FSP Technology VITA GM 750W

Serial Number S4091000191

Lab ID FS75002474

Certification ID 252474

Test Result Report ID: 24PS2474A

Certificate Issue Date: Jun 13, 2024

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	VITA GM 750W
OEM/ODM	FSP
Serial Number	S4091000191
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	5-10

Rated Frequency (Hz)	50-60
Rated Power (W)	750
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	120mm Rifle Bearing Fan (D12SH-12)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	FS75002474
Date of receipt	May 21, 2024
Testing Date	Jun 12, 2024
Report Issued Date	Jun 13, 2024
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors(Non-accredited measurements)

Modular Cables				
Description	**Cable Count**	**Connector Count (Total)**	**Gauge**	In Cable Capacitors
ATX connector 20+4 pin (600mm)	1	1	18-22AWG	No
4+4 pin EPS12V (700mm)	2	2	18AWG	No
6+2 pin PCIe (500mm+150mm)	2	4	16-18AWG	No
12+4 pin PCIe (700mm) (600W)	1	1	16-24AWG	No
SATA (500mm+150mm+150mm+150mm)	1	4	18AWG	No
SATA (500mm+150mm) / 4-pin Molex (+155mm+100mm)	2	4 / 4	18-20AWG	No
AC Power Cord (1350mm) - C13 coupler	1	1	18AWG	-

Protection Features

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	62.5	3	0.3
	Watts	100		750	15	3.6
Total Max. Power (W)		750				

Parts Description

General Data	
Manufacturer (OEM)	FSP
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	1x NTC Thermistor SCK-056 (5 Ohm) & Relay
Bridge Rectifier(s)	2x GBJ1506 (600V, 15A @ 100°C)
APFC MOSFETs	2x Toshiba TK16A60W (600V, 15.8A @ 150°C, Rds(on): 0.19Ohm)
APFC Boost Diode	1x Toshiba TRS6E65F (650V, 6A, @ 175°C)
Bulk Cap(s)	1x Toshin Kogyo TK (450V, 560uF, 3,000h @ 105°C, LGWA)

Main Switchers	2x Toshiba TK12A60W (600V, 11.5A, @ 150°C, Rds(on): 0.3Ohm)
APFC Controller	Champion CM6500UNX
Resonant Controller	Champion CU6901VPA
Topology	Primary side: APFC, Half-Bridge & LLC converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	4x CYStek MTB1D6NO4RH8 (40V, 84A @ 100°C, Rds(on): 1.8mOhm)
5V & 3.3V	DC-DC Converters: 4x XSEMI XP3R303GMT-L (30V, 25A @ 70°C, Rds(on): 3.3mOhm) PWM Controller(s): UPIuP3861P
Filtering Capacitors	Electrolytic: 6x Nippon Chemi-Con (1-5,000h @ 105°C, KZE), 2x Rubycon (6-10,000h @ 105°C, ZLH), Polymer: 4x CapXon, 2x Apaq, 26x
Supervisor IC	IN1T703I-SDG
Fan Model	Yate Loon D12SH-12 (120mm, 12V, 0.30A, Rifle Bearing Fan)
5VSB Circuit	
TVS Diode	1x SMAJ15A
High Side Rectifier	US1MGR (1000V, 1A)
Standby PWM Controller	Grenery GR9230UK

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)	89.413%
Average Noise Output (>1450 Load Combinations)	19.52dBA
Average PF (>1450 Load Combinations)	0.981
Efficiency With 10W (≤500W) or 2% (>500W) Load	69.191%
Standby Power Consumption	0.0523W
Non-Accredited	
12V Ripple (Full Load)	22.28mV
5V Ripple (Full Load)	14.85mV
3.3V Ripple (Full Load)	15.80mV
5VSB Ripple (Full Load)	17.92mV
12V Load Regulation	0.60%
5V Load Regulation	1.52%
3.3V Load Regulation	2.25%
5VSB Load Regulation	2.73%
Inrush Current	37.530A

230V

Accredited	
Average Efficiency (>1450 load combinations)	91.661%
Average Noise Output (>1450 Load Combinations)	19.59dBA
Average PF (>1450 Load Combinations)	0.935
Efficiency With 10W (≤500W) or 2% (>500W) Load	65.557%
Standby Power Consumption	0.1471W
Non-Accredited	
12V Ripple (Full Load)	22.39mV
5V Ripple (Full Load)	15.90mV
3.3V Ripple (Full Load)	16.43mV

