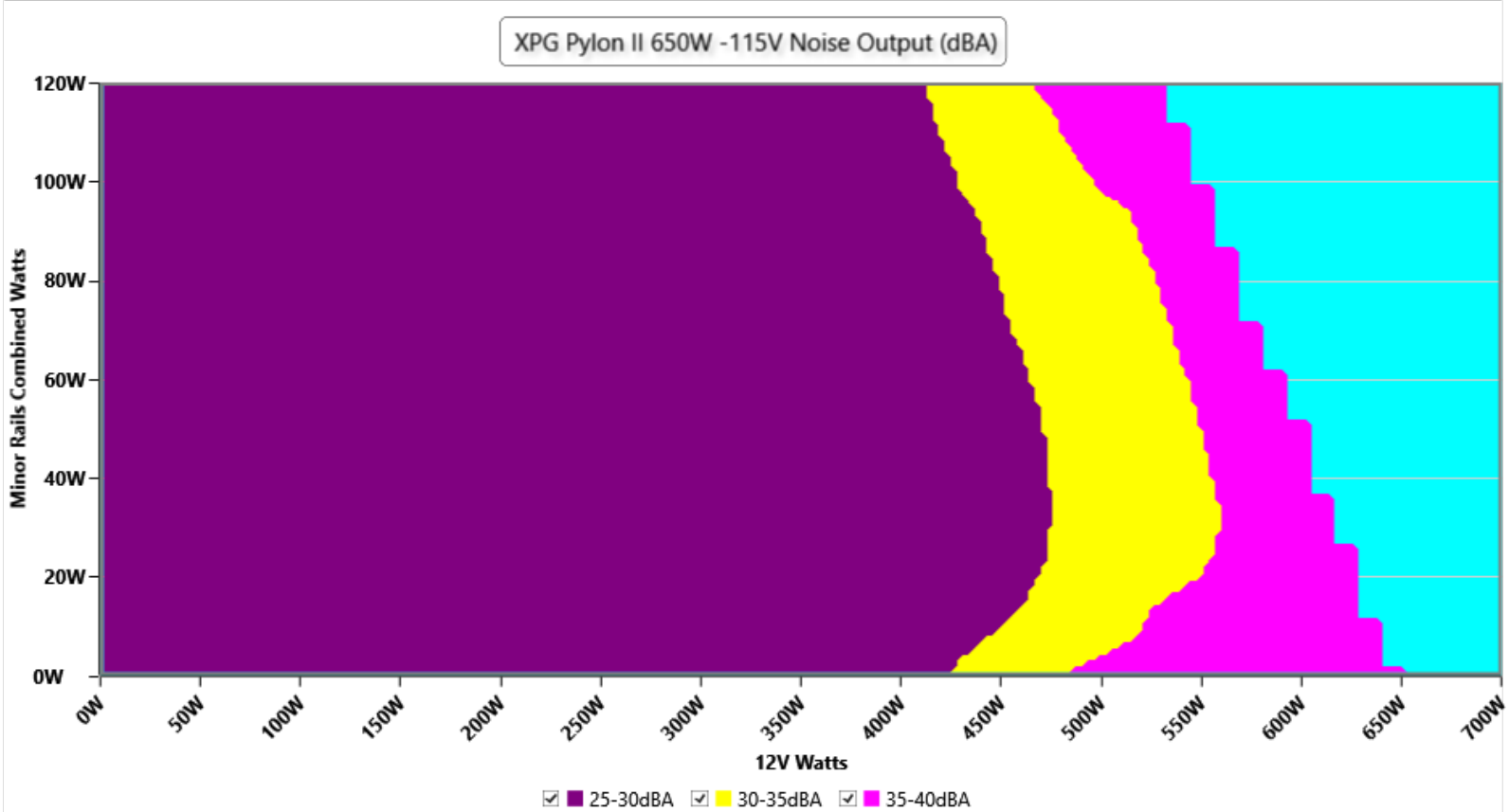


### INFO

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

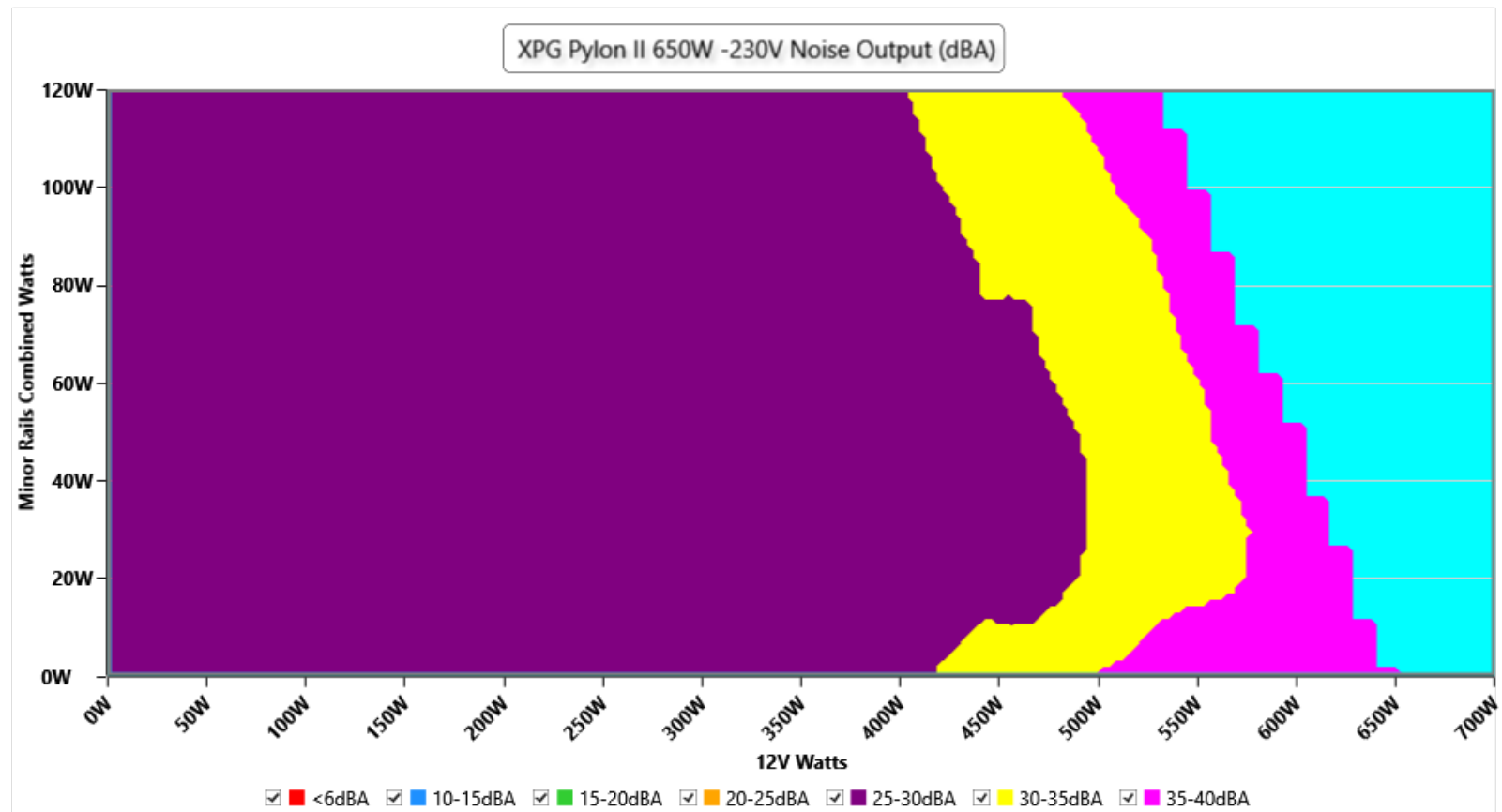
Noise Graph

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

