FSP Technology DAGGER PM 1000W

Serial Number S5311030018

Lab ID FS10003092

Certification ID 253092

Test Result Report ID: 25PS3092A

Certificate Issue Date: Jan 14, 2026

Scheme: ETA-EMI PSU

115V



230V



Scheme: LAMBDA PSU

115V



230V





Outside Validation Scope



General Information

Test Equipment

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

DUT Information
(Non-accredited measurements)

Product Identification Details	
Brand	FSP Technology
Model	DAGGER PM 1000W
OEM/ODM	FSP
Serial Number	S5311030018
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	6-13
Rated Frequency (Hz)	50-60
Rated Power (W)	1000
Operating Temperature (Continuous Full Load) (°C)	0 - 50
Type	SFX
Cable Design	Fully Modular
Warranty	No Info
Cybenetics Measurements	
Dimensions (W x H x D)	125 x 63.5 x 100mm
Weight	1.01 kg (2.23 lb)
Cooling	92mm Fluid Dynamic Bearing Fan (HA9215SH12FD-F00)
Semi-Passive Operation	✓
Cybenetics Testing Information	
Lab ID	FS10003092
Date of receipt	Nov 28, 2025
Testing Date	Jan 5, 2026
Report Issued Date	Jan 14, 2026
DUT Notes	The fan starts spinning at very high loads.
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 (350mm)	1	1	16-22AWG	Tinned Copper
4+4 pin EPS12V (500mm)	2	2	16AWG	Tinned Copper
6+2 pin PCIe (350mm+160mm)	2	4	16-18AWG	Tinned Copper
12+4 pin PCIe (500mm) (600W)	1	1	16-24AWG	Tinned Copper

SATA (500mm+155mm+155mm+155mm)	1	4	18AWG	Tinned Copper
SATA (500mm+155mm) / 4-pin Molex (+155mm+155mm)	1	2 / 2	18AWG	Tinned Copper

Protection Features

Under Voltage Protection	✓
Over Power Protection	έεΥ
Over Current (+12V) Protection	έεΥ
Over Temperature Protection	έεΥ
Short Circuit Protection	έεΥ
Surge Protection	έεΥ
Inrush Current Protection	έεΥ
Fan Failure Protection	έεΩ

Power Specifications

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	20	20	83.3	3	0.3
	Watts	100		1000	15	3.6
Total Max. Power (W)		1000				

Test Results

Temperature & Compliance Info

Temperature Range (°C /°F)	28-32 / 82.4-89.6
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓
ALPM (Alternative Low Power Mode) compatible	✓
ATX v3.1 PSU Power Excursion	✓

Performance Summary

115V

Accredited	
Average Efficiency (>1450 load combinations)	90.288%
Average Noise Output (>1450 Load Combinations)	24.50dBA
Average PF (>1450 Load Combinations)	0.978
Efficiency With 10W (≤500W) or 2% (>500W) Load	75.793%
Standby Power Consumption	0.0905W
Non-Accredited	
12V Ripple (Full Load)	39.51mV
5V Ripple (Full Load)	19.81mV
3.3V Ripple (Full Load)	11.13mV
5VSB Ripple (Full Load)	18.73mV
12V Load Regulation	1.08%
5V Load Regulation	0.34%
3.3V Load Regulation	0.73%
5VSB Load Regulation	3.45%
Inrush Current	25.550A

230V

Accredited	
Average Efficiency (>1450 load combinations)	92.021%
Average Noise Output (>1450 Load Combinations)	24.24dBA
Average PF (>1450 Load Combinations)	0.940
Efficiency With 10W (≤500W) or 2% (>500W) Load	74.914%
Standby Power Consumption	0.1717W
Non-Accredited	
12V Ripple (Full Load)	44.47mV
5V Ripple (Full Load)	20.50mV
3.3V Ripple (Full Load)	13.36mV

5VSB Ripple (Full Load)		22.86mV
12V Load Regulation		0.74%
5V Load Regulation		0.36%
3.3V Load Regulation		0.85%
5VSB Load Regulation		3.48%
Inrush Current		59.220A
12V Transient Response (200%)		11.60V
5V Transient Response (200%)		4.940V
3.3V Transient Response (200%)		3.203V
5VSB Transient Response (200%)		4.921V
Hold-Up Time & PWR_OK Signal		22.10ms
AC Loss to PWR_OK Hold Up Time		19.40ms
PWR_OK Inactive to DC Loss Delay		2.70ms
PSU Timings: T1 (20% / 100%)	51.0ms	50.0ms
PSU Timings: T3 (20% / 100%)	111.0ms	110.0ms
12V OCP (29.7°C / 43.5°C)	105.00A (126.05%), 12.015V	103.20A (123.89%), 12.018V
5V OCP (29.7°C / 43.5°C)	22.4A (112.00%), 4.999V	22.4A (112.00%), 4.999V
3.3V OCP (29.7°C / 43.5°C)	23.6A (118.00%), 3.305V	23.3A (116.50%), 3.306V
5VSB OCP (29.7°C / 43.5°C)	3.6A (120.00%), 4.775V	3.6A (120.00%), 4.764V *High Ripple (59.72mV)
OPP (29.58°C / 41.01°C)	134.31%	129.50%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	22.1
AC Loss to PWR_OK Hold Up Time (ms)	19.4
PWR_OK Inactive to DC Loss Delay (ms)	2.7