5VSB Ripple (Full Load)		19.61mV
12V Load Regulation		0.61%
5V Load Regulation		1.50%
3.3V Load Regulation		2.29%
5VSB Load Regulation		2.73%
Inrush Current		65.550A
12V Transient Response (200%)		11.72V
5V Transient Response (200%)		4.970V
3.3V Transient Response (200%)		3.196V
5VSB Transient Response (200%)		4.953V
Hold-Up Time & PWR_OK Signal		17.70ms
AC Loss to PWR_OK Hold Up Time		15.80ms
PWR_OK Inactive to DC Loss Delay		1.90ms
PSU Timings: T1 (20% / 100%)	41.0ms	37.0ms
PSU Timings: T3 (20% / 100%)	112.0ms	113.0ms
12V OCP (27.2°C / 39.7°C)	69.00A (110.40%), 12.120V	67.20A (107.52%), 12.149V
5V OCP (27.2°C / 39.7°C)	25.5A (127.50%), 5.036V	24.6A (123.00%), 5.035V
3.3V OCP (27.2°C / 39.7°C)	25.1A (125.50%), 3.301V	24.4A (122.00%), 3.301V
5VSB OCP (27.2°C / 39.7°C)	3.9A (130.00%), 4.98V	3.9A (130.00%), 4.98V
OPP (28.39°C / 41.27°C)	112.27%	118.49%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	17.7
AC Loss to PWR_OK Hold Up Time (ms)	15.8