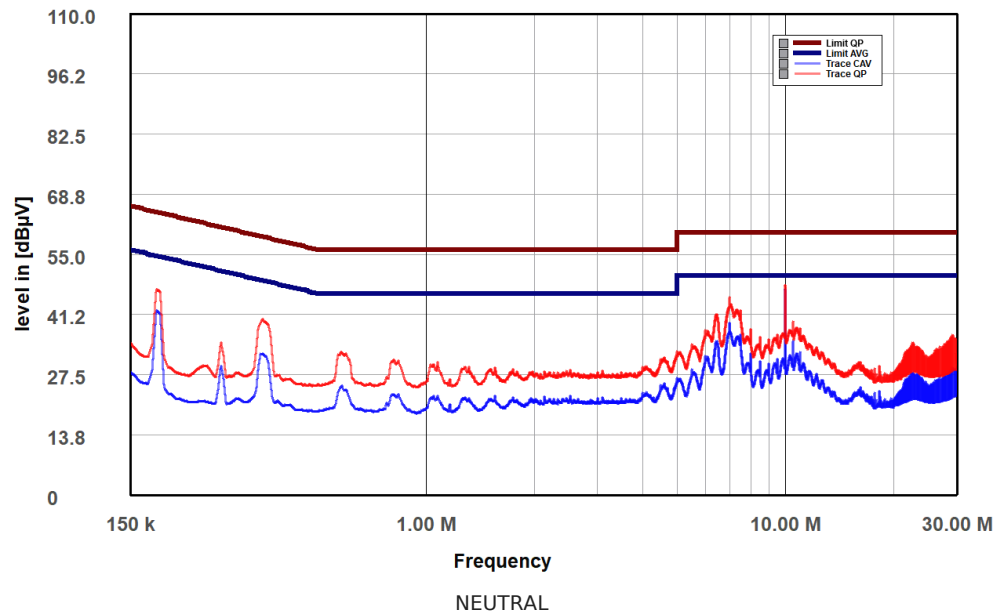


### INFO

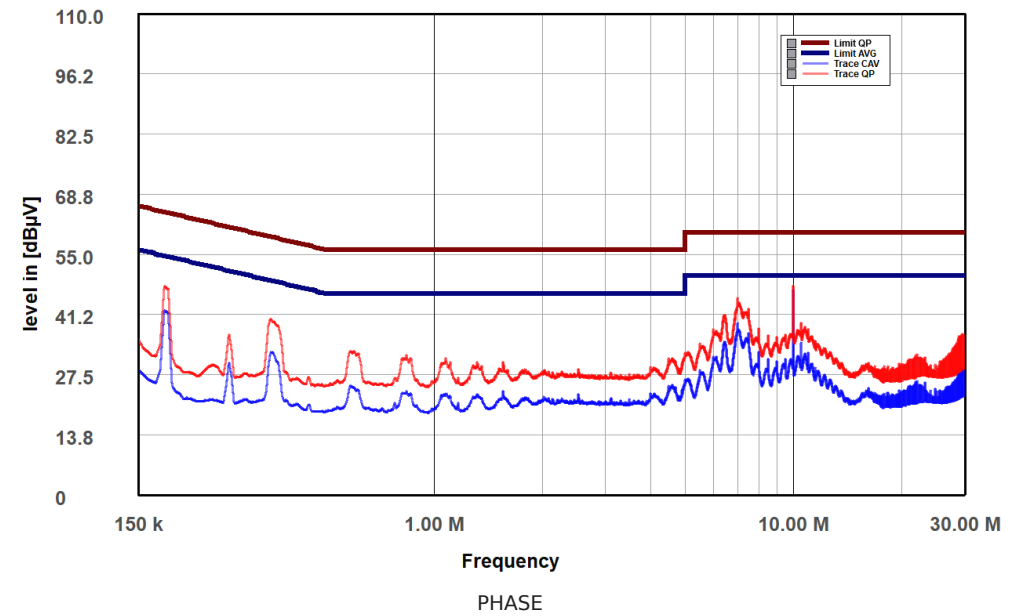
The PSU's noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

## Conducted Emissions EN 55032 & CISPR 32

XPG Pylon II 650 (AD65003029) Neutral