Vampire Power

Tables

115V

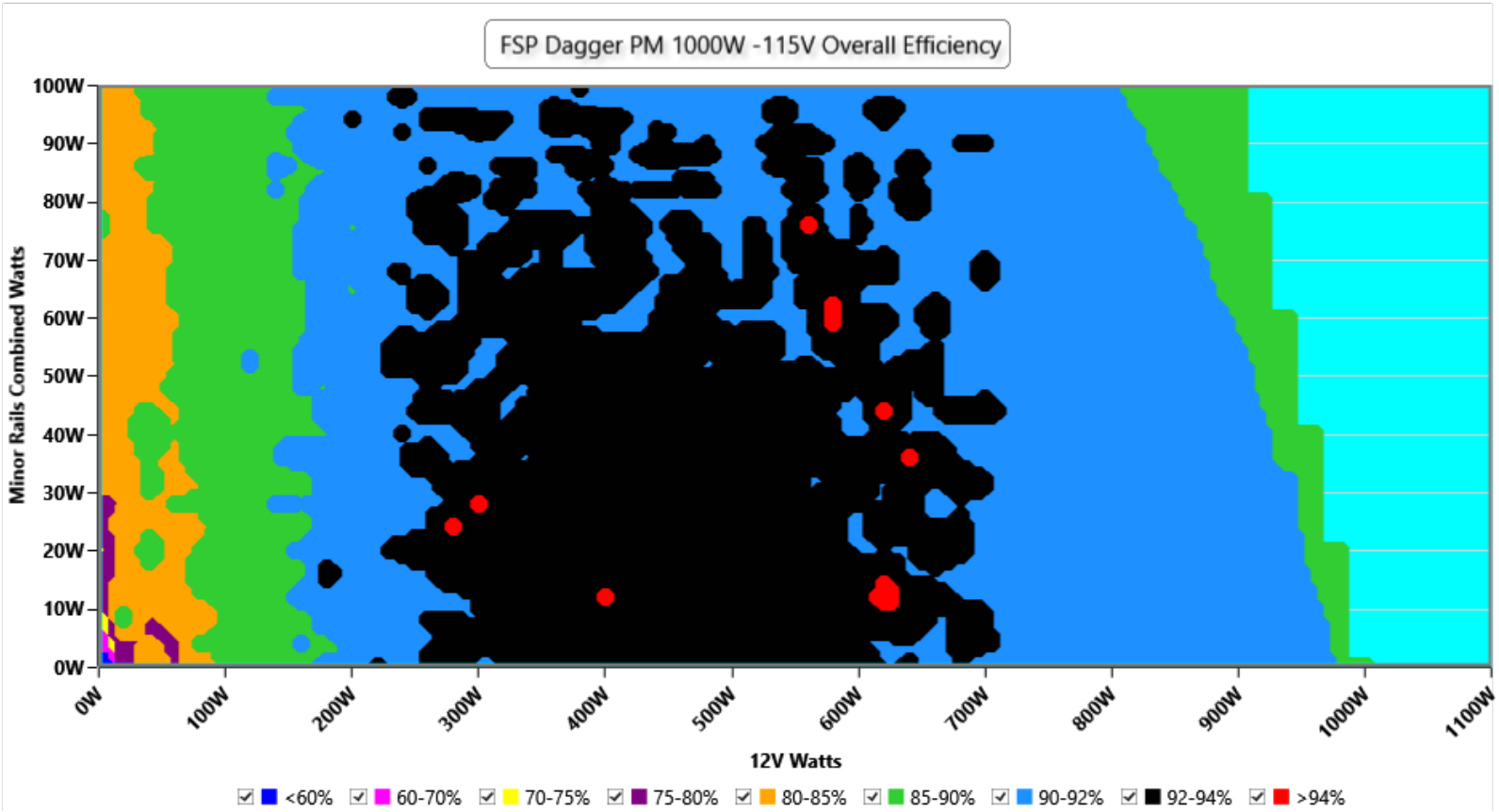
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.06 V	115.03 V	113.85 V	115.07 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	60.00 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.13 %	0.11 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.090 W	0.067 W	N/A	0.118 W	N/A	N/A
Apparent Power:	12.388 W	12.369 W	N/A	12.406 W	N/A	N/A
Power Factor:	0.007	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	230.12 V	230.08 V	227.70 V	230.13 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:	0.172 W	0.129 W	N/A	0.263 W	N/A	N/A
Apparent Power:	40.724 W	40.676 W	N/A	40.775 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

