Aerocool Aero Bronze 650W

Serial Number SNBAR65AEC1010134

Lab ID AC65001673

Certification ID 251673

Test Result Report ID: 20PS1673A

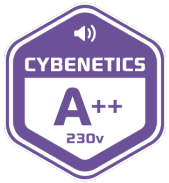
Certificate Issue Date: Jul 13, 2020

230V

Scheme: ETA-EMI PSU



230V



Scheme: LAMBDA PSU



Aristeidis Bitziopoulos, Certification Body General Manager

General Information

Test Equipment

Electronic Loads	Chroma 63601-5 x2 Chroma 63600-2 Chroma 63640-80-80 x10 Chroma 63610-80-20
AC Sources	Chroma 6530, APM SP300VAC4000W-P, GW Instek ASR-3500
Power Analyzers	Rohde & Schwarz HMC8015 & NPA701
Oscilloscopes	Picoscope 4444, Siglent SDS2104X PLUS
Sound Analyzer	Bruel & Kjaer 2270 G4
Microphone	Bruel & Kjaer Type 4955-A
Temperature Logger	Picoscope TC-08
Tachometer	UNI-T UT372
Multimeters	Keysight 34465A
EMI Analyzer	TekBox TBMR-110M-EU
Isolation Transformer	4kVA
UPS	FSP Champ Tower 3kVA, CyberPower OLS3000E 3kVA
Testing Methodology	Cybenetics PSU Test Protocol

DUT Information(Non-accredited measurements)

Product Identification Details	
Brand	Aerocool
Model	Aero Bronze 650W
OEM/ODM	-
Serial Number	SNBAR65AEC1010134
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	200-240
Rated Current (Arms)	5
Rated Frequency (Hz)	47-63

Rated Power (W)	650
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fixed cables
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	120mm Rifle Bearing Fan (DWPH EFS-12E12H)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	AC65001673
Date of receipt	Jun 27, 2020
Testing Date	Jul 1, 2020
Report Issued Date	Jul 13, 2020
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Test Results