XPG Pylon II 650 (AD65003029) Phase

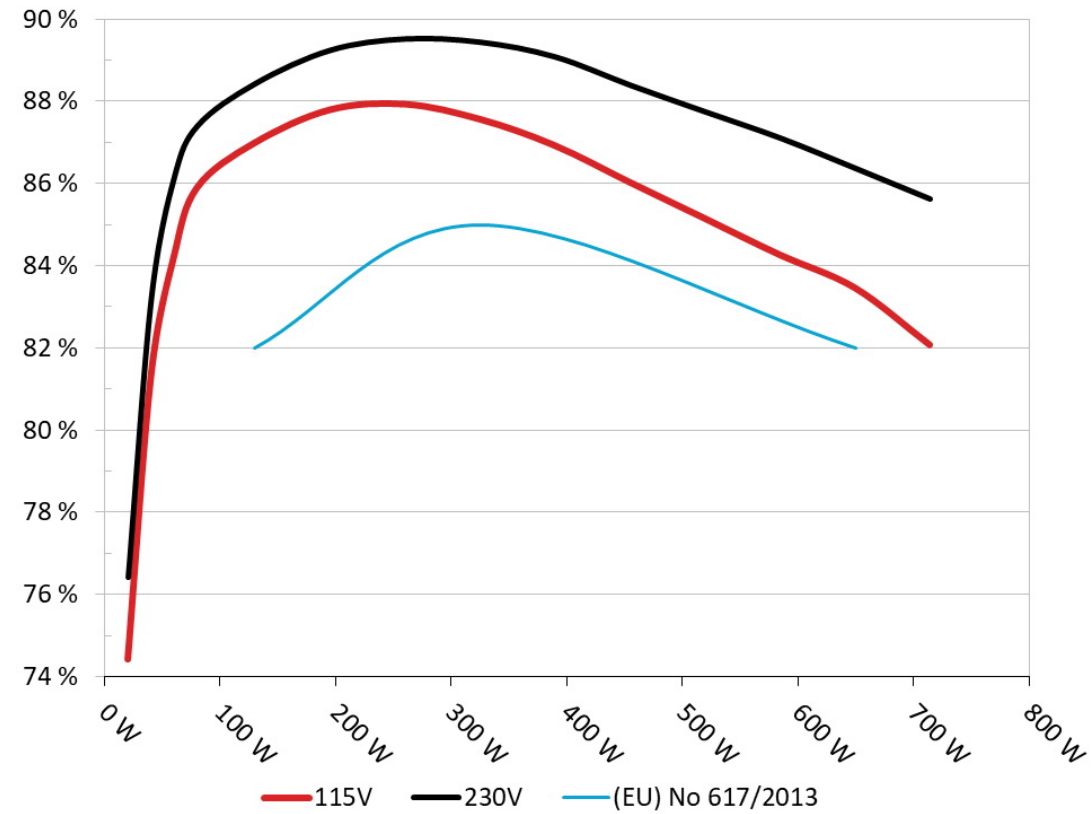


## Indicative Performance

### Efficiency under high ambient temperature

Efficiency: XPG Pylon II 650W

Ambient: 37°C - 47°C (98.6°F - 116.6°F)