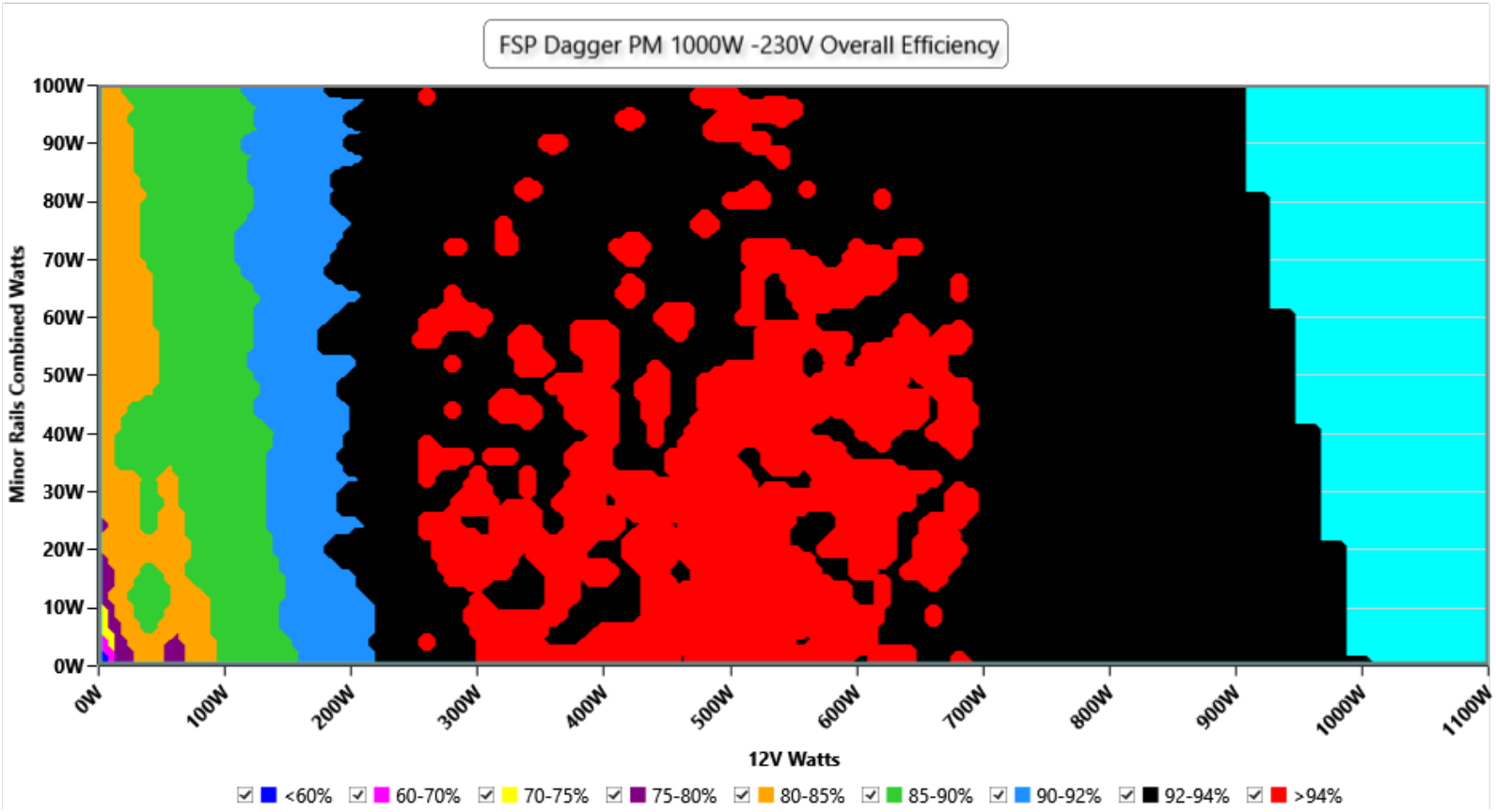
115V



INFO

This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

230V



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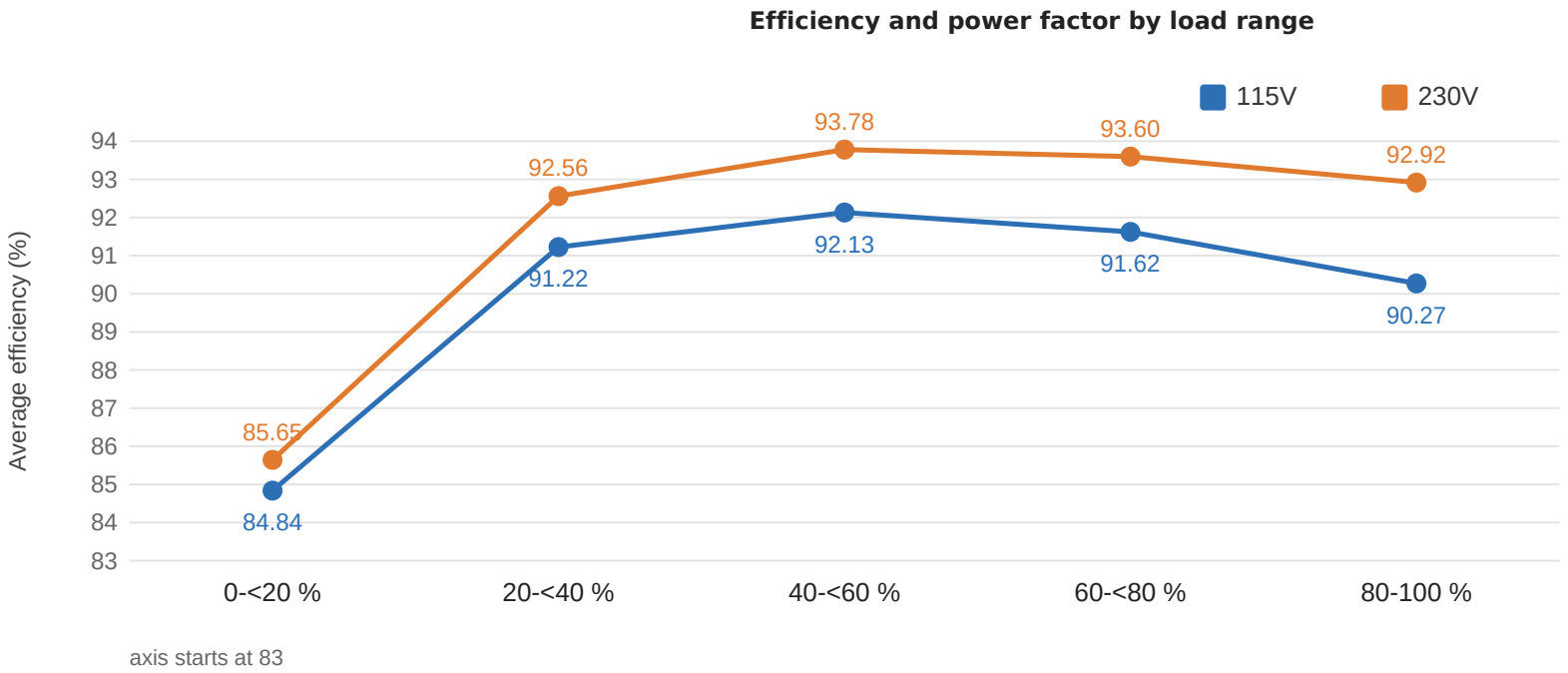
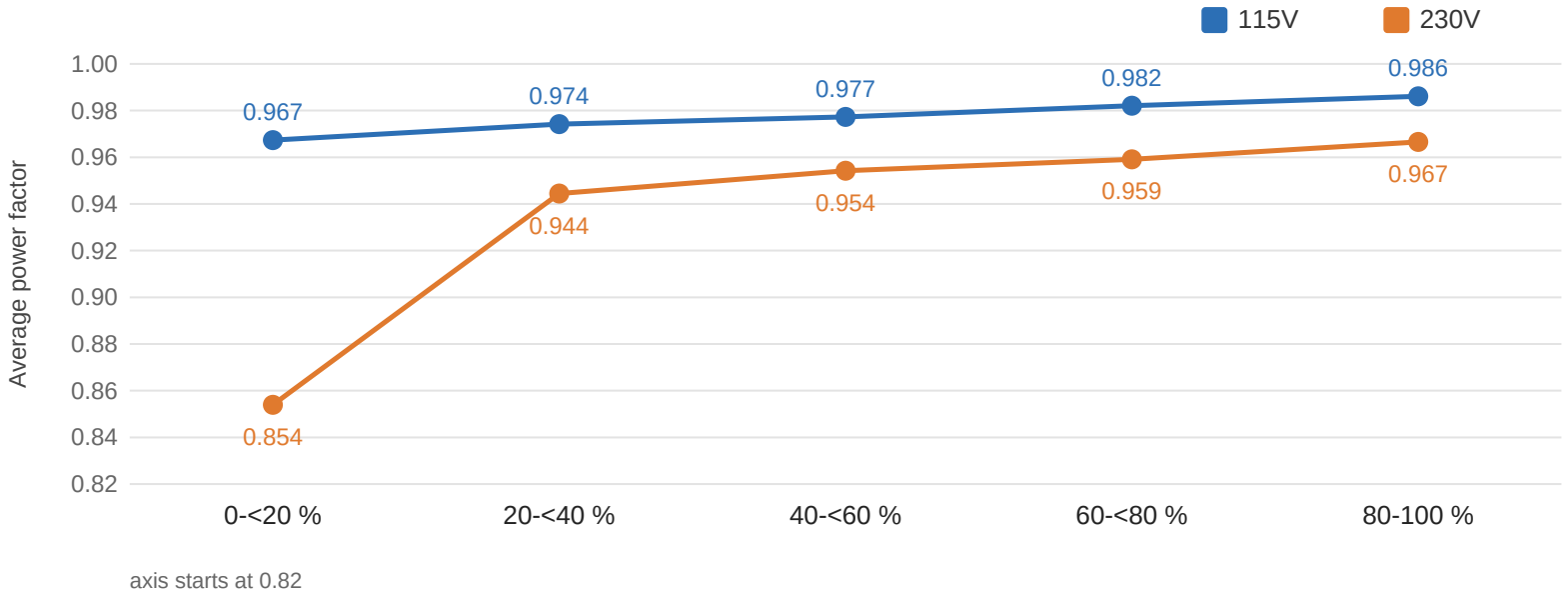


axis starts at 83



axis starts at 0.82

Load range	Points	Efficiency 115V	Efficiency 230V	PF 115V	PF 230V
0-<20 %	233 / 233	84.84%	85.65%	0.967	0.854
20-<40 %	310 / 310	91.22%	92.56%	0.974	0.944
40-<60 %	310 / 310	92.13%	93.78%	0.977	0.954
60-<80 %	310 / 310	91.62%	93.60%	0.982	0.959
80-100 %	317 / 317	90.27%	92.92%	0.986	0.967
70-100 % (High-Load)	472 / 472	90.61%	93.09%	0.985	0.965
All (published average)	1480 / 1480	90.29%	92.02%	0.978	0.940

