# Wentai AiBARZA AIdan D1515 (1300W)

Serial Number -

Lab ID WT13003083

Certification ID 253083

Test Result Report ID: 25PS3083A

Certificate Issue Date: Jan 12, 2026

115V

Scheme: ETA-EMI PSU

115V

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 | Wentai |
| Model | AiBARZA AIdan D1515 (1300W) |
| OEM/ODM | Wentai |
| Serial Number | - |
| Product Specifications | |
| Manufacturer-Provided Information | |
| Rated Voltage (Vrms) | 100-240 |

| | |
|---|---|
| Rated Current (Arms) | 7.5-15 |
| Rated Frequency (Hz) | 50-60 |
| Rated Power (W) | 1300 |
| Operating Temperature (Continuous Full Load) (°C) | 0 - 50 |
| Type | ATX12V |
| Cable Design | Fully Modular |
| Warranty | No Info |
| Cybenetics Measurements | |
| Dimensions (W x H x D) | 150 x 85 x 190mm |
| Weight | 2.80 kg (6.17 lb) |
| Cooling | 135mm Double Ball Bearing Fan (CF1325H12D) |
| Semi-Passive Operation | ✓ |
| Cybenetics Testing Information | |
| Lab ID | WT13003083 |
| Date of receipt | Nov 25, 2025 |
| Testing Date | Dec 30, 2025 |
| Report Issued Date | Jan 12, 2026 |
| Engineer Name | Georgios Theodoros Sarimpalas |
| Authorized By the Laboratory Technical Manager | Aristeidis Bitziopoulos |
| Signature |  |

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

| **Modular Cables** | | | | |
|---|---|---|---|---|
| **Description** | **Cable Count** | **Connector Count (Total)** | **Gauge** | **Cable Type** |
| ATX connector 20+4 pin (610mm) | 1 | 1 | 16-20AWG | Tinned Copper |
| 4+4 pin EPS12V (1010mm) | 2 | 2 | 16AWG | Tinned Copper |
| 6+2 pin PCIe (690mm) | 4 | 4 | 16-18AWG | Tinned Copper |
| 12+4 pin PCIe (750mm) (600W) | 4 | 4 | 16-24AWG | Tinned Copper |
| SATA (400mm+120mm+120mm) | 3 | 9 | 18AWG | Tinned Copper |

| | | | | |
|---|---|---|---|---|
| 4-pin Molex (450mm+120mm) | 3 | 6 | 18AWG | Tinned Copper |
| AC Power Cord (1390mm) - C19 coupler | 1 | 1 | 14AWG | - |

## Protection Features

| | |
|---|---|
| Under Voltage Protection | ✓ |
| 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 | 20 | 20 | 108.3 | 3 | 0.3 |
| | Watts | 100 | | 1300 | 15 | 3.6 |
| Total Max. Power (W) | | 1300 | | | | |

## Parts Description

| | |
|---|---|
| **General Data** | |
| Manufacturer (OEM) | Wentai |
| PCB Type | Double-Sided |
| **Primary Side** | |
| Transient Filter | 6x Y caps, 3x X caps, 2x CM chokes, 1x MOV, 1x discharge IC |
| Inrush Protection | 1x NTC Thermistor SCK-15105 (10Ohm) & Relay |
| Inrush Bypass Diode | 1x MCC S8ML (1000V, 8A @ 25°C) |
| Bridge Rectifier(s) | 1x Lision GBJ25JL, 8x SemiHow HCA60R040 (600V, 68.8A, 0.04ohm) |
| Bridge Rectify Controller | NXP TEA2209T |
| PFC MODFETs (HEMTs) | 2x Transphorm TP65H050WS GaN FETs (650V, 25A @ 100°C, Rds(on): 50mOhm) |
| Bulk Cap(s) | 4x Toshin Kogyo (400V, 470uF each or 1,680uF combined, 2,000h @ 105°C, LGW) |