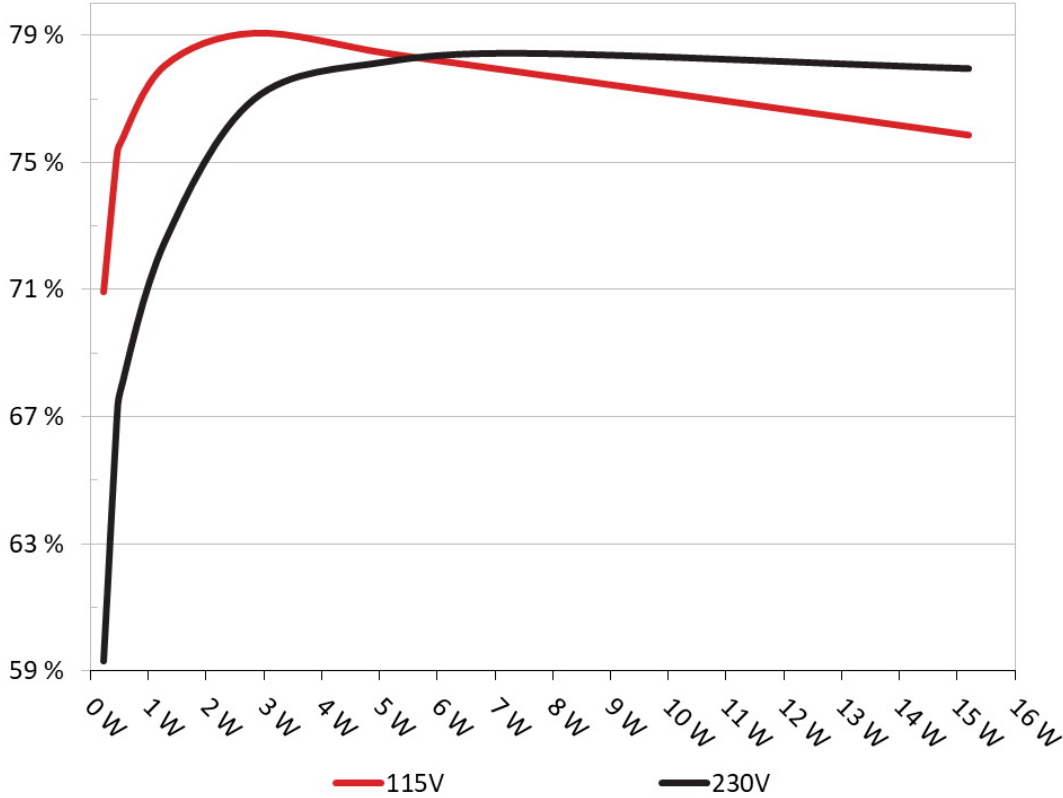


### INFO

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 Efficiency

5VSB Efficiency: XPG Pylon II 650W  
Ambient: 25°C - 30°C (77°F - 86°F)



INFO

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

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

#### 115V

| Test # | 5VSB   | DC/AC (Watts) | Efficiency | PF/AC Volts |
|--------|--------|---------------|------------|-------------|
| 1      | 0.045A | 0.233W        | 70.937%    | 0.033       |
|        | 5.164V | 0.328W        |            | 115.04V     |
| 2      | 0.09A  | 0.465W        | 75.269%    | 0.061       |
|        | 5.162V | 0.618W        |            | 115.04V     |
| 3      | 0.55A  | 2.831W        | 79.063%    | 0.24        |
|        | 5.147V | 3.581W        |            | 115.04V     |
| 4      | 1A     | 5.134W        | 78.432%    | 0.308       |
|        | 5.133V | 6.545W        |            | 115.04V     |
| 5      | 1.5A   | 7.676W        | 77.779%    | 0.343       |
|        | 5.117V | 9.87W         |            | 115.04V     |
| 6      | 3A     | 15.202W       | 75.862%    | 0.387       |
|        | 5.068V | 20.04W        |            | 115.03V     |

#### 230V

| Test # | 5VSB   | DC/AC (Watts) | Efficiency | PF/AC Volts |
|--------|--------|---------------|------------|-------------|
| 1      | 0.045A | 0.232W        | 59.312%    | 0.012       |
|        | 5.161V | 0.392W        |            | 230V        |
| 2      | 0.09A  | 0.465W        | 67.029%    | 0.021       |
|        | 5.16V  | 0.694W        |            | 230V        |
| 3      | 0.55A  | 2.831W        | 76.973%    | 0.103       |
|        | 5.147V | 3.678W        |            | 230V        |
| 4      | 1A     | 5.133W        | 78.159%    | 0.162       |
|        | 5.133V | 6.567W        |            | 230V        |
| 5      | 1.5A   | 7.675W        | 78.418%    | 0.209       |
|        | 5.116V | 9.789W        |            | 230V        |
| 6      | 3A     | 15.201W       | 77.94%     | 0.282       |
|        | 5.067V | 19.504W       |            | 230V        |