PWR_OK Inactive to DC Loss Delay (ms)	1.9

Stromverbrauch im Ruhezustand

Tables

115V

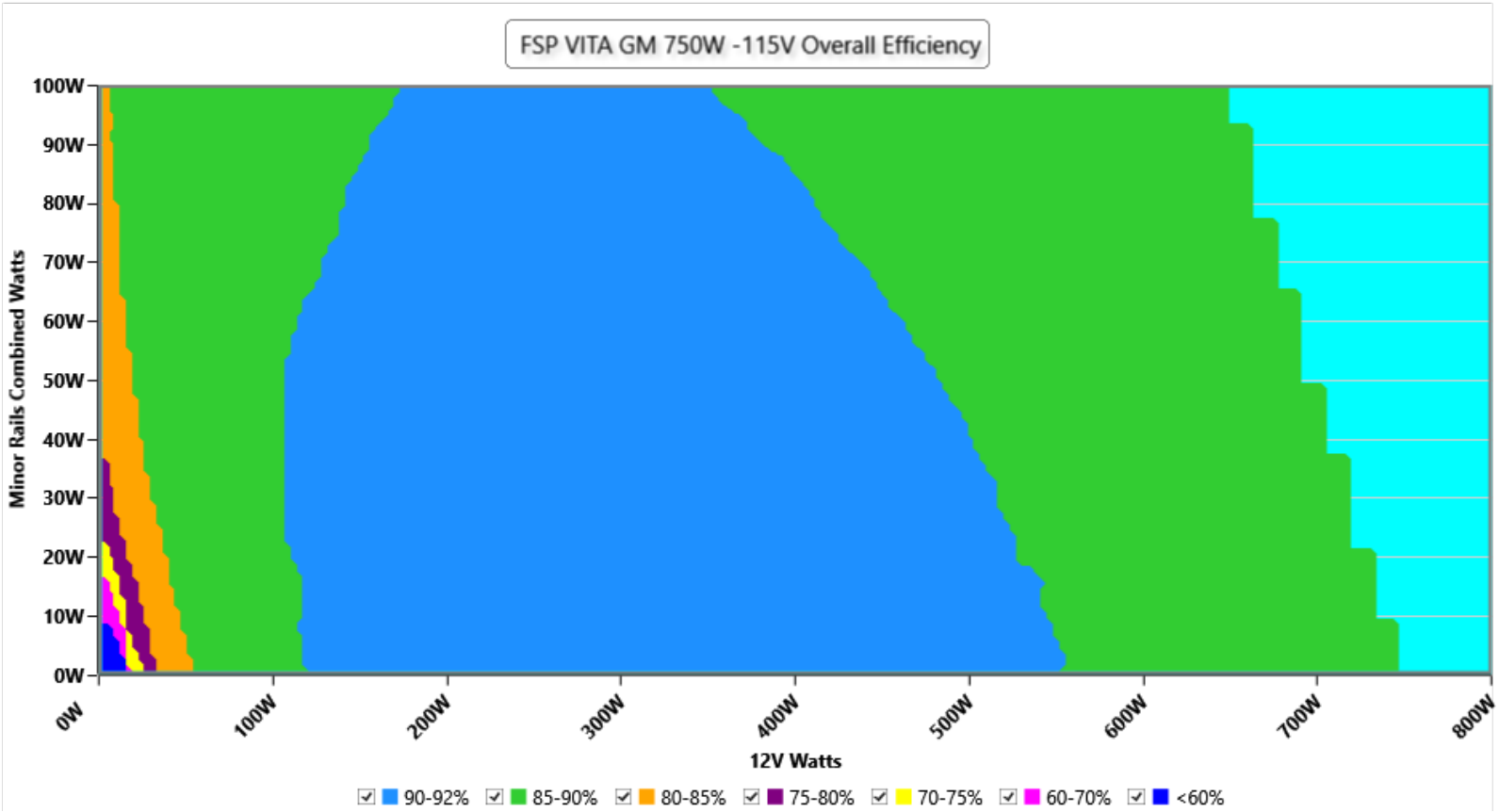
Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.07 V	115.04 V	113.85 V	115.11 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.94 Hz	59.40 Hz	60.03 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.418	1.490	PASS
Mains Voltage THD:	0.13 %	0.09 %	N/A	0.18 %	2.00 %	PASS
Real Power:	0.052 W	0.007 W	N/A	0.088 W	N/A	N/A
Apparent Power:	12.857 W	12.801 W	N/A	12.916 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:	231.01 V	230.93 V	227.70 V	231.08 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	49.99 Hz	49.50 Hz	50.01 Hz	50.50 Hz	PASS
Mains Voltage CF:	1.417	1.416	1.340	1.419	1.490	PASS
Mains Voltage THD:	0.17 %	0.14 %	N/A	0.25 %	2.00 %	PASS
Real Power:	0.147 W	0.105 W	N/A	0.212 W	N/A	N/A
Apparent Power:	44.078 W	43.795 W	N/A	44.430 W	N/A	N/A
Power Factor:	0.004	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