| | |
|---|---|
| Main Switchers | 4x Alpha & Omega AOTF29S50 (500V, 18A @ 100°C, 0.15ohm) |
| PFC (MOSFET) Controller ICs | Texas Instruments UCD3138A |
| IC Driver(s) | 2x Texas Instruments UCC21520 |
| MCUs | Texas Instruments UCD3138A |
| Topology | Primary side: Digital, Bridgeless Interlaved PFC, Full-Bridge & LLC converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters |
| **Secondary Side** | |
| +12V MOSFETs | 16x Toshiba TPH1R005PL (45V, 150A @ 25°C, Rds(on): 0.8mOhm) |
| 5V & 3.3V | DC-DC Converters: 6x Excelliance EMB04N03HR(30V, 45A @ 100°C, Rds(on): 4.0mOhm)<br>PWM Controller(s): Anpec APW7159C |
| Filtering Capacitors | Electrolytic:<br>5x Toshin Kogyo (8,000h @ 105C, LWY)<br>2x Toshin Kogyo (5,000h @ 105C, LWV)<br>Polymer:<br>78x Toshin Kogyo (PRJ) |
| Supervisor IC | Weltrend WT7502R |
| Fan Controller | Texas Instruments UCD3138A |
| Fan Model | 135mm Double Ball Bearing Fan (CF1325H12D) |
| **5VSB Circuit** | |
| High Side Rectifier | Primary Side: Potens PMD04N65M (650V, 4A @ 25°C, Rds(on): 260mOhm)<br>Secondary Side: MCC MBR15U45 (45V, 15A @ 90°C) |
| Standby PWM Controller | Weltrend WT7161R |

# 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) | 93.055% |
| Average Noise Output (>1450 Load Combinations) | 7.12dBA |
| Average PF (>1450 Load Combinations) | 0.989 |
| Efficiency With 10W (≤500W) or 2% (>500W) Load | 70.778% |
| Standby Power Consumption | 0.0271W |
| Non-Accredited | |
| 12V Ripple (Full Load) | 43.17mV |
| 5V Ripple (Full Load) | 21.92mV |
| 3.3V Ripple (Full Load) | 24.14mV |
| 5VSB Ripple (Full Load) | 16.92mV |
| 12V Load Regulation | 0.59% |
| 5V Load Regulation | 0.21% |
| 3.3V Load Regulation | 0.27% |
| 5VSB Load Regulation | 0.82% |
| Inrush Current | 16.242A |

## Hold-Up Time & PWR_OK Signal

| | |
|---|---|
| Hold-Up Time (ms) | 25.6 |
| AC Loss to PWR_OK Hold Up Time (ms) | 20.1 |
| PWR_OK Inactive to DC Loss Delay (ms) | 5.5 |