Temperature & Compliance Info

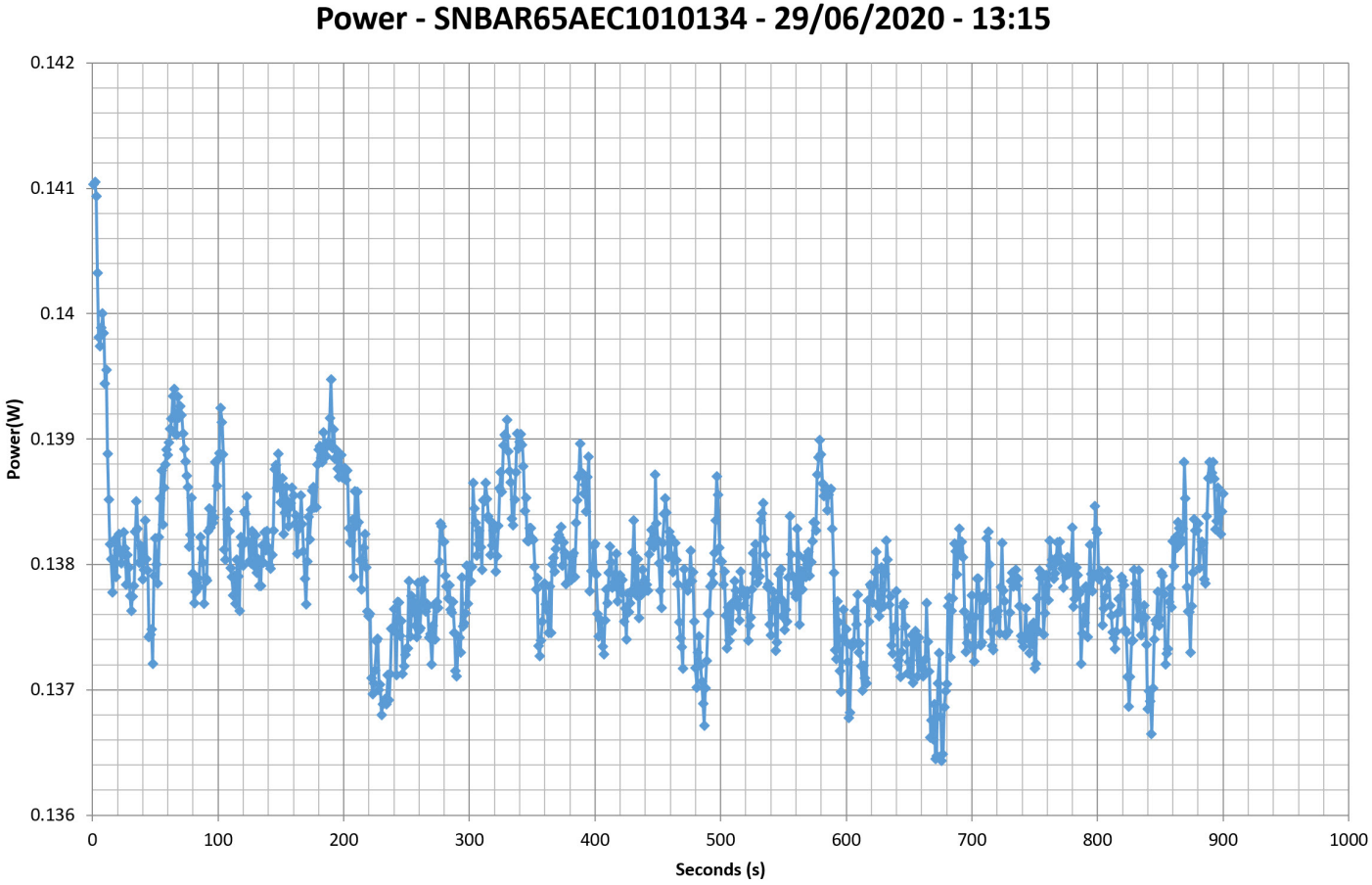
Temperature Range (°C /°F)	28-32 / 82.4-89.6
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓