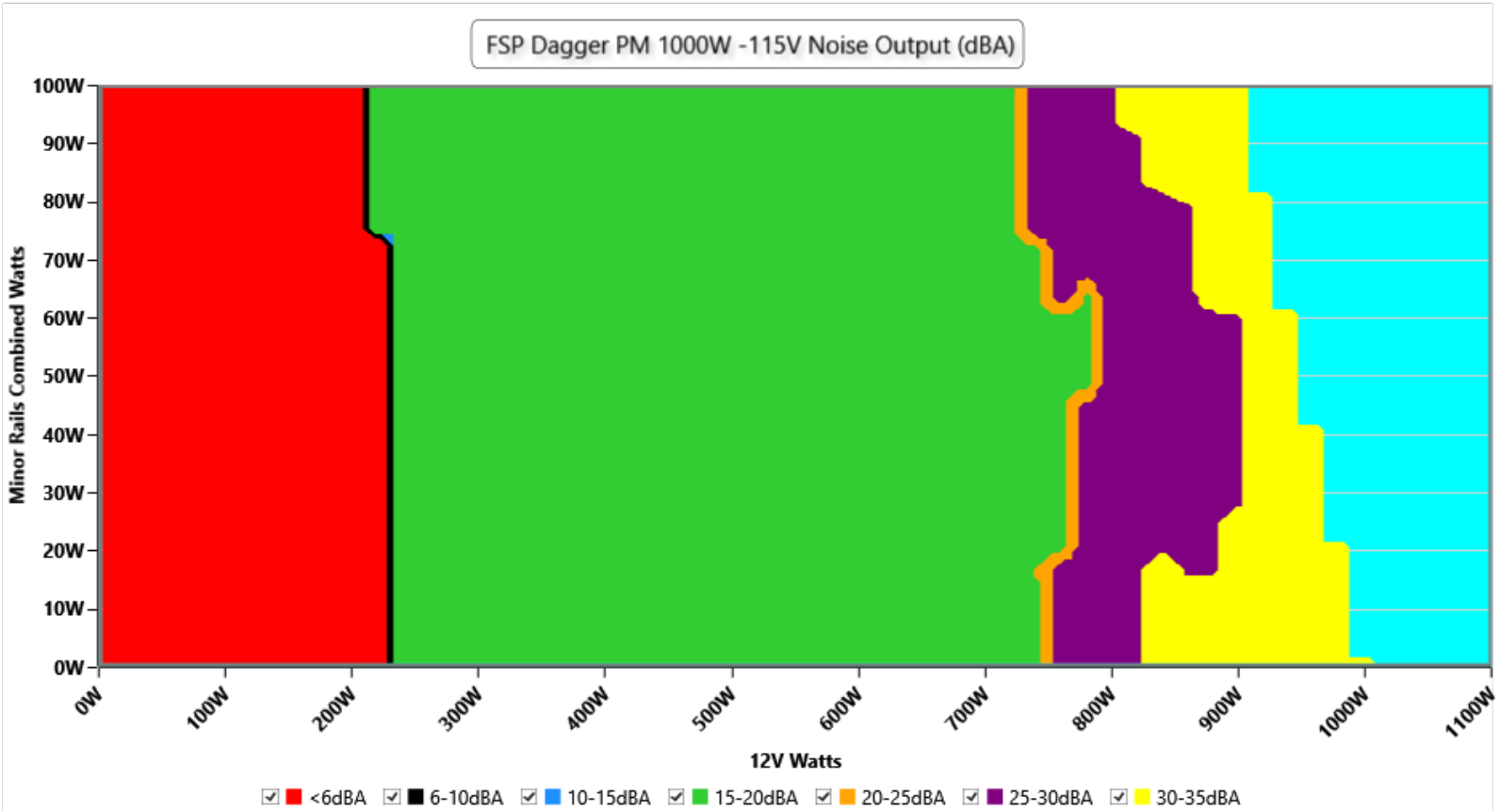
INFO

The average efficiency and power factor in five ranges of load. Calculated from the 1480 (115V) and 1480 (230V) load combinations of the certification sweep, the same data that ETA and LAMBDA use (test 0 excluded). Load is the total DC output as a share of the rated 1000 W. These are plain averages of the valid readings, as for the ETA rating, so the ranges combined give back the published averages.

Informational. Not part of the ETA or LAMBDA rating.