## Protection Features

|                                        |                                                                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| OCP (Normal @ 28.5°C)                  | 12V: 66.40A (122.96%), 12.012V<br>5V: 23.7A (118.50%), 4.977V<br>3.3V: 24.3A (121.50%), 3.238V<br>5VSB: 4.7A (156.67%), 5.012V |
| OCP (Hot @ 43.2°C)                     | 12V: 64.80A (120.00%), 12.008V<br>5V: 23.6A (118.00%), 4.98V<br>3.3V: 24.4A (122.00%), 3.245V<br>5VSB: 4.6A (153.33%), 5.008V  |
| OPP (Normal @ 31.1°C)                  | 911.16W (140.18%)                                                                                                              |
| OPP (Hot @ 42.4°C)                     | 883.08W (135.86%)                                                                                                              |
| OTP                                    | ✓ (108°C @ Heat Sink)                                                                                                          |
| 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                                                                                                      |

## 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%  | 3.592A  | 1.999A  | 1.983A  | 0.976A | 65.005        | 84.189%    | 955             | 26.5              | 40.38°C        | 0.983       |
|      | 12.085V | 5.003V  | 3.329V  | 5.124V | 77.206        |            |                 |                   | 42.93°C        | 115.02V     |
| 20%  | 8.206A  | 3.002A  | 2.981A  | 1.175A | 129.946       | 87.001%    | 960             | 26.7              | 40.63°C        | 0.994       |
|      | 12.070V | 4.996V  | 3.322V  | 5.109V | 149.36        |            |                 |                   | 42.43°C        | 114.99V     |
| 30%  | 13.182A | 3.507A  | 3.484A  | 1.375A | 194.953       | 87.804%    | 959             | 26.7              | 41.2°C         | 0.997       |
|      | 12.055V | 4.99V   | 3.316V  | 5.093V | 222.067       |            |                 |                   | 44.09°C        | 114.97V     |
| 40%  | 18.177A | 4.013A  | 3.989A  | 1.576A | 260.042       | 87.941%    | 964             | 26.8              | 41.72°C        | 0.998       |
|      | 12.039V | 4.985V  | 3.31V   | 5.078V | 295.684       |            |                 |                   | 47.65°C        | 114.95V     |
| 50%  | 22.836A | 5.023A  | 4.997A  | 1.779A | 325.046       | 87.573%    | 967             | 26.9              | 42.09°C        | 0.998       |
|      | 12.022V | 4.978V  | 3.302V  | 5.06V  | 371.161       |            |                 |                   | 51.68°C        | 114.93V     |
| 60%  | 27.456A | 6.036A  | 6.009A  | 1.984A | 389.423       | 86.938%    | 1046            | 29.2              | 42.98°C        | 0.998       |
|      | 12.005V | 4.971V  | 3.295V  | 5.042V | 447.951       |            |                 |                   | 54.52°C        | 114.9V      |
| 70%  | 32.171A | 7.052A  | 7.027A  | 2.189A | 454.755       | 86.038%    | 1357            | 36.3              | 43.16°C        | 0.998       |
|      | 11.988V | 4.964V  | 3.288V  | 5.025V | 528.592       |            |                 |                   | 54.48°C        | 114.87V     |
| 80%  | 36.892A | 8.069A  | 8.049A  | 2.295A | 519.535       | 85.16%     | 1617            | 40.2              | 43.79°C        | 0.998       |
|      | 11.971V | 4.956V  | 3.28V   | 5.011V | 610.065       |            |                 |                   | 54.85°C        | 114.84V     |
| 90%  | 42.031A | 8.584A  | 8.551A  | 2.401A | 584.939       | 84.269%    | 1927            | 44.8              | 44.41°C        | 0.998       |
|      | 11.955V | 4.95V   | 3.275V  | 4.998V | 694.122       |            |                 |                   | 56.71°C        | 114.82V     |
| 100% | 46.886A | 9.1A    | 9.086A  | 3.015A | 649.68        | 83.469%    | 2132            | 47.2              | 45.83°C        | 0.998       |
|      | 11.944V | 4.944V  | 3.269V  | 4.976V | 778.354       |            |                 |                   | 58.14°C        | 114.79V     |
| 110% | 51.688A | 10.124A | 10.211A | 3.027A | 714.331       | 82.084%    | 2145            | 47.5              | 46.43°C        | 0.998       |
|      | 11.919V | 4.938V  | 3.261V  | 4.956V | 870.226       |            |                 |                   | 64.98°C        | 114.76V     |
| CL1  | 0.116A  | 14.548A | 14.528A | 0A     | 121.288       | 81.489%    | 981             | 26.8              | 42.2°C         | 0.993       |
|      | 12.062V | 4.962V  | 3.283V  | 5.118V | 148.849       |            |                 |                   | 52.23°C        | 114.99V     |

| 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  | 20.133A | 0A      | 0A     | 101.338       | 80.002%    | 979             | 27                | 40.84°C        | 0.992       |
|      | 12.075V | 4.964V  | 3.32V   | 5.133V | 126.649       |            |                 |                   | 47.54°C        | 115V        |
| CL3  | 0.115A  | 0.001A  | 20.182A | 0.001A | 67.401        | 75.325%    | 963             | 26.8              | 40.13°C        | 0.986       |
|      | 12.078V | 4.995V  | 3.271V  | 5.136V | 89.471        |            |                 |                   | 44.3°C         | 115.02V     |
| CL4  | 54.381A | 0A      | 0A      | 0A     | 649.528       | 84.158%    | 1849            | 43.4              | 45.59°C        | 0.998       |
|      | 11.945V | 4.978V  | 3.301V  | 5.077V | 771.777       |            |                 |                   | 59.63°C        | 114.8V      |