## Vampire Power

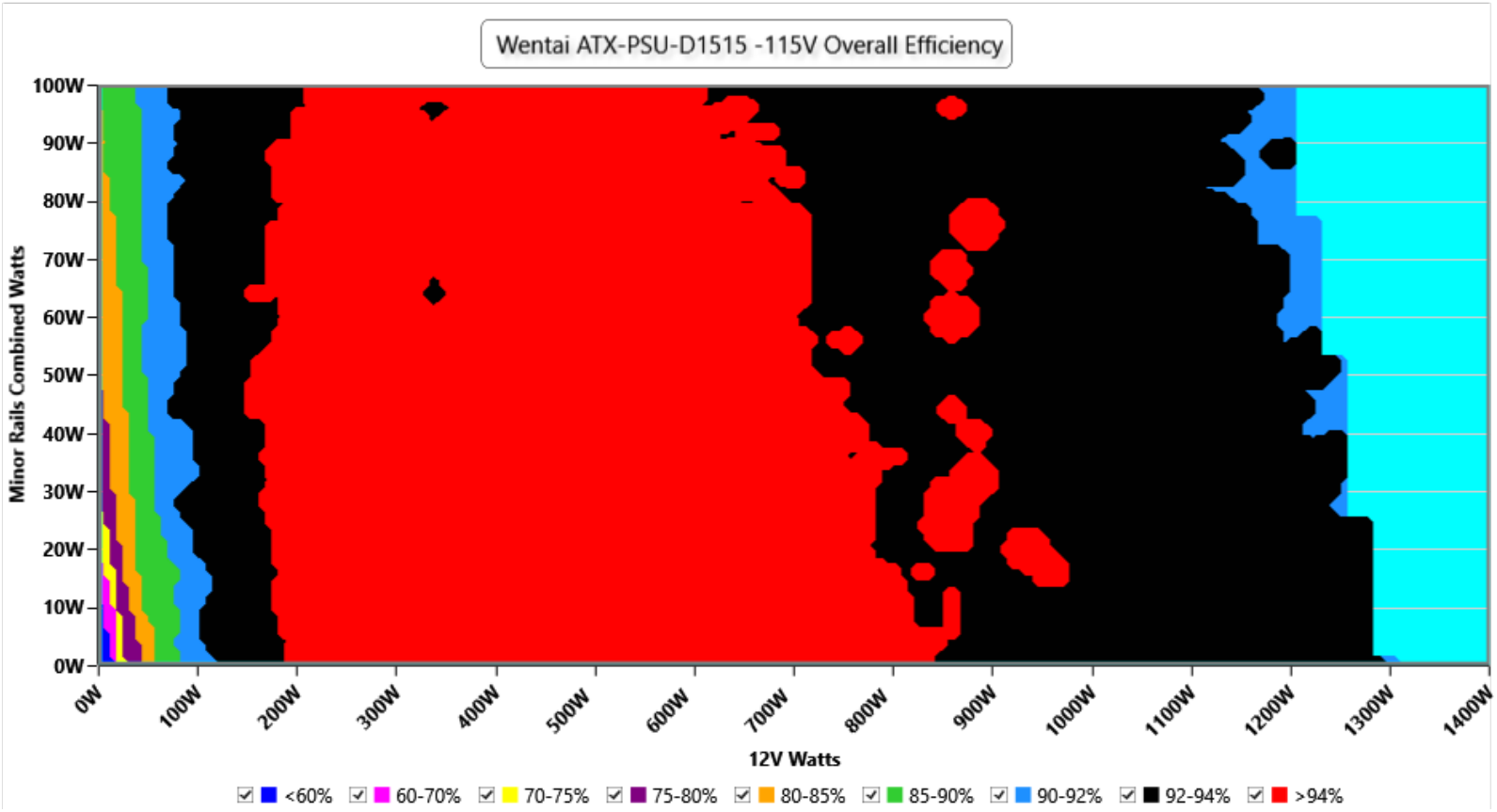
### Tables 115V

| Detailed Results | | | | | | |
|---|---|---|---|---|---|---|
| | Average | Min | Limit Min | Max | Limit Max | Result |
| Mains Voltage RMS: | 115.01 V | 115.00 V | 113.85 V | 115.04 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 | 0.17 % | 2.00 % | PASS |
| Real Power: | 0.027 W | 0.013 W | N/A | 0.042 W | N/A | N/A |
| Apparent Power: | 17.205 W | 17.186 W | N/A | 17.226 W | N/A | N/A |
| Power Factor: | 0.002 | N/A | N/A | N/A | N/A | N/A |