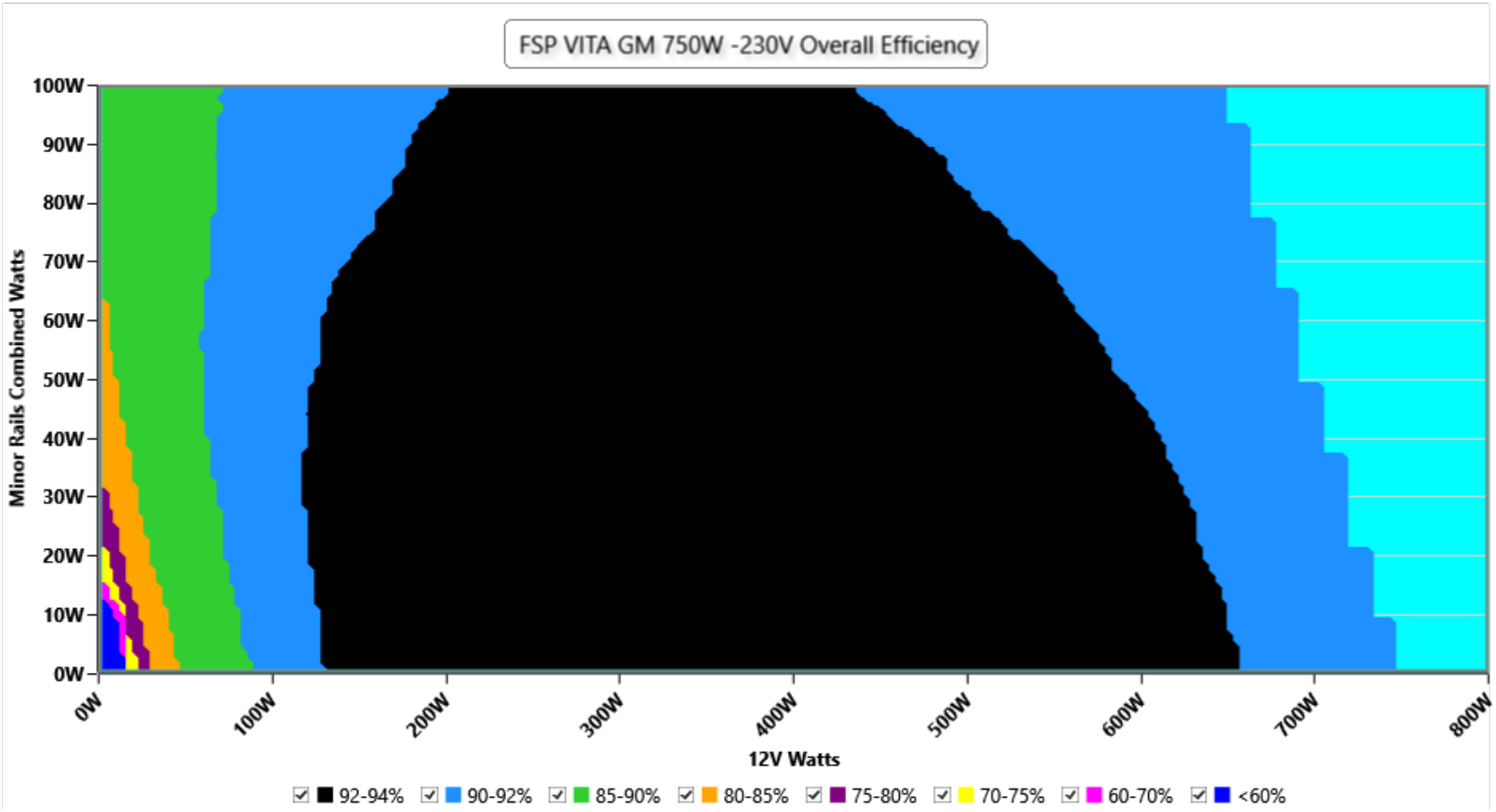
115V



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

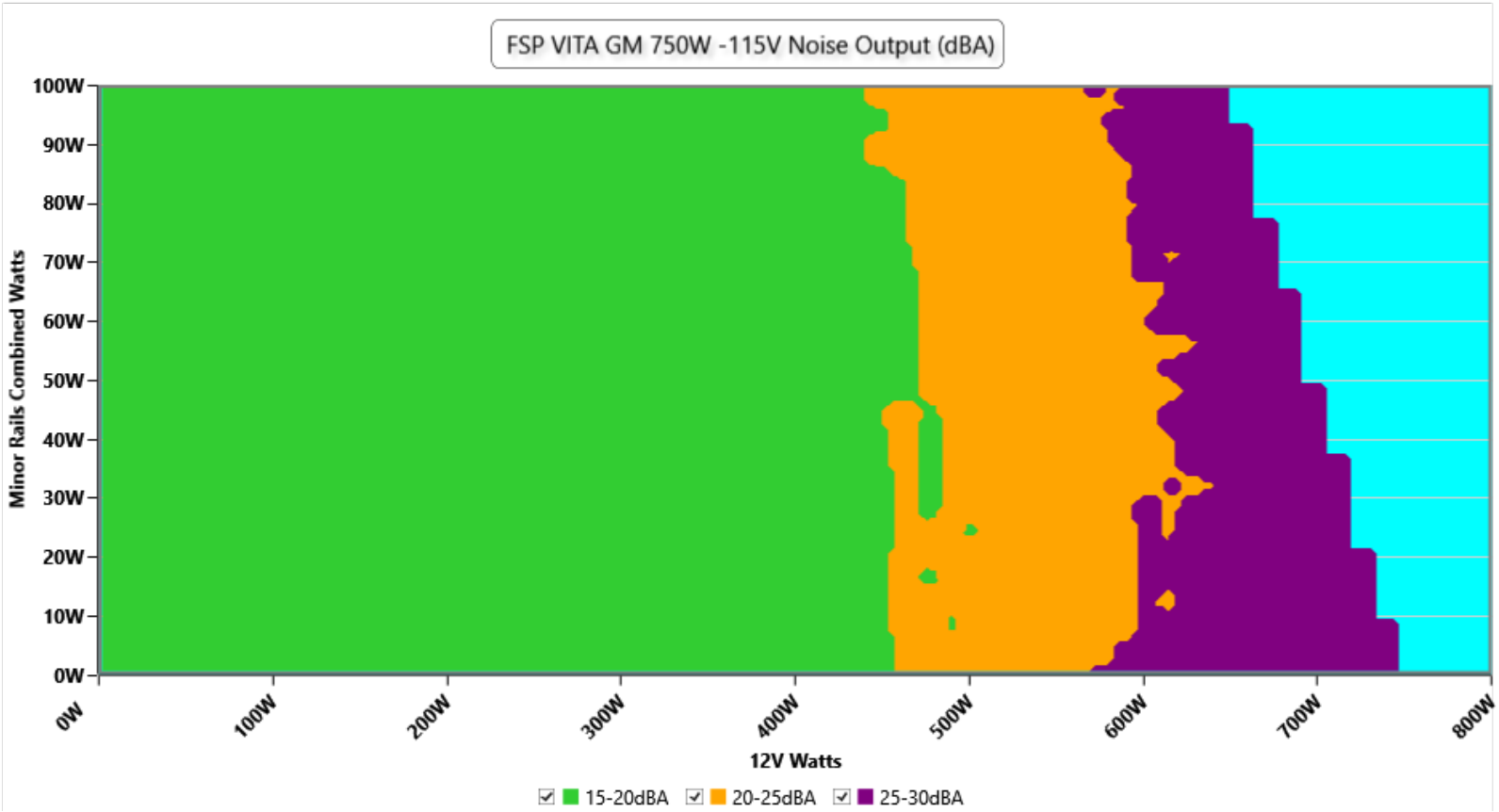


INFO

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Noise Graph

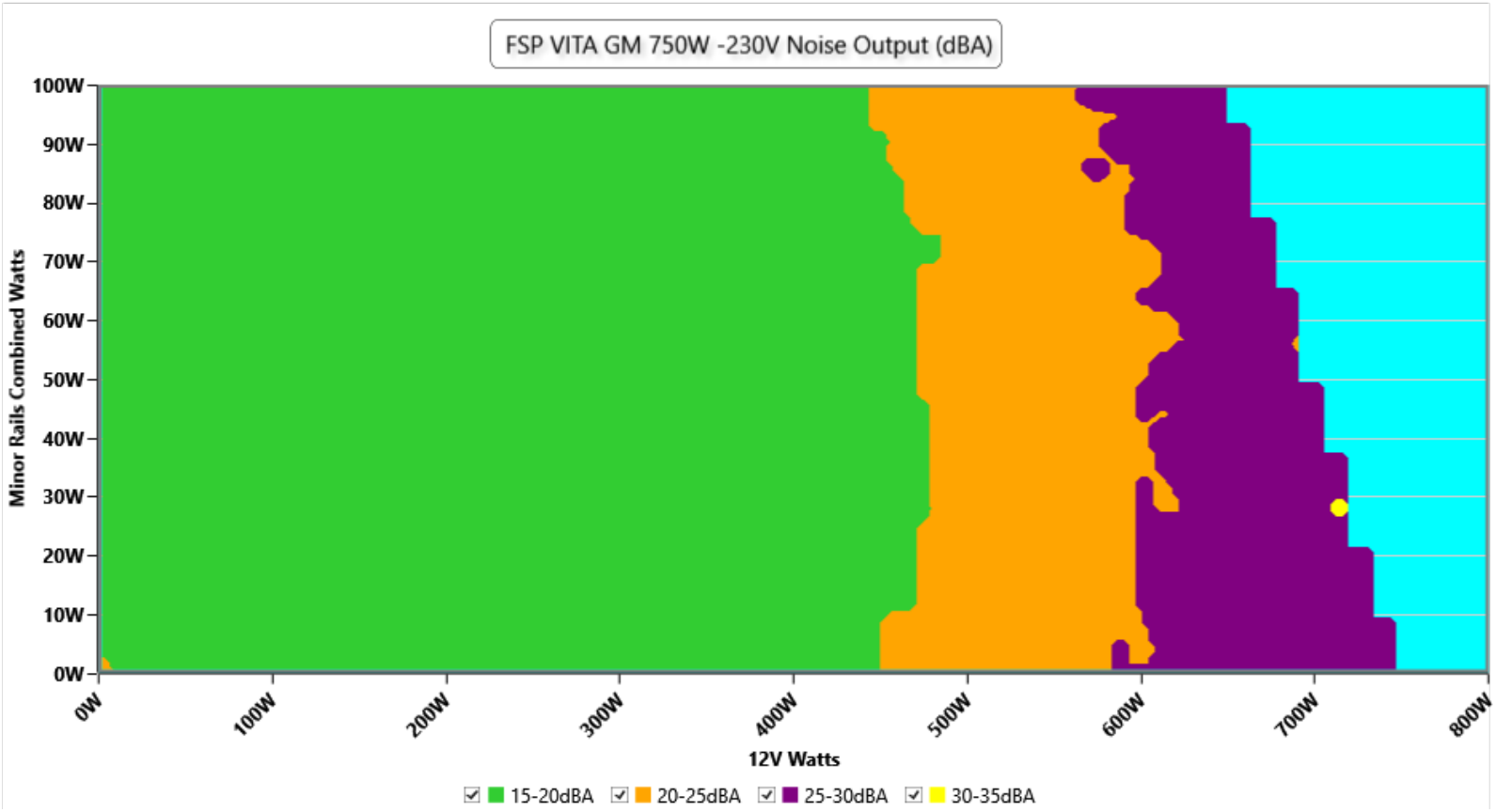
115V



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 under high ambient temperature (indicative)