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%  | 3.592A  | 1.999A | 1.982A | 0.976A | 65.005        | 85.664%    | 957             | 26.6              | 40.01°C        | 0.96        |
|      | 12.085V | 5.003V | 3.33V  | 5.124V | 75.951        |            |                 |                   | 41.93°C        | 229.99V     |
| 20%  | 8.206A  | 3.002A | 2.98A  | 1.174A | 129.946       | 88.443%    | 958             | 26.6              | 40.58°C        | 0.971       |
|      | 12.070V | 4.996V | 3.323V | 5.109V | 146.978       |            |                 |                   | 42.42°C        | 229.98V     |
| 30%  | 13.181A | 3.507A | 3.482A | 1.374A | 194.955       | 89.255%    | 957             | 26.6              | 41.19°C        | 0.98        |
|      | 12.056V | 4.99V  | 3.317V | 5.094V | 218.395       |            |                 |                   | 41.38°C        | 229.97V     |
| 40%  | 18.175A | 4.013A | 3.987A | 1.575A | 260.045       | 89.53%     | 962             | 26.8              | 41.64°C        | 0.987       |
|      | 12.041V | 4.985V | 3.311V | 5.079V | 290.464       |            |                 |                   | 44.57°C        | 229.96V     |
| 50%  | 22.835A | 5.023A | 4.994A | 1.779A | 325.052       | 89.45%     | 966             | 26.8              | 42.19°C        | 0.991       |
|      | 12.023V | 4.978V | 3.304V | 5.061V | 363.397       |            |                 |                   | 47.89°C        | 229.95V     |
| 60%  | 27.456A | 6.036A | 6.005A | 1.983A | 389.441       | 89.095%    | 1008            | 27.5              | 42.78°C        | 0.994       |
|      | 12.006V | 4.971V | 3.298V | 5.043V | 437.171       |            |                 |                   | 49.86°C        | 229.93V     |
| 70%  | 32.170A | 7.052A | 7.021A | 2.189A | 454.776       | 88.403%    | 1367            | 36.4              | 43.42°C        | 0.996       |
|      | 11.989V | 4.964V | 3.291V | 5.025V | 514.433       |            |                 |                   | 50.7°C         | 229.92V     |
| 80%  | 36.893A | 8.069A | 8.042A | 2.295A | 519.555       | 87.757%    | 1679            | 41.4              | 43.68°C        | 0.997       |
|      | 11.972V | 4.957V | 3.283V | 5.011V | 592.066       |            |                 |                   | 52.03°C        | 229.91V     |
| 90%  | 42.027A | 8.583A | 8.543A | 2.401A | 584.93        | 87.116%    | 1922            | 44.7              | 44.61°C        | 0.997       |
|      | 11.955V | 4.951V | 3.278V | 4.999V | 671.399       |            |                 |                   | 52.08°C        | 229.89V     |

| Test        | 12V            | 5V             | 3.3V           | 5VSB          | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|-------------|----------------|----------------|----------------|---------------|---------------|------------|-----------------|-------------------|----------------|-------------|
| <b>100%</b> | <b>46.910A</b> | <b>9.098A</b>  | <b>9.077A</b>  | <b>3.018A</b> | 649.726       | 86.38%     | 2147            | 47.5              | 45.3°C         | 0.998       |
|             | 11.939V        | 4.945V         | 3.272V         | 4.971V        | 752.179       |            |                 |                   | 53.63°C        | 229.88V     |
| <b>110%</b> | <b>51.682A</b> | <b>10.122A</b> | <b>10.195A</b> | <b>3.026A</b> | 714.331       | 85.635%    | 2154            | 47.6              | 46.88°C        | 0.998       |
|             | 11.921V        | 4.938V         | 3.266V         | 4.957V        | 834.188       |            |                 |                   | 56.77°C        | 229.87V     |
| <b>CL1</b>  | <b>0.116A</b>  | <b>14.544A</b> | <b>14.463A</b> | <b>0A</b>     | 121.286       | 82.861%    | 980             | 26.8              | 41.04°C        | 0.971       |
|             | 12.063V        | 4.963V         | 3.298V         | 5.119V        | 146.371       |            |                 |                   | 49.6°C         | 229.98V     |
| <b>CL2</b>  | <b>0.115A</b>  | <b>20.126A</b> | <b>0A</b>      | <b>0A</b>     | 101.337       | 81.207%    | 979             | 27                | 40.03°C        | 0.967       |
|             | 12.075V        | 4.966V         | 3.319V         | 5.133V        | 124.796       |            |                 |                   | 46.11°C        | 229.98V     |
| <b>CL3</b>  | <b>0.114A</b>  | <b>0.001A</b>  | <b>19.949A</b> | <b>0.001A</b> | 67.4          | 76.982%    | 964             | 26.8              | 40.19°C        | 0.96        |
|             | 12.078V        | 4.995V         | 3.309V         | 5.136V        | 87.561        |            |                 |                   | 44.12°C        | 229.99V     |
| <b>CL4</b>  | <b>54.382A</b> | <b>0A</b>      | <b>0A</b>      | <b>0A</b>     | 649.51        | 87.398%    | 1806            | 43                | 45.53°C        | 0.998       |
|             | 11.944V        | 4.978V         | 3.3V           | 5.077V        | 743.174       |            |                 |                   | 52.85°C        | 229.88V     |