## Efficiency Graph

### 115V

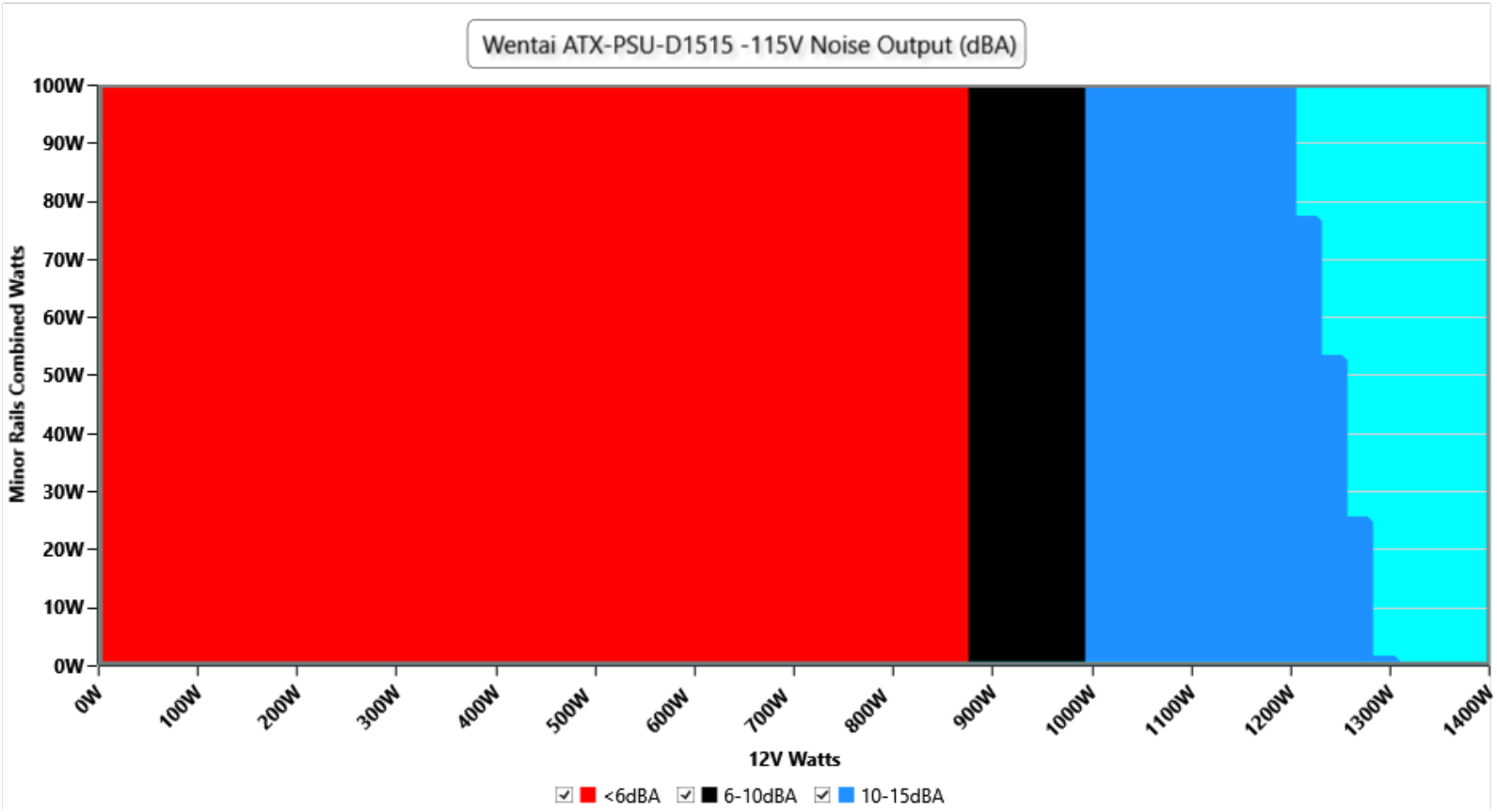



### INFO

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

## 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

## Noise under high ambient temperature (indicative)

### 115V

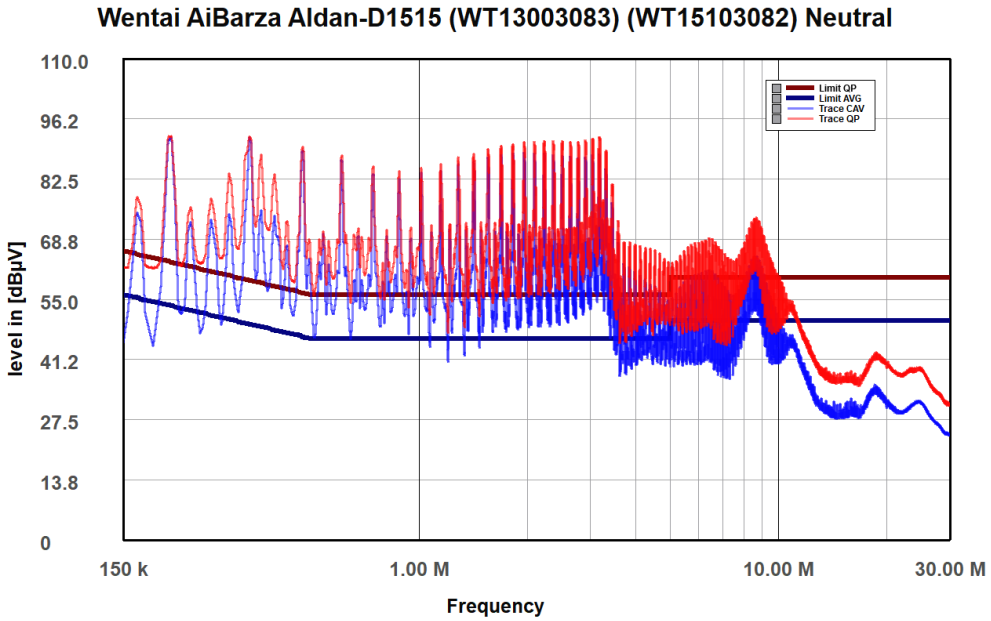
| Load | Normal ambient<br>fan · noise · intake | High ambient<br>fan · noise · intake | Noise change |
|---|---|---|---|
| 10% | 0 RPM · <6.0 dB(A) · 30.6 °C | 0 RPM · <6.0 dB(A) · 48.4 °C | fan off in both |
| 20% | 0 RPM · <6.0 dB(A) · 32.3 °C | 0 RPM · <6.0 dB(A) · 48.9 °C | fan off in both |
| 50% | 0 RPM · <6.0 dB(A) · 32.9 °C | 0 RPM · <6.0 dB(A) · 44.9 °C | fan off in both |
| 100% | 460 RPM · 14.2 dB(A) · 30.3 °C | 466 RPM · 12.8 dB(A) · 45.3 °C | **-1.4 dB(A)** |