115V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	699 RPM · 15.0 dB(A) · 30.3 °C	711 RPM · 15.7 dB(A) · 40.1 °C	**+0.7 dB(A)**
20%	703 RPM · 15.2 dB(A) · 30.8 °C	710 RPM · 15.5 dB(A) · 40.7 °C	**+0.3 dB(A)**
50%	705 RPM · 15.3 dB(A) · 30.8 °C	775 RPM · 17.0 dB(A) · 42.4 °C	**+1.7 dB(A)**
100%	1083 RPM · 26.6 dB(A) · 31.0 °C	1342 RPM · 32.7 dB(A) · 45.4 °C	**+6.1 dB(A)**

230V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	700 RPM · 15.0 dB(A) · 29.4 °C	710 RPM · 15.5 dB(A) · 40.3 °C	**+0.5 dB(A)**
20%	700 RPM · 15.0 dB(A) · 29.5 °C	718 RPM · 15.8 dB(A) · 40.5 °C	**+0.8 dB(A)**
50%	706 RPM · 15.3 dB(A) · 30.2 °C	777 RPM · 17.0 dB(A) · 42.4 °C	**+1.7 dB(A)**
100%	1089 RPM · 26.7 dB(A) · 31.5 °C	1428 RPM · 34.2 dB(A) · 45.4 °C	**+7.5 dB(A)**