Performance Summary 230V

Accredited	
Average Efficiency (>1450 load combinations)	87.881%

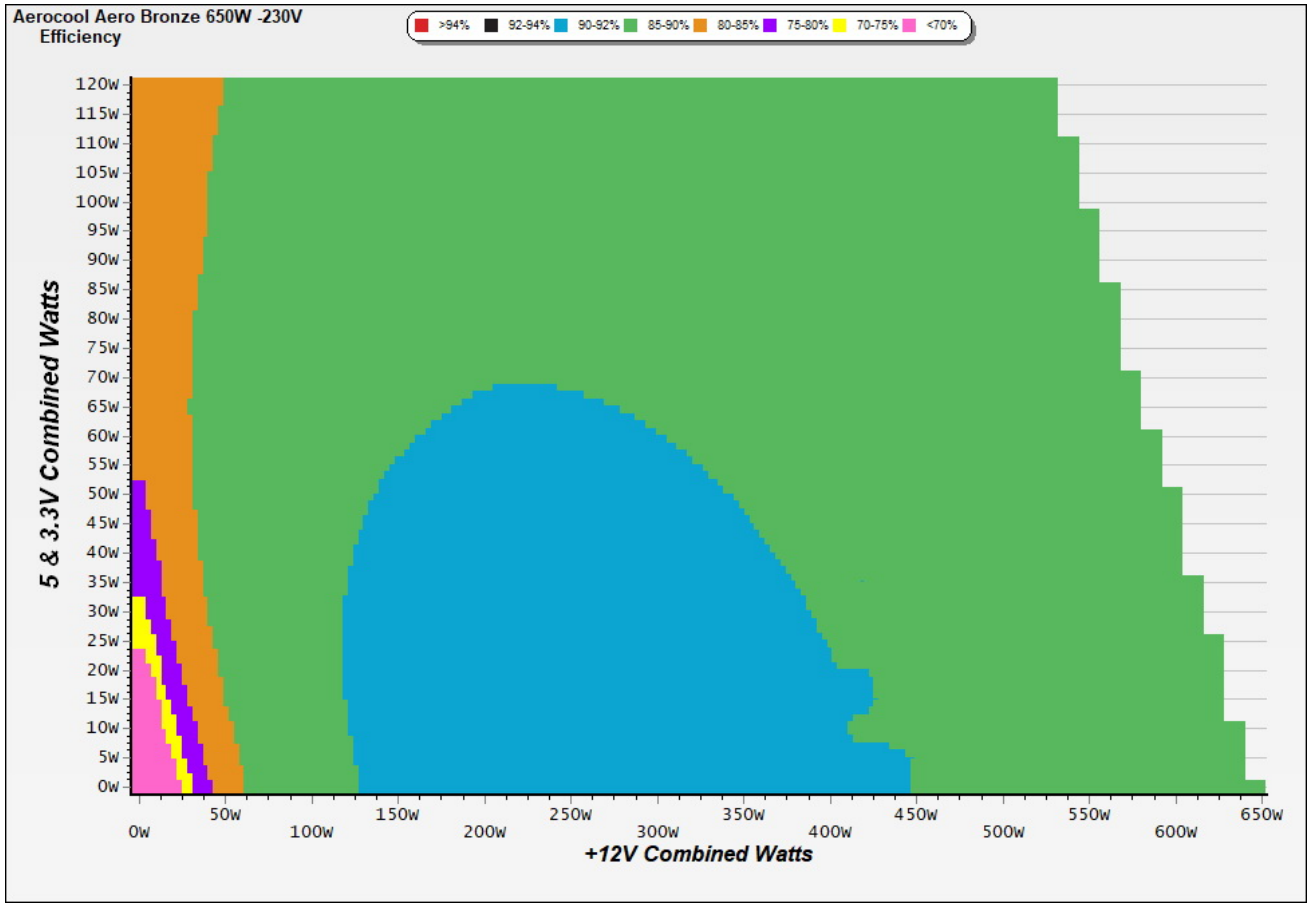
Average Noise Output (>1450 Load Combinations)		18.24dBA
Average PF (>1450 Load Combinations)		0.945
Efficiency With 10W (≤500W) or 2% (>500W) Load		-
Standby Power Consumption		0.1386W
Non-Accredited		
12V Ripple (Full Load)		34.88mV
5V Ripple (Full Load)		22.07mV
3.3V Ripple (Full Load)		33.43mV
5VSB Ripple (Full Load)		28.10mV
12V Load Regulation		1.09%
5V Load Regulation		1.77%
3.3V Load Regulation		0.86%
5VSB Load Regulation		0.53%
Inrush Current		88.900A
Hold-Up Time & PWR_OK Signal		9.70ms
AC Loss to PWR_OK Hold Up Time		8.70ms
PWR_OK Inactive to DC Loss Delay		1.00ms
PSU Timings: T1 (20% / 100%)	67.0ms	65.0ms
PSU Timings: T3 (20% / 100%)	277.0ms	287.0ms
OPP (0.00°C / 0.00°C)	122.04%	-

Graphs 230V


Power - SNBAR65AEC1010134 - 29/06/2020 - 13:15
Power(W)
0.142
0.141
0.14
0.139
0.138
0.137
0.136
0
100
200
300
400
500
600
700
800
900
1000
Seconds (s)