### INFO

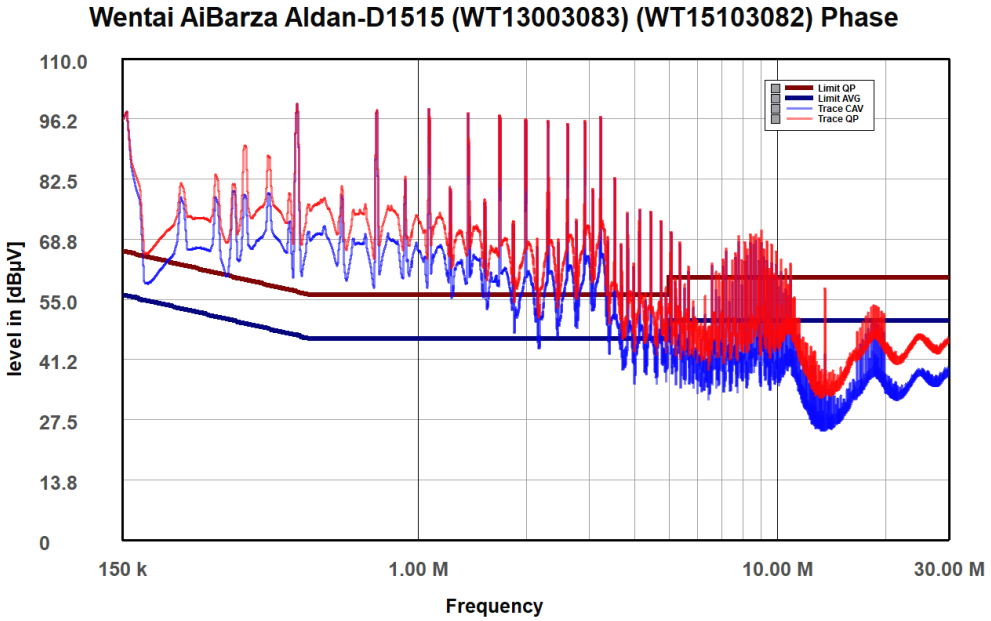
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative 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.*