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 |
|------------|---------------|---------------|---------------|---------------|---------------|------------|-----------------|-------------------|----------------|-------------|
| <b>20W</b> | <b>1.227A</b> | <b>0.499A</b> | <b>0.494A</b> | <b>0.194A</b> | 19.996        | 74.433%    | 920             | 25.4              | 36.83°C        | 0.951       |
|            | 12.099V       | 5.011V        | 3.338V        | 5.157V        | 26.874        |            |                 |                   | 38.11°C        | 115.03V     |
| <b>40W</b> | <b>2.704A</b> | <b>0.699A</b> | <b>0.693A</b> | <b>0.291A</b> | 39.998        | 81.313%    | 922             | 25.4              | 37.49°C        | 0.969       |
|            | 12.092V       | 5.009V        | 3.336V        | 5.15V         | 49.189        |            |                 |                   | 39.61°C        | 115.03V     |
| <b>60W</b> | <b>4.180A</b> | <b>0.899A</b> | <b>0.891A</b> | <b>0.389A</b> | 59.999        | 84.246%    | 924             | 25.4              | 38.88°C        | 0.98        |
|            | 12.087V       | 5.007V        | 3.333V        | 5.144V        | 71.233        |            |                 |                   | 37.19°C        | 115.02V     |
| <b>80W</b> | <b>5.654A</b> | <b>1.099A</b> | <b>1.09A</b>  | <b>0.487A</b> | 79.95         | 85.911%    | 951             | 26.2              | 39.39°C        | 0.987       |
|            | 12.083V       | 5.005V        | 3.331V        | 5.138V        | 93.079        |            |                 |                   | 40.16°C        | 115.01V     |

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 |
|------------|---------------|---------------|---------------|---------------|---------------|------------|-----------------|-------------------|----------------|-------------|
| <b>20W</b> | <b>1.228A</b> | <b>0.499A</b> | <b>0.495A</b> | <b>0.194A</b> | 20.005        | 76.434%    | 947             | 26                | 36.7°C         | 0.598       |
|            | 12.095V       | 5.011V        | 3.337V        | 5.153V        | 26.223        |            |                 |                   | 37.32°C        | 229.99V     |
| <b>40W</b> | <b>2.704A</b> | <b>0.699A</b> | <b>0.693A</b> | <b>0.291A</b> | 40.002        | 83.223%    | 954             | 26.4              | 37.14°C        | 0.883       |
|            | 12.091V       | 5.009V        | 3.335V        | 5.149V        | 48.084        |            |                 |                   | 38.92°C        | 229.99V     |
| <b>60W</b> | <b>4.181A</b> | <b>0.899A</b> | <b>0.891A</b> | <b>0.389A</b> | 60.001        | 86.179%    | 957             | 26.6              | 38.61°C        | 0.955       |
|            | 12.086V       | 5.007V        | 3.333V        | 5.143V        | 69.689        |            |                 |                   | 39.8°C         | 229.99V     |
| <b>80W</b> | <b>5.654A</b> | <b>1.099A</b> | <b>1.09A</b>  | <b>0.487A</b> | 79.948        | 87.416%    | 955             | 26.5              | 39.16°C        | 0.961       |
|            | 12.082V       | 5.005V        | 3.331V        | 5.138V        | 91.45         |            |                 |                   | 39.37°C        | 229.94V     |

The results above are not used in the certification process

## Ripple Measurements

## 115V

| Test       | 12V     | 5V      | 3.3V    | 5VSB    | Pass/Fail |
|------------|---------|---------|---------|---------|-----------|
| 10% Load   | 24.81mV | 24.52mV | 21.99mV | 22.56mV | Pass      |
| 20% Load   | 27.32mV | 25.09mV | 21.43mV | 22.10mV | Pass      |
| 30% Load   | 28.09mV | 25.60mV | 22.46mV | 21.33mV | Pass      |
| 40% Load   | 32.59mV | 26.72mV | 24.71mV | 22.66mV | Pass      |
| 50% Load   | 34.74mV | 27.28mV | 22.82mV | 24.04mV | Pass      |
| 60% Load   | 44.25mV | 28.76mV | 23.74mV | 24.86mV | Pass      |
| 70% Load   | 55.25mV | 29.89mV | 24.81mV | 25.98mV | Pass      |
| 80% Load   | 52.49mV | 31.57mV | 26.04mV | 25.42mV | Pass      |
| 90% Load   | 56.74mV | 32.13mV | 26.96mV | 26.04mV | Pass      |
| 100% Load  | 55.30mV | 31.95mV | 27.81mV | 27.33mV | Pass      |
| 110% Load  | 59.02mV | 33.99mV | 26.67mV | 27.82mV | Pass      |
| Crossload1 | 41.93mV | 38.59mV | 31.28mV | 22.74mV | Pass      |
| Crossload2 | 44.41mV | 49.25mV | 29.16mV | 24.35mV | Pass      |