Noise Graph

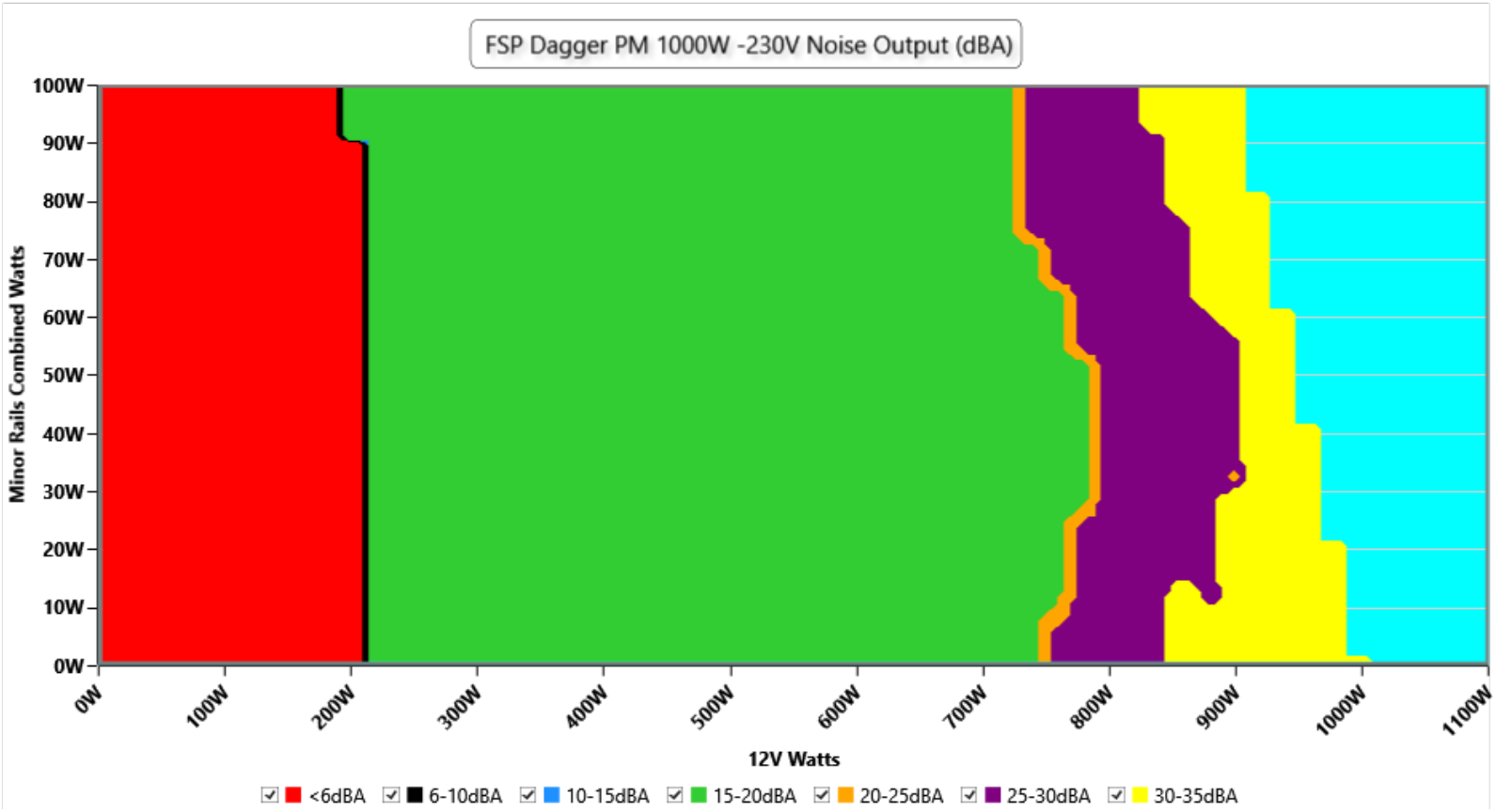
115V



INFO

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

230V



INFO

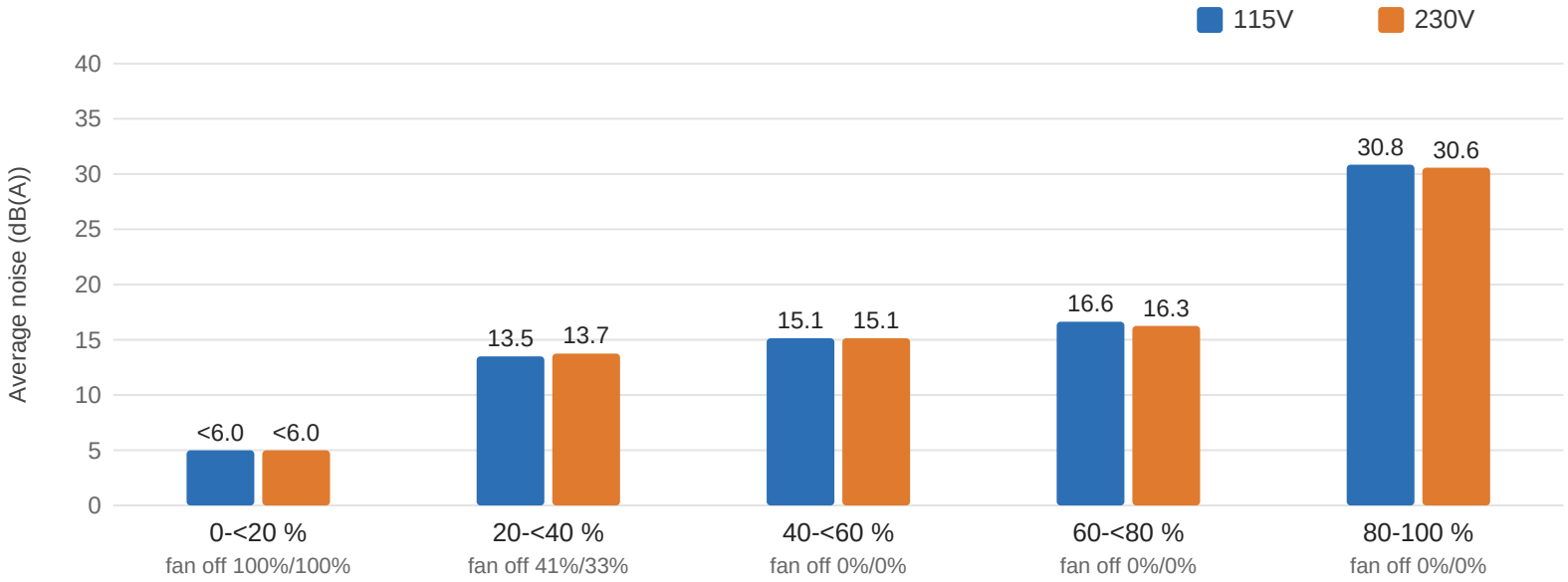
The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

Noise by load range

High-Load Index (70-100 % load)

Noise **29.2 dB(A)** at 115V and **28.9 dB(A)** at 230V · loudest point 33.9 dB(A)

Efficiency 90.61% / 93.09% · power factor 0.985 / 0.965 (115V / 230V)



Load range	Noise 115V avg (loudest)	Noise 230V avg (loudest)	Fan off 115V / 230V
0-<20 %	<6.0 (<6.0)	<6.0 (<6.0)	100% / 100%
20-<40 %	13.5 (16.7)	13.7 (16.7)	41% / 33%
40-<60 %	15.1 (15.1)	15.1 (15.1)	0% / 0%
60-<80 %	16.6 (26.5)	16.3 (26.5)	0% / 0%
80-100 %	30.8 (33.9)	30.6 (33.9)	0% / 0%
70-100 % (High-Load)	29.2 (33.9)	28.9 (33.9)	0% / 0%
All (published average)	24.5 (33.9)	24.2 (33.9)	24% / 23%

INFO

The average noise in five ranges of load, the share of points with the fan stopped (semi-passive operation), and the High-Load Index: the same figures for all points at 70 % of the rated output and above. Calculated from the 1480 (115V) and 1480 (230V) load combinations of the certification sweep, the same data that ETA and LAMBDA use (test 0 excluded). Load is the total DC output as a share of the rated 1000 W. Noise is averaged on the energy scale, as for LAMBDA, so the ranges combined give back the published average noise. Each load combination is held for about five seconds; the stabilized readings at fixed loads are under "Noise under high ambient temperature". Below 6 dB(A), the floor of our sound meter, the table and the chart show <6.0. In the averages a stopped fan counts as 5 dB(A),

as in the published average.

Informational. Not part of the ETA or LAMBDA rating.

Noise under high ambient temperature (indicative)

115V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 31.2 °C	0 RPM · <6.0 dB(A) · 41.1 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 36.6 °C	0 RPM · <6.0 dB(A) · 41.1 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 43.9 °C	1159 RPM · 16.7 dB(A) · 42.2 °C	fan starts (<6.0 → 16.7)
100%	1893 RPM · 33.4 dB(A) · 30.2 °C	2604 RPM · 42.7 dB(A) · 45.2 °C	**+9.3 dB(A)**

230V

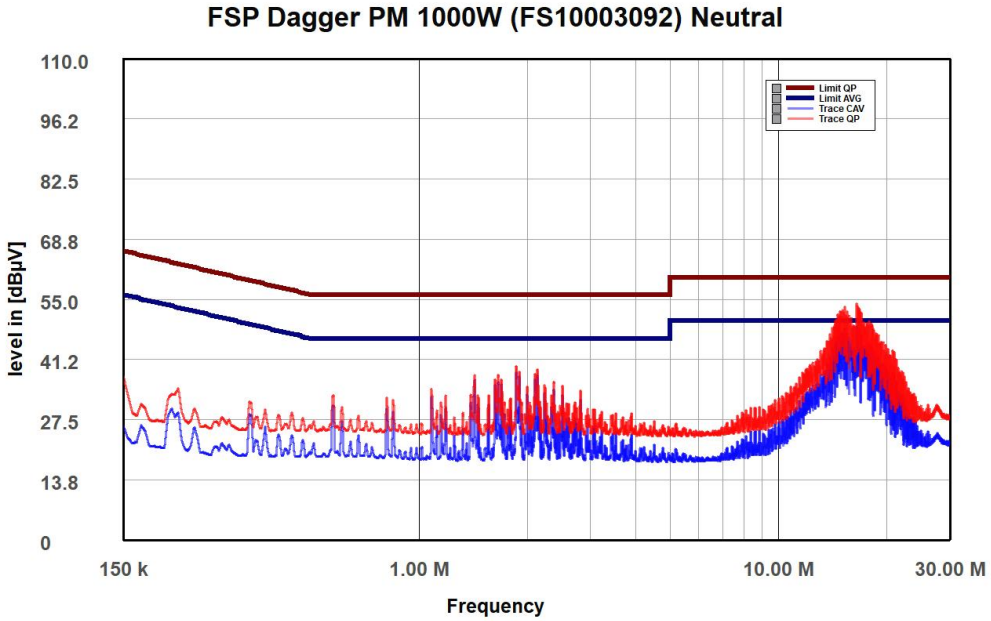
Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 38.9 °C	0 RPM · <6.0 dB(A) · 47.8 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 42.8 °C	0 RPM · <6.0 dB(A) · 47.9 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 47.0 °C	1160 RPM · 16.7 dB(A) · 42.5 °C	fan starts (<6.0 → 16.7)
100%	2598 RPM · 42.6 dB(A) · 30.2 °C	2639 RPM · 43.3 dB(A) · 45.5 °C	**+0.7 dB(A)**