Efficiency Graph

230V

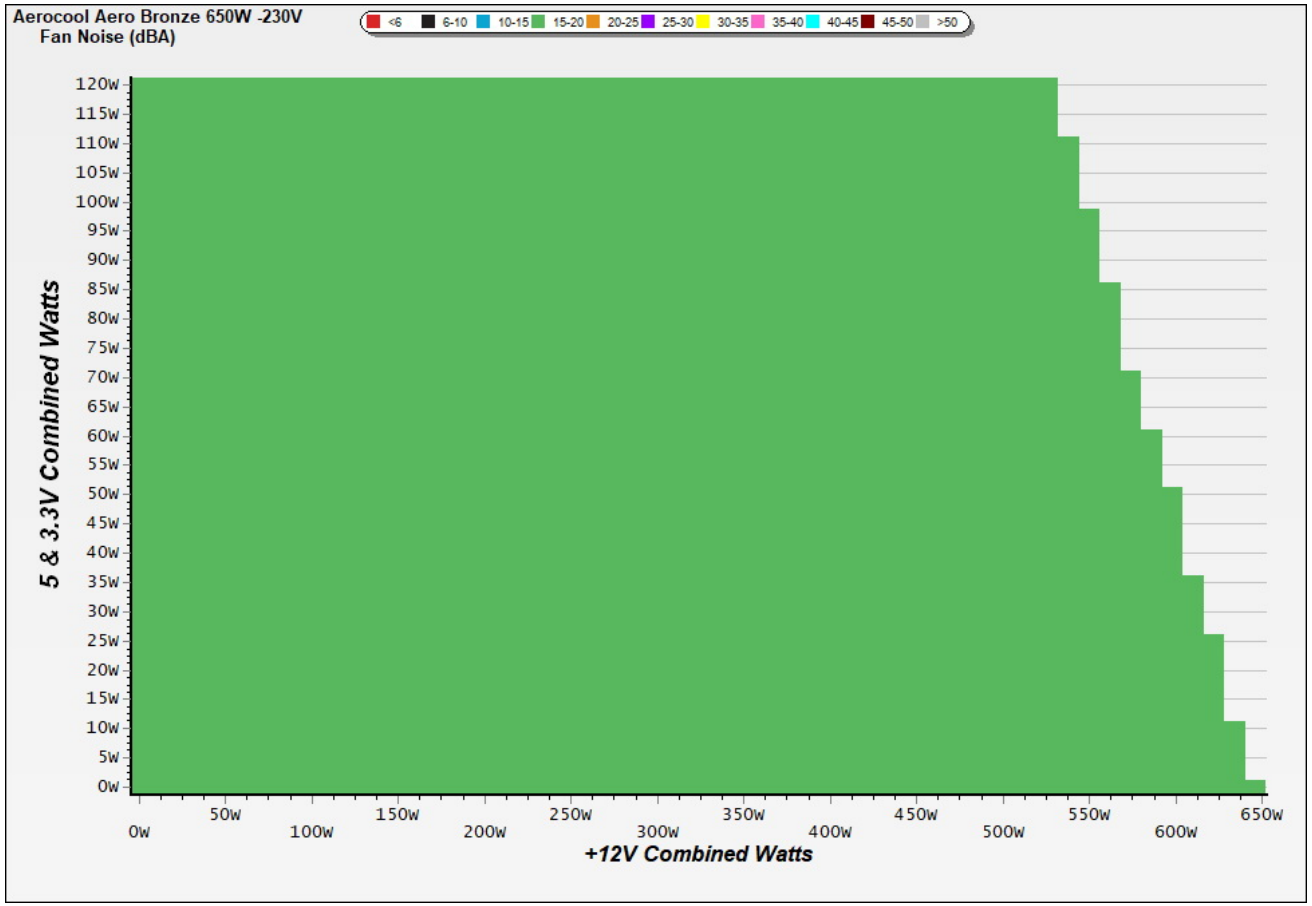


INFO

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

230V

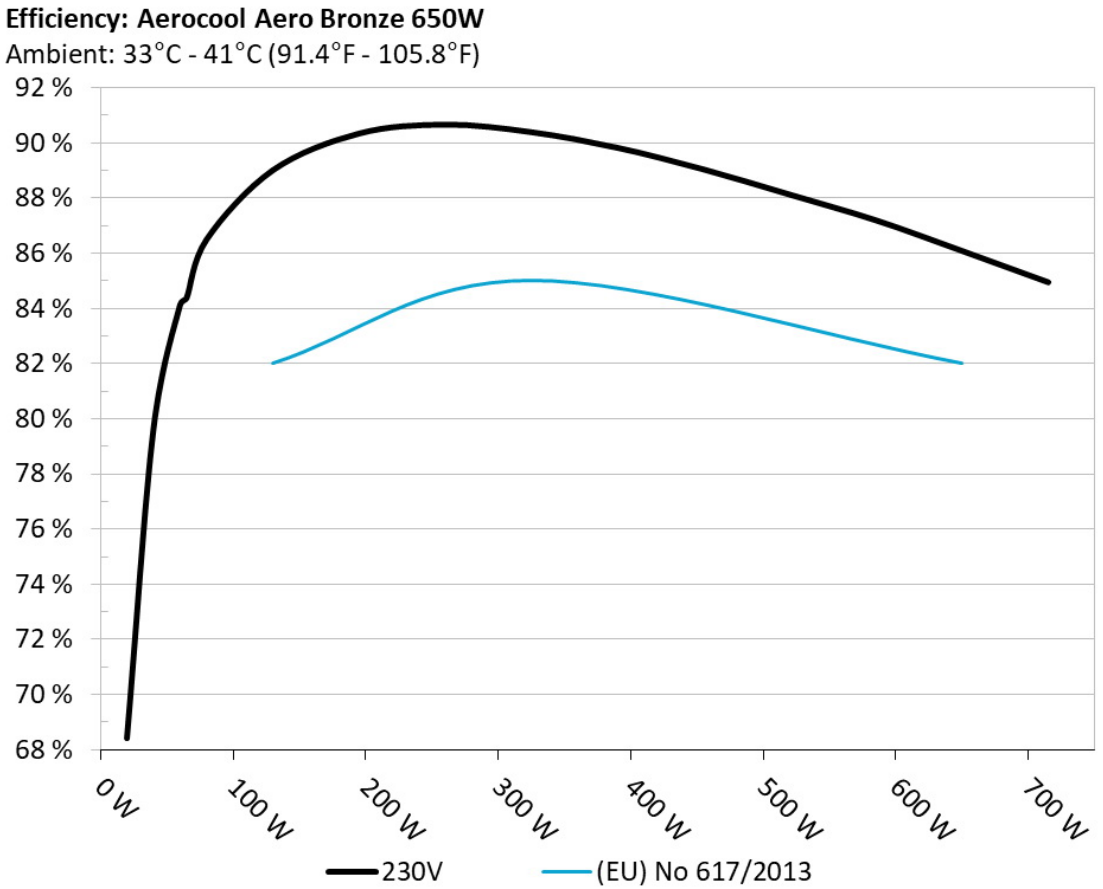


INFO

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

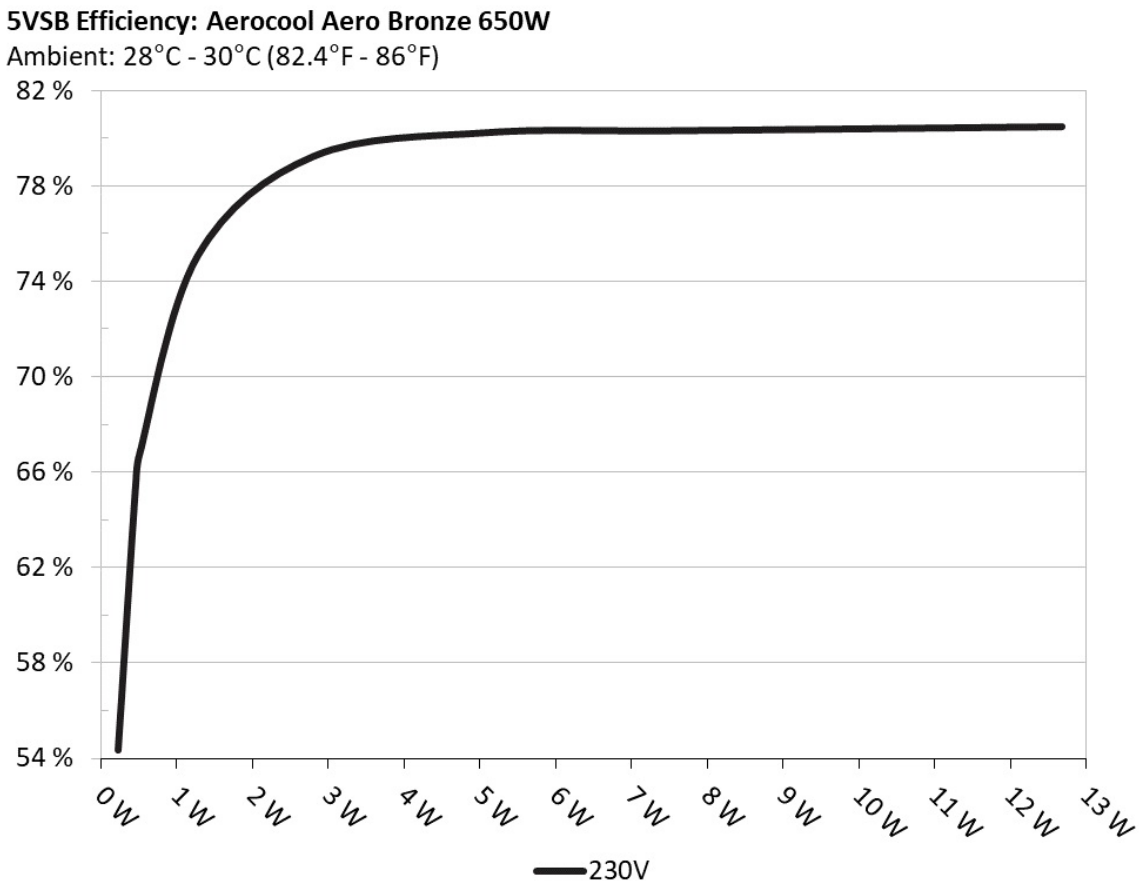