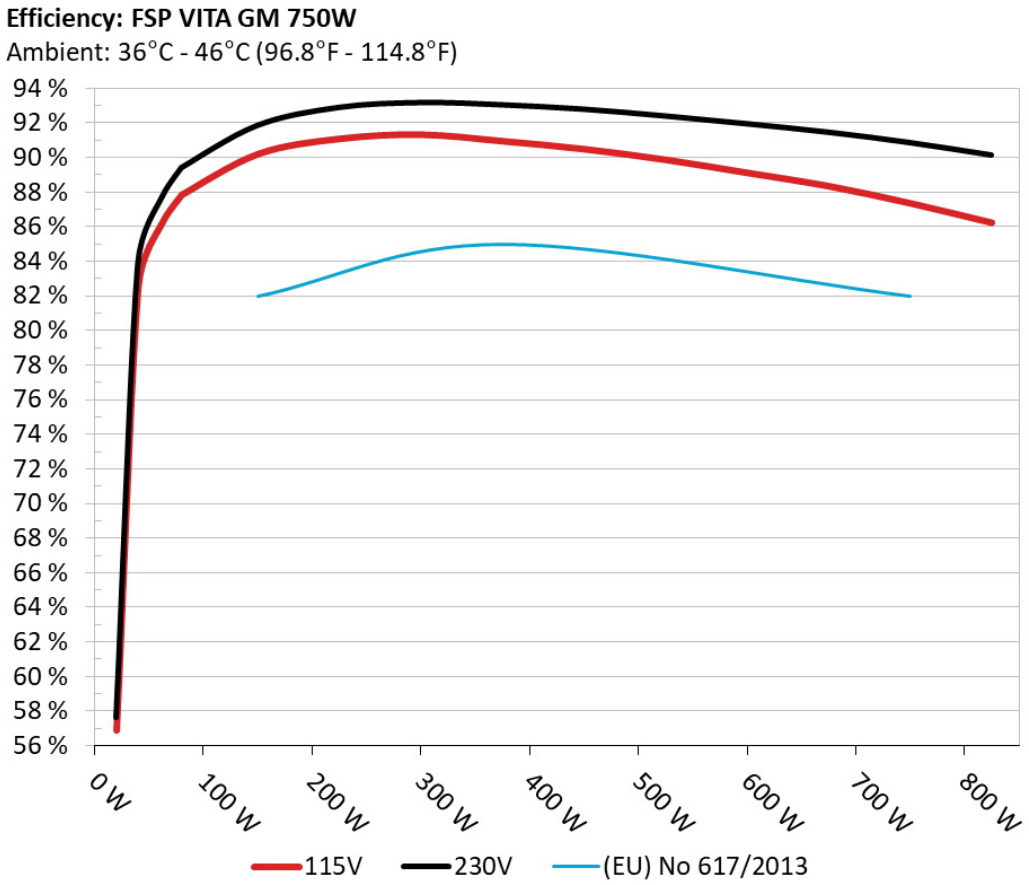
INFO

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.

Indicative Performance

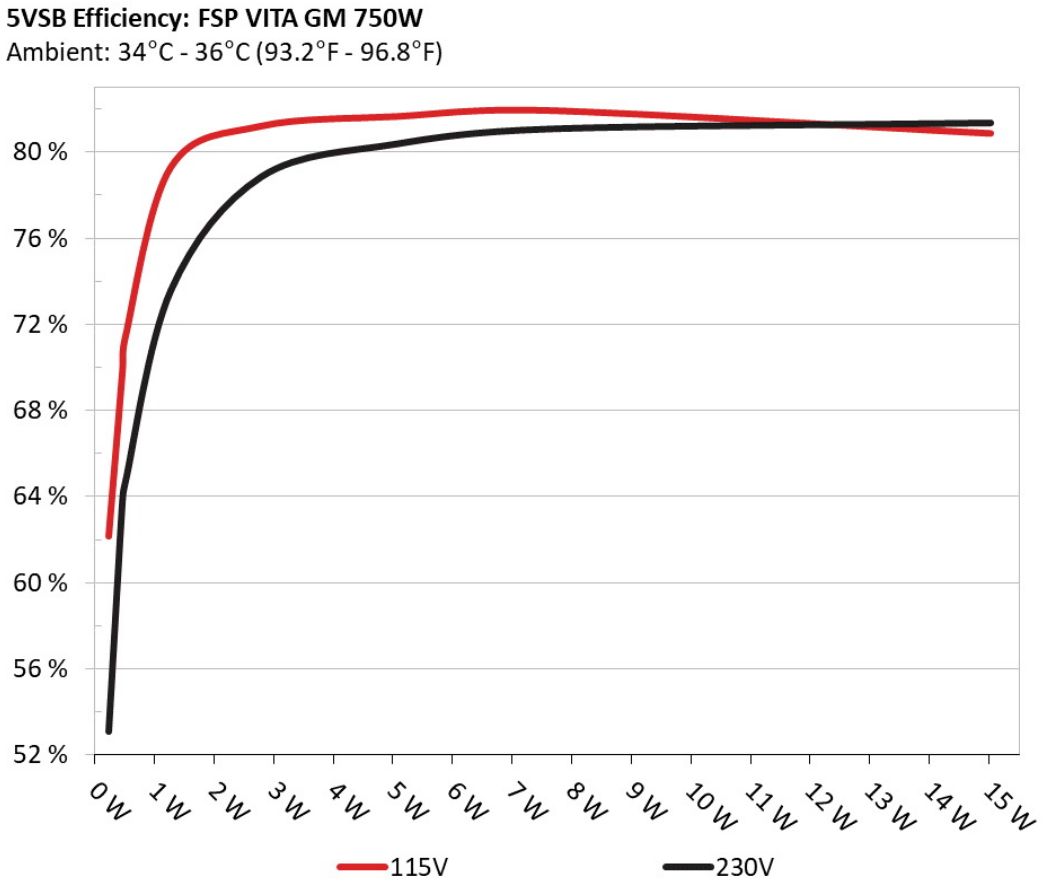
Efficiency under high ambient temperature