INFO

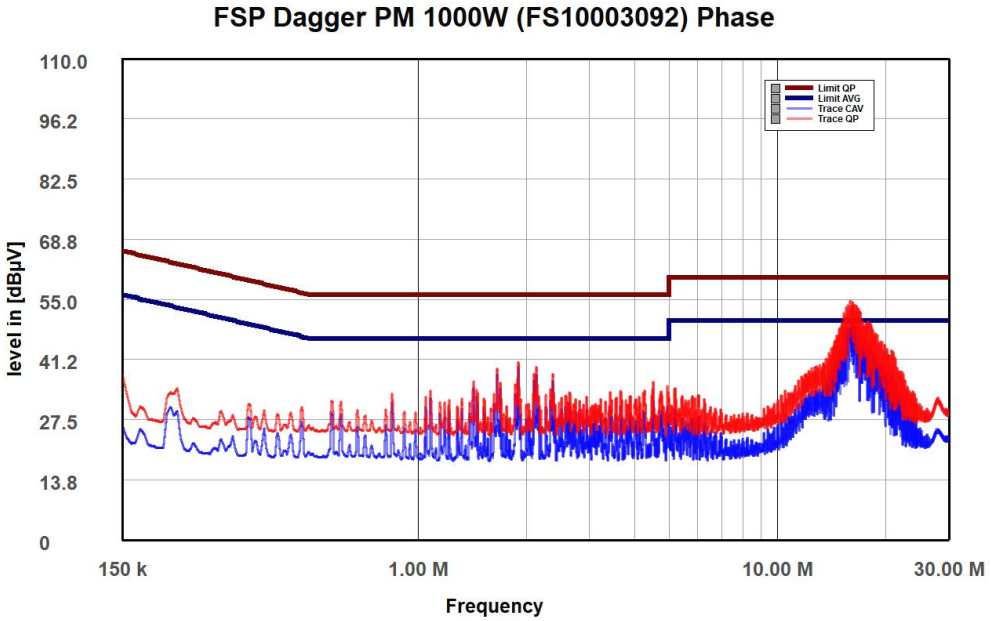
Fan speed, noise and the measured intake temperature at 10, 20, 50 and 100 % load, from the two load regulation tests: at normal ambient (about 30-32 °C) and at high ambient (about 40-47 °C). These are stabilized readings at fixed loads, not averages over the certification sweep, so they are indicative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



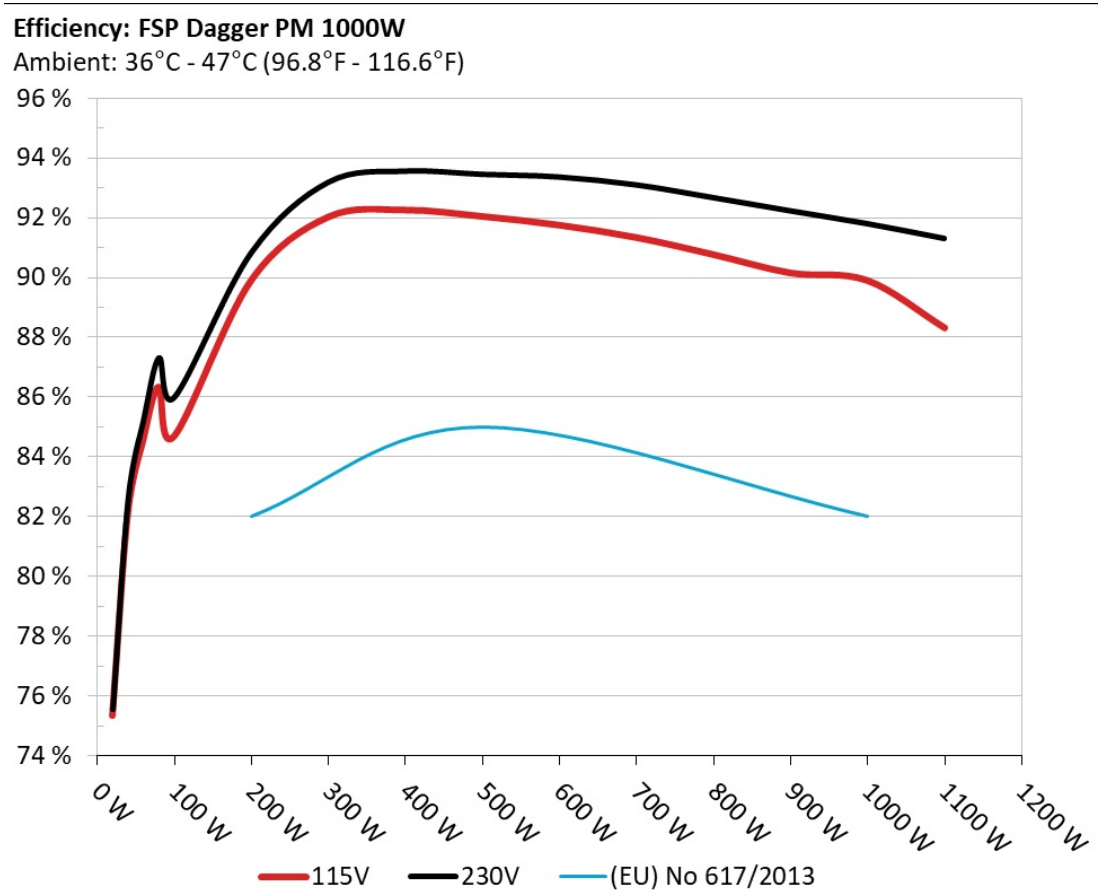
NEUTRAL



PHASE

Indicative Performance

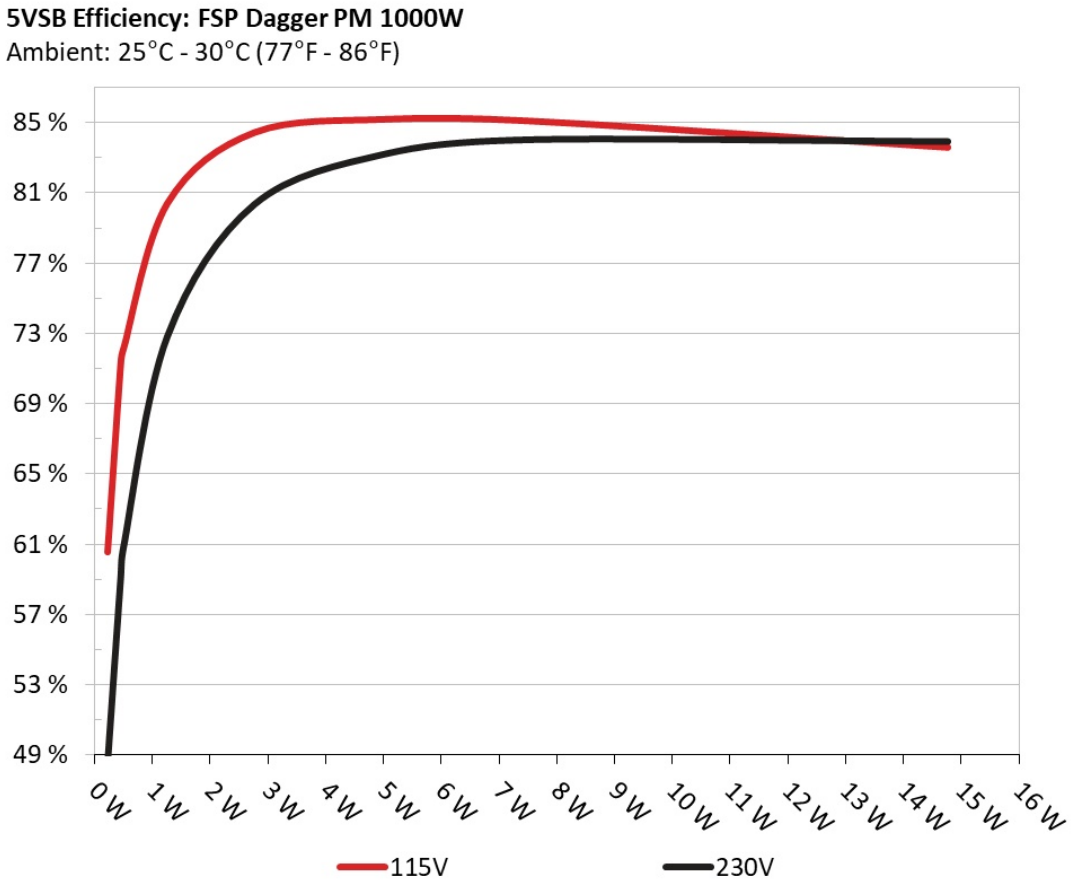
Efficiency under high ambient temperature