Efficiency under high ambient temperature



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

Supplementary Tests (For Reference)

Typical Load Tests 230V

The results above are not used in the certification process

Light Load Tests 230V

The results above are not used in the certification process

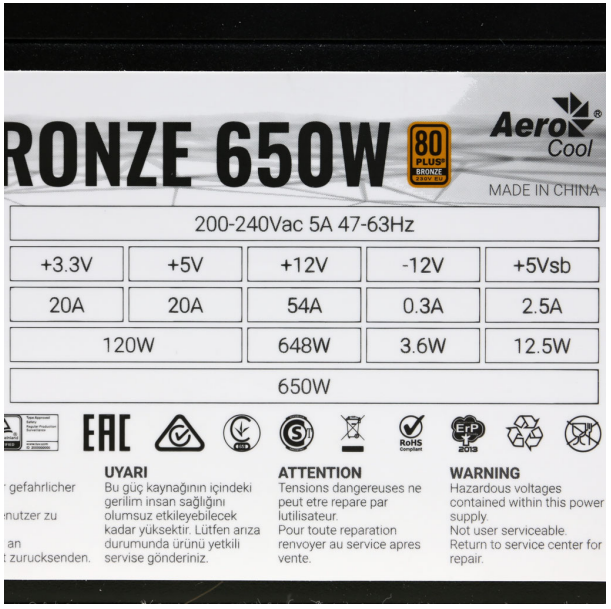
Ripple Measurements 230V

The results above are not used in the certification process

Aerocool Aero Bronze 650W



Top side



Power specifications label