## Conducted Emissions EN 55032 & CISPR 32



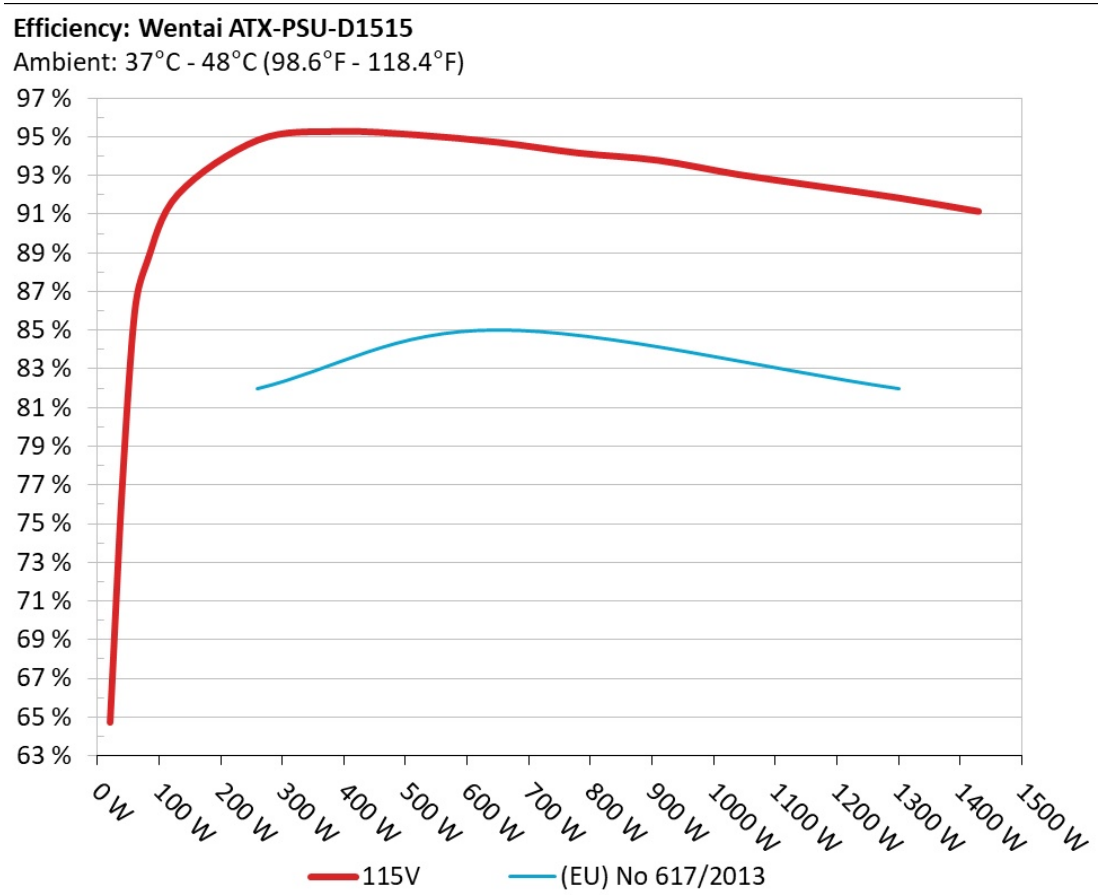

NEUTRAL




PHASE

## Indicative Performance

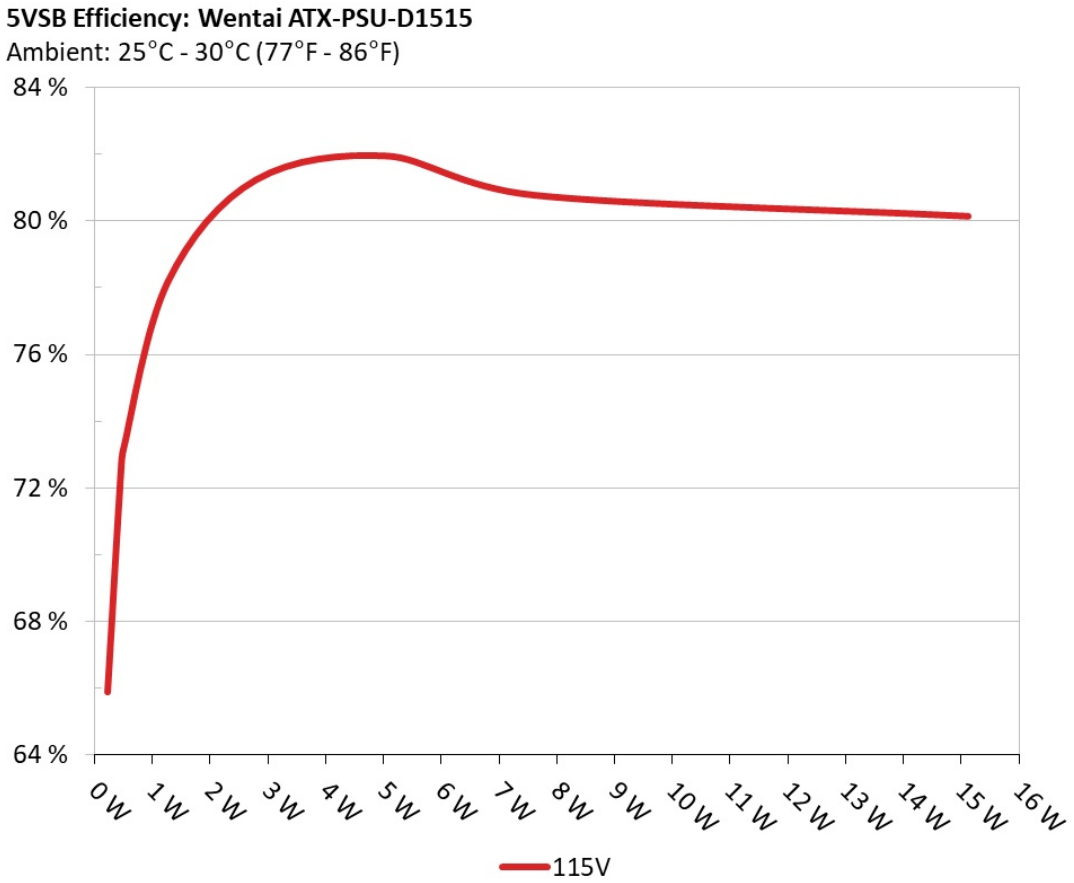
### Efficiency under high ambient temperature




**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




### 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** | 0.23W | 65.872% | 0.02 |
| | 5.099V | 0.349W | | 114.89V |

| | | | | |
|---|---|---|---|---|
| **2** | **0.09A** | 0.459W | 72.465% | 0.037 |
| | 5.097V | 0.633W | | 114.89V |
| **3** | **0.55A** | 2.797W | 81.25% | 0.185 |
| | 5.085V | 3.443W | | 114.88V |
| **4** | **1A** | 5.078W | 81.961% | 0.299 |
| | 5.078V | 6.196W | | 114.87V |
| **5** | **1.5A** | 7.604W | 80.787% | 0.392 |
| | 5.069V | 9.413W | | 114.88V |
| **6** | **3A** | 15.112W | 80.155% | 0.522 |
| | 5.037V | 18.853W | | 114.87V |