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**	0.228W	60.564%	0.031
	5.061V	0.377W		115.14V
2	**0.09A**	0.455W	71.303%	0.052
	5.05V	0.638W		115.1V
3	**0.55A**	2.769W	84.426%	0.224
	5.034V	3.28W		115.1V
4	**1A**	5.025W	85.174%	0.323
	5.024V	5.899W		115.1V
5	**1.5A**	7.501W	85.082%	0.381
	5V	8.816W		115.1V
6	**3A**	14.761W	83.576%	0.459
	4.92V	17.662W		115.1V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.229W	48.531%	0.012
	5.071V	0.472W		230.29V
2	**0.09A**	0.455W	59.091%	0.019
	5.056V	0.77W		230.29V
3	**0.55A**	2.77W	80.371%	0.083
	5.036V	3.447W		230.29V
4	**1A**	5.023W	83.236%	0.138
	5.023V	6.035W		230.29V
5	**1.5A**	7.503W	84.056%	0.19
	5.002V	8.926W		230.29V
6	**3A**	14.778W	83.959%	0.295
	4.925V	17.6W		230.29V

Protection Features

OCP (Normal @ 29.7°C)	12V: 105A (126.05%), 12.015V 5V: 22.4A (112%), 4.999V 3.3V: 23.6A (118%), 3.305V 5VSB: 3.6A (120%), 4.775V
OCP (Hot @ 43.5°C)	12V: 103.2A (123.89%), 12.018V 5V: 22.4A (112%), 4.999V 3.3V: 23.3A (116.5%), 3.306V 5VSB: 3.6A (120%), 4.764V *High Ripple (59.72mV)
OPP (Normal @ 29.6°C)	1343.13W (134.31%)
OPP (Hot @ 41°C)	1295.02W (129.5%)
OTP	✓ (119°C @ Primary Heatsink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -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 Inrush: NTC & Bypass Relay

Supplementary Tests (For Reference)

Typical Load Tests

115V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
10%	**6.450A**	**1.993A**	**1.986A**	**0.998A**	99.997	84.696%	0	<6.0	41.11°C	0.974
	12.153V	5.018V	3.324V	5.011V	118.049				40.45°C	115.06V
20%	**13.897A**	**2.991A**	**2.981A**	**1.203A**	199.946	89.91%	0	<6.0	41.11°C	0.975
	12.164V	5.016V	3.321V	4.99V	222.367				40.67°C	115.02V
30%	**21.682A**	**3.49A**	**3.481A**	**1.408A**	299.999	92.037%	0	<6.0	42.68°C	0.974
	12.173V	5.015V	3.319V	4.971V	325.98				41.11°C	114.99V
40%	**29.443A**	**3.989A**	**3.981A**	**1.614A**	399.546	92.271%	0	<6.0	42.94°C	0.981
	12.170V	5.014V	3.316V	4.958V	433.013				41.91°C	114.96V
50%	**36.869A**	**4.988A**	**4.98A**	**1.82A**	499.277	92.059%	1159	16.7	42.15°C	0.987
	12.172V	5.013V	3.314V	4.945V	542.378				53.3°C	114.93V
60%	**44.384A**	**5.989A**	**5.981A**	**2A**	599.68	91.765%	1155	16.7	42.73°C	0.986
	12.166V	5.011V	3.311V	4.941V	653.515				51.86°C	114.88V
70%	**51.837A**	**6.99A**	**6.983A**	**2.236A**	699.524	91.352%	1153	16.7	43.24°C	0.987
	12.161V	5.009V	3.308V	4.919V	765.728				52.31°C	114.85V
80%	**59.357A**	**7.989A**	**7.986A**	**2.341A**	799.516	90.781%	1820	32.3	43.75°C	0.987
	12.157V	5.006V	3.305V	4.913V	880.682				50.4°C	114.81V
90%	**67.237A**	**8.491A**	**8.477A**	**2.446A**	899.3	90.165%	1938	34.7	43.46°C	0.988
	12.149V	5.005V	3.303V	4.906V	997.351				49.67°C	114.77V
100%	**75.028A**	**8.995A**	**8.997A**	**3.081A**	999.178	89.916%	2604	42.7	45.16°C	0.987
	12.122V	5.002V	3.301V	4.868V	1111.249				52.02°C	114.73V
110%	**83.274A**	**10.018A**	**10.132A**	**3.072A**	1099.826	88.325%	3159	47.7	46.92°C	0.983
	12.027V	4.99V	3.286V	4.884V	1245.229				48.54°C	114.69V
CL1	**0.115A**	**12.022A**	**11.967A**	**0A**	101.287	81.922%	0	<6.0	41.83°C	0.974
	12.177V	5.007V	3.317V	5.036V	123.823				40.99°C	115.06V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL2	**0.114A**	**19.998A**	**0A**	**0A**	101.373	79.447%	1157	16.7	42.43°C	0.977
	12.187V	5V	3.323V	5.041V	127.597				48.12°C	115.06V
CL3	**0.113A**	**0A**	**19.921A**	**0A**	67.38	77.038%	1150	16.6	41.32°C	0.955
	12.190V	5.019V	3.313V	5.041V	87.584				45.41°C	115.07V
CL4	**82.379A**	**0A**	**0A**	**0A**	999.883	90.203%	2605	42.7	45.25°C	0.987
	12.137V	5.015V	3.307V	5.02V	1108.497				51.74°C	114.72V