| Test       | 12V     | 5V      | 3.3V    | 5VSB    | Pass/Fail |
|------------|---------|---------|---------|---------|-----------|
| Crossload3 | 43.18mV | 32.49mV | 36.27mV | 25.22mV | Pass      |
| Crossload4 | 45.32mV | 24.49mV | 22.81mV | 24.84mV | Pass      |

The results above are not used in the certification process

## 230V

| Test       | 12V     | 5V      | 3.3V    | 5VSB    | Pass/Fail |
|------------|---------|---------|---------|---------|-----------|
| 10% Load   | 24.56mV | 24.22mV | 23.33mV | 23.99mV | Pass      |
| 20% Load   | 25.73mV | 23.96mV | 22.56mV | 21.59mV | Pass      |
| 30% Load   | 27.78mV | 25.44mV | 22.41mV | 22.51mV | Pass      |
| 40% Load   | 33.05mV | 26.31mV | 22.97mV | 22.51mV | Pass      |
| 50% Load   | 35.04mV | 27.90mV | 22.20mV | 23.89mV | Pass      |
| 60% Load   | 43.18mV | 28.25mV | 23.07mV | 23.48mV | Pass      |
| 70% Load   | 52.23mV | 29.99mV | 23.84mV | 23.83mV | Pass      |
| 80% Load   | 51.21mV | 31.27mV | 27.16mV | 24.96mV | Pass      |
| 90% Load   | 53.15mV | 32.69mV | 26.09mV | 27.47mV | Pass      |
| 100% Load  | 52.40mV | 33.25mV | 28.06mV | 25.32mV | Pass      |
| 110% Load  | 59.01mV | 34.93mV | 27.39mV | 26.24mV | Pass      |
| Crossload1 | 42.43mV | 37.99mV | 31.80mV | 22.83mV | Pass      |
| Crossload2 | 43.39mV | 49.56mV | 28.85mV | 25.17mV | Pass      |
| Crossload3 | 42.87mV | 32.13mV | 36.63mV | 24.20mV | Pass      |
| Crossload4 | 41.92mV | 24.44mV | 23.28mV | 21.78mV | Pass      |

The results above are not used in the certification process

## XPG Pylon II 650W



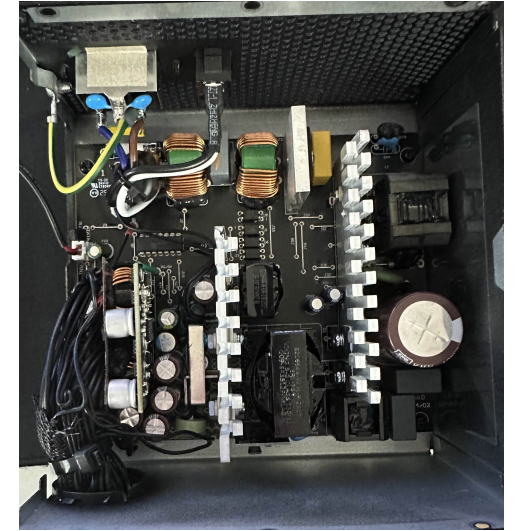
Top side

|                                   |       |                          |       |
|-----------------------------------|-------|--------------------------|-------|
| <b>XPG</b>                        |       | <b>PYLON II</b>          |       |
| Model (型番/仕名)                     |       | <b>PYLONII650BRONZE</b>  |       |
| AC Input (電源入力仕名/仕様)              |       | 100-240VAC, 50-60Hz, 10A |       |
| DC Output (直流電圧/出力仕様)             | +5V   | +3.3V                    | +12V  |
| Output Current (直流電流/出力仕様)        | 20A   | 20A                      | 54A   |
| Output Power (直流電力/出力仕様)          | 200W  | 645W                     | 650W  |
| Output Voltage Regulation (電圧調整率) | ±0.5% | ±0.5%                    | ±0.5% |
| Output Current Regulation (電流調整率) | ±0.5% | ±0.5%                    | ±0.5% |
| Output Power Regulation (電力調整率)   | ±0.5% | ±0.5%                    | ±0.5% |
| Total Continuous Power (連続動作電力)   |       | 650W                     |       |

### Power specifications label



Fan



## PSU Internals

Cybernetics bietet freiwillige Zertifizierungsprogramme für Netzteile – ETA für Effizienz, LAMBDA für Lautstärke und SAFE für Sicherheit und korrekten Betrieb – sowie für Kühlprodukte mit DELTA für die Schalldämmung von Gehäusen und PHI für Luftstrom und statischen Druck von Lüftern

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