## Protection Features

| | |
|---|---|
| OCP (Normal @ 31.2°C) | 12V: 163.2A (150.69%), 12.067V *Didn't Shut Down<br>5V: 27.1A (135.5%), 5.153V<br>3.3V: 30.6A (153%), 3.308V *Didn't Shut Down<br>5VSB: 3.6A (120%), 5.036V |
| OCP (Hot @ 42°C) | 12V: 138.6A (127.98%), 12.084V<br>5V: 25.9A (129.5%), 5.159V<br>3.3V: 29.6A (148%), 3.309V<br>5VSB: 3.6A (120%), 5.036V |
| OPP (Normal @ 27.6°C) | 1953.11W (150.24%) *Didn't Shut Down |
| OPP (Hot @ 43.5°C) | 1801.65W (138.59%) |
| OTP | ✓ (112°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)

### 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%** | **9.002A** | **1.94A** | **1.996A** | **0.972A** | 129.994 | 92.046% | 0 | <6.0 | 48.37°C | 0.974 |
| | 12.042V | 5.154V | 3.306V | 5.143V | 141.175 | | | | 40.12°C | 114.83V |
| **20%** | **19.000A** | **2.911A** | **2.995A** | **1.167A** | 259.957 | 94.852% | 0 | <6.0 | 48.86°C | 0.994 |
| | 12.055V | 5.153V | 3.305V | 5.14V | 274.078 | | | | 40.85°C | 114.79V |
| **30%** | **29.341A** | **3.396A** | **3.495A** | **1.363A** | 389.602 | 95.298% | 0 | <6.0 | 46.58°C | 0.997 |
| | 12.050V | 5.153V | 3.305V | 5.136V | 408.852 | | | | 41.15°C | 114.75V |
| **40%** | **39.663A** | **3.882A** | **3.996A** | **1.559A** | 519.574 | 95.113% | 0 | <6.0 | 45.05°C | 0.996 |
| | 12.061V | 5.153V | 3.304V | 5.133V | 546.302 | | | | 41.55°C | 114.7V |
| **50%** | **49.704A** | **4.853A** | **4.996A** | **1.755A** | 649.719 | 94.737% | 0 | <6.0 | 44.88°C | 0.996 |
| | 12.055V | 5.152V | 3.303V | 5.13V | 685.808 | | | | 42.15°C | 114.67V |
| **60%** | **59.653A** | **5.824A** | **5.997A** | **1.951A** | 779.848 | 94.186% | 0 | <6.0 | 45.47°C | 0.988 |
| | 12.070V | 5.151V | 3.302V | 5.127V | 827.982 | | | | 42.59°C | 114.61V |
| **70%** | **69.677A** | **6.796A** | **6.999A** | **2.147A** | 909.943 | 93.8% | 0 | <6.0 | 50.02°C | 0.996 |
| | 12.068V | 5.151V | 3.301V | 5.125V | 970.108 | | | | 43.38°C | 114.56V |
| **80%** | **79.578A** | **7.767A** | **8A** | **2.245A** | 1039.543 | 93.073% | 361 | 7.9 | 43.7°C | 0.993 |
| | 12.085V | 5.15V | 3.3V | 5.124V | 1116.958 | | | | 46.42°C | 114.52V |
| **90%** | **89.973A** | **8.254A** | **8.487A** | **2.344A** | 1169.785 | 92.467% | 419 | 12.2 | 44.38°C | 0.996 |
| | 12.084V | 5.149V | 3.299V | 5.121V | 1265.049 | | | | 47.98°C | 114.47V |
| **100%** | **100.011A** | **8.742A** | **9.005A** | **2.937A** | 1299.417 | 91.865% | 466 | 12.8 | 45.33°C | 0.995 |
| | 12.096V | 5.148V | 3.298V | 5.109V | 1414.403 | | | | 48.84°C | 114.42V |
| **110%** | **110.083A** | **9.715A** | **10.1A** | **2.936A** | 1429.593 | 91.162% | 515 | 14.3 | 47.75°C | 0.995 |
| | 12.094V | 5.147V | 3.297V | 5.11V | 1568.138 | | | | 50.44°C | 114.36V |

| Test | 12V | 5V | 3.3V | 5VSB | DC/AC (Watts) | Efficiency | Fan Speed (RPM) | PSU Noise (dB[A]) | Temps (In/Out) | PF/AC Volts |
|---|---|---|---|---|---|---|---|---|---|---|
| **CL1** | **0.116A** | **11.68A** | **12.018A** | **0A** | 101.307 | 84.206% | 0 | <6.0 | 56.62°C | 0.967 |
| | 12.083V | 5.154V | 3.303V | 5.19V | 120.297 | | | | 40.33°C | 114.84V |
| **CL2** | **0.116A** | **19.364A** | **0A** | **0A** | 101.376 | 83.251% | 0 | <6.0 | 54.33°C | 0.968 |
| | 12.081V | 5.163V | 3.299V | 5.209V | 121.77 | | | | 40.06°C | 114.84V |
| **CL3** | **0.115A** | **0A** | **19.927A** | **0A** | 67.385 | 77.757% | 0 | <6.0 | 51.65°C | 0.944 |
| | 12.080V | 5.159V | 3.312V | 5.174V | 86.664 | | | | 40.64°C | 114.84V |
| **CL4** | **107.463A** | **0A** | **0A** | **0A** | 1299.938 | 92.018% | 502 | 14.6 | 45.69°C | 0.995 |
| | 12.096V | 5.161V | 3.305V | 5.148V | 1412.672 | | | | 49.47°C | 114.44V |