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
10%	**6.488A**	**1.996A**	**1.991A**	**0.995A**	99.993	85.766%	0	<6.0	47.81°C	0.846
	12.082V	5.011V	3.316V	5.027V	116.591				40.13°C	230.28V
20%	**13.986A**	**2.995A**	**2.989A**	**1.196A**	199.941	90.842%	0	<6.0	47.94°C	0.923
	12.086V	5.008V	3.312V	5.015V	220.107				40.59°C	230.26V
30%	**21.832A**	**3.495A**	**3.49A**	**1.402A**	299.988	93.198%	0	<6.0	50.91°C	0.941
	12.089V	5.007V	3.31V	4.993V	321.892				41.16°C	230.25V
40%	**29.655A**	**3.996A**	**3.991A**	**1.607A**	399.528	93.567%	0	<6.0	52.55°C	0.947
	12.083V	5.006V	3.307V	4.979V	427.004				41.83°C	230.24V
50%	**37.153A**	**4.997A**	**4.994A**	**1.812A**	499.23	93.46%	1160	16.7	42.45°C	0.952
	12.078V	5.004V	3.304V	4.968V	534.146				46.82°C	230.22V
60%	**44.737A**	**6A**	**5.998A**	**2A**	599.668	93.37%	1165	16.9	42.67°C	0.952
	12.069V	5.001V	3.301V	4.959V	642.204				45.82°C	230.21V
70%	**52.259A**	**7.003A**	**7.005A**	**2.228A**	699.482	93.107%	1169	17	43.44°C	0.956
	12.062V	4.999V	3.298V	4.938V	751.189				46.04°C	230.19V
80%	**59.860A**	**8.005A**	**8.012A**	**2.333A**	799.487	92.679%	1958	35.1	43.64°C	0.958
	12.055V	4.996V	3.295V	4.93V	862.589				46.22°C	230.17V
90%	**67.813A**	**8.508A**	**8.504A**	**2.439A**	899.293	92.241%	2643	43.4	44.34°C	0.961
	12.045V	4.995V	3.292V	4.921V	974.935				45.61°C	230.15V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**75.572A**	**9.012A**	**9.028A**	**3.072A**	999.303	91.811%	2639	43.3	45.45°C	0.962
	12.037V	4.993V	3.289V	4.884V	1088.433				45.63°C	230.13V
110%	**83.271A**	**10.018A**	**10.132A**	**3.075A**	1099.9	91.316%	3449	51.5	46.84°C	0.963
	12.028V	4.99V	3.286V	4.879V	1204.504				44.76°C	230.12V
CL1	**0.116A**	**12.042A**	**12.005A**	**0A**	101.293	82.124%	1194	18.1	40.87°C	0.834
	12.086V	4.999V	3.306V	5.056V	123.365				43.75°C	230.28V
CL2	**0.115A**	**20.023A**	**0A**	**0A**	101.368	80.769%	1176	17.3	40.84°C	0.836
	12.086V	4.993V	3.317V	5.06V	125.606				42.38°C	230.28V
CL3	**0.115A**	**0A**	**19.991A**	**0A**	67.381	77.578%	1162	16.8	40.73°C	0.763
	12.050V	5.012V	3.301V	5.056V	86.947				40.87°C	230.28V
CL4	**83.043A**	**0A**	**0A**	**0A**	999.874	92.598%	2646	43.4	45.45°C	0.961
	12.040V	5.005V	3.299V	5.029V	1079.804				47.89°C	230.13V

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**	**0.498A**	**0.496A**	**0.199A**	20	75.342%	0	<6.0	38.81°C	0.825
	12.043V	5.018V	3.325V	5.036V	26.698				36.07°C	115.09V
40W	**2.704A**	**0.698A**	**0.695A**	**0.298A**	40	82.137%	0	<6.0	38.98°C	0.923
	12.087V	5.018V	3.325V	5.034V	48.869				37.41°C	115.08V
60W	**4.164A**	**0.897A**	**0.893A**	**0.398A**	60	84.591%	0	<6.0	39.34°C	0.953
	12.134V	5.019V	3.325V	5.03V	70.998				38.49°C	115.07V
80W	**5.636A**	**1.096A**	**1.092A**	**0.497A**	79.945	86.347%	0	<6.0	40.62°C	0.963
	12.123V	5.019V	3.324V	5.027V	92.538				39.16°C	115.06V

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20W	**1.238A**	**0.499A**	**0.497A**	**0.198A**	20.001	75.55%	0	<6.0	38.31°C	0.389
	12.000V	5.01V	3.317V	5.054V	26.298				36.71°C	230.29V
40W	**2.714A**	**0.699A**	**0.697A**	**0.297A**	40	82.611%	0	<6.0	40.65°C	0.592
	12.042V	5.01V	3.317V	5.051V	48.532				37.31°C	230.29V
60W	**4.186A**	**0.898A**	**0.895A**	**0.396A**	59.999	85.247%	0	<6.0	41.2°C	0.724
	12.073V	5.011V	3.317V	5.047V	70.384				38.32°C	230.28V
80W	**5.672A**	**1.098A**	**1.094A**	**0.496A**	79.941	87.316%	0	<6.0	42.45°C	0.801
	12.043V	5.011V	3.316V	5.045V	91.61				39.24°C	230.28V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	42.59mV	11.80mV	9.77mV	20.44mV	Pass
20% Load	33.77mV	11.59mV	10.39mV	22.50mV	Pass
30% Load	55.27mV	13.34mV	11.27mV	20.39mV	Pass
40% Load	35.52mV	14.94mV	10.34mV	19.92mV	Pass
50% Load	34.34mV	16.38mV	10.60mV	21.52mV	Pass
60% Load	34.18mV	20.45mV	17.07mV	26.94mV	Pass
70% Load	36.40mV	18.91mV	15.41mV	25.24mV	Pass
80% Load	38.00mV	19.89mV	13.55mV	23.18mV	Pass
90% Load	38.51mV	18.65mV	11.38mV	20.80mV	Pass
100% Load	39.51mV	19.81mV	11.13mV	18.73mV	Pass
110% Load	44.9mV	22.94mV	15.9mV	23.94mV	Pass
Crossload1	38.93mV	12.80mV	10.93mV	7.68mV	Pass
Crossload2	42.89mV	14.79mV	10.14mV	8.88mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	42.26mV	14.84mV	11.32mV	8.36mV	Pass
Crossload4	38.88mV	18.45mV	10.29mV	9.97mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	34.18mV	13.14mV	11.12mV	19.72mV	Pass
20% Load	37.17mV	12.37mV	11.17mV	19.93mV	Pass
30% Load	45.83mV	14.58mV	11.69mV	23.33mV	Pass
40% Load	38.72mV	15.20mV	12.20mV	21.63mV	Pass
50% Load	39.18mV	18.55mV	16.70mV	21.78mV	Pass
60% Load	38.57mV	19.01mV	15.31mV	25.70mV	Pass
70% Load	38.41mV	19.42mV	12.62mV	30.76mV	Pass
80% Load	39.91mV	18.65mV	12.98mV	27.31mV	Pass
90% Load	43.77mV	19.99mV	13.08mV	25.34mV	Pass
100% Load	44.47mV	20.50mV	13.36mV	22.86mV	Pass
110% Load	44.73mV	21.20mV	14.09mV	22.99mV	Pass
Crossload1	24.60mV	13.95mV	12.10mV	8.48mV	Pass
Crossload2	37.33mV	15.71mV	12.26mV	9.55mV	Pass
Crossload3	20.73mV	15.20mV	13.14mV	9.09mV	Pass
Crossload4	44.24mV	20.74mV	13.14mV	12.48mV	Pass

The results above are not used in the certification process

FSP Technology DAGGER PM 1000W



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

CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus

www.cybenetics.com - info@cybenetics.com