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** | **1.234A** | **0.486A** | **0.499A** | **0.194A** | 19.991 | 64.744% | 0 | <6.0 | 41.14°C | 0.753 |
| | 12.024V | 5.144V | 3.304V | 5.143V | 30.911 | | | | 36.72°C | 114.89V |
| **40W** | **2.713A** | **0.679A** | **0.699A** | **0.291A** | 39.998 | 77.113% | 0 | <6.0 | 44.24°C | 0.873 |
| | 12.048V | 5.153V | 3.307V | 5.151V | 51.86 | | | | 37.59°C | 114.86V |
| **60W** | **4.196A** | **0.873A** | **0.898A** | **0.388A** | 59.999 | 85.98% | 0 | <6.0 | 45.76°C | 0.919 |
| | 12.045V | 5.154V | 3.307V | 5.15V | 69.796 | | | | 38.9°C | 114.85V |
| **80W** | **5.672A** | **1.067A** | **1.098A** | **0.486A** | 79.941 | 88.553% | 0 | <6.0 | 47°C | 0.945 |
| | 12.044V | 5.155V | 3.307V | 5.149V | 90.22 | | | | 39.3°C | 114.85V |

The results above are not used in the certification process

## Ripple Measurements 115V

| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 10% Load | 29.41mV | 18.27mV | 28.78mV | 12.93mV | Pass |
| 20% Load | 32.83mV | 20.07mV | 30.32mV | 15.14mV | Pass |
| 30% Load | 33.60mV | 17.29mV | 21.85mV | 13.24mV | Pass |
| 40% Load | 37.64mV | 17.40mV | 21.24mV | 13.03mV | Pass |
| 50% Load | 48.08mV | 25.66mV | 45.05mV | 21.34mV | Pass |

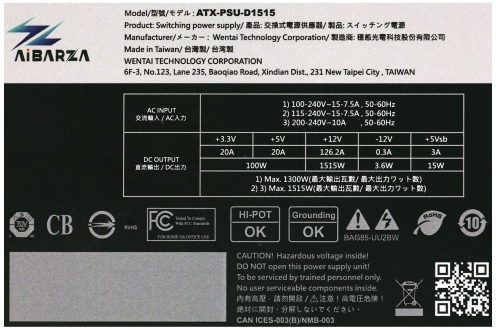
| Test | 12V | 5V | 3.3V | 5VSB | Pass/Fail |
|---|---|---|---|---|---|
| 60% Load | 64.39mV | 25.15mV | 29.60mV | 16.57mV | Pass |
| 70% Load | 36.31mV | 18.99mV | 24.11mV | 14.16mV | Pass |
| 80% Load | 54.62mV | 24.12mV | 36.32mV | 19.75mV | Pass |
| 90% Load | 36.16mV | 22.27mV | 24.52mV | 14.47mV | Pass |
| 100% Load | 43.17mV | 21.92mV | 24.14mV | 16.92mV | Pass |
| 110% Load | 46.99mV | 24.89mV | 29.67mV | 17.01mV | Pass |
| Crossload1 | 31.71mV | 19.22mV | 21.18mV | 12.36mV | Pass |
| Crossload2 | 29.76mV | 19.50mV | 21.34mV | 13.14mV | Pass |
| Crossload3 | 27.57mV | 17.86mV | 22.47mV | 12.11mV | Pass |
| Crossload4 | 44.01mV | 20.99mV | 28.69mV | 14.92mV | Pass |

The results above are not used in the certification process

## Wentai AiBARZA AIdan D1515 (1300W)



Top side




Power specifications label




Fan



PSU Internals

All data and graphs included in this test report can be used by any individual on the following conditions:
› It should be mentioned that the test results are provided by Cybenetics
› The link to the original test results document should be provided in any case

Cybenetics runs voluntary certification programs for power supplies - ETA for efficiency, LAMBDA for noise and SAFE for safety and correct operation - and for cooling products, with DELTA for chassis soundproofing and PHI for fan airflow and static pressure. THETA rates cooler performance on AMD AM5 and Intel LGA1851 outside ISO 17065 and accreditation scope

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