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**	0.229W	62.141%	0.029
	5.089V	0.369W		114.94V
2	**0.09A**	0.458W	69.783%	0.05
	5.088V	0.657W		114.94V
3	**0.55A**	2.791W	81.217%	0.223
	5.075V	3.437W		114.92V
4	**1A**	5.063W	81.665%	0.324
	5.063V	6.2W		114.92V
5	**1.5A**	7.574W	81.943%	0.38
	5.049V	9.243W		114.92V
6	**3A**	15.018W	80.875%	0.463
	5.006V	18.57W		114.91V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.229W	53.088%	0.01
	5.092V	0.434W		229.88V
2	**0.09A**	0.458W	63.768%	0.016
	5.088V	0.726W		229.92V
3	**0.55A**	2.791W	78.843%	0.077
	5.075V	3.54W		229.89V
4	**1A**	5.063W	80.365%	0.131
	5.063V	6.301W		229.89V
5	**1.5A**	7.574W	81.053%	0.183
	5.049V	9.345W		229.88V
6	**3A**	15.019W	81.336%	0.292
	5.007V	18.466W		229.88V

Protection Features

OCP (Cold @ 27.2°C)	12V: 69.00A (110.40%), 12.120V 5V: 25.5A (127.50%), 5.036V 3.3V: 25.1A (125.50%), 3.301V 5VSB: 3.9A (130.00%), 4.98V
OCP (Hot) @ 39.7°C)	12V: 67.20A (107.52%), 12.149V 5V: 24.6A (123.00%), 5.035V 3.3V: 24.4A (122.00%), 3.301V 5VSB: 3.9A (130.00%), 4.98V
OCP (Cold @ 28.4°C)	842.02W (112.27%)
OCP (Hot @ 41.3°C)	888.68W (118.49%)
OTP	✓ (130°C @ Heat Sink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Proper Operation
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%	**4.380A**	**1.969A**	**1.971A**	**0.988A**	75.003	86.813%	711	15.7	40.1°C	0.965
	12.195V	5.079V	3.349V	5.06V	86.394				41.36°C	114.88V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20%	**9.768A**	**2.958A**	**2.963A**	**1.189A**	149.944	90.209%	710	15.5	40.67°C	0.981
	12.187V	5.071V	3.341V	5.049V	166.217				42.11°C	114.86V
30%	**15.511A**	**3.456A**	**3.464A**	**1.39A**	224.948	91.096%	712	15.7	41.11°C	0.984
	12.178V	5.064V	3.334V	5.038V	246.941				43.31°C	114.83V
40%	**21.265A**	**3.955A**	**3.967A**	**1.592A**	300.039	91.335%	719	15.8	41.62°C	0.982
	12.172V	5.058V	3.328V	5.027V	328.502				44.46°C	114.8V
50%	**26.643A**	**4.952A**	**4.97A**	**1.795A**	374.479	90.961%	775	17	42.38°C	0.982
	12.160V	5.049V	3.32V	5.015V	411.69				47.13°C	114.78V
60%	**32.051A**	**5.952A**	**5.979A**	**1.999A**	449.399	90.501%	897	21.1	42.38°C	0.985
	12.156V	5.041V	3.312V	5.004V	496.564				49.15°C	114.76V
70%	**37.469A**	**6.956A**	**6.993A**	**2.203A**	524.306	89.886%	997	24	43.34°C	0.986
	12.149V	5.032V	3.304V	4.992V	583.304				50.84°C	114.73V
80%	**42.962A**	**7.961A**	**8.011A**	**2.308A**	599.506	89.132%	1149	29	43.96°C	0.987
	12.142V	5.024V	3.295V	4.983V	672.6				52.08°C	114.69V
90%	**48.798A**	**8.469A**	**8.514A**	**2.412A**	674.506	88.36%	1253	31	44.01°C	0.988
	12.132V	5.017V	3.289V	4.975V	763.363				53.52°C	114.67V
100%	**54.439A**	**8.981A**	**9.051A**	**3.03A**	749.717	87.366%	1342	32.7	45.35°C	0.99
	12.124V	5.01V	3.282V	4.951V	858.136				57.33°C	114.63V
110%	**59.958A**	**9.996A**	**10.175A**	**3.033A**	824.741	86.239%	1663	39.1	46.01°C	0.991
	12.116V	5.001V	3.273V	4.945V	956.34				58.46°C	114.6V
CL1	**0.114A**	**11.928A**	**11.965A**	**0A**	101.286	84.997%	780	17	40.19°C	0.976
	12.201V	5.046V	3.318V	5.083V	119.169				49.1°C	114.86V
CL2	**0.113A**	**19.809A**	**0A**	**0A**	101.339	83.535%	777	17	40.09°C	0.975
	12.197V	5.046V	3.332V	5.084V	121.306				46.37°C	114.87V
CL3	**0.113A**	**0A**	**19.911A**	**0A**	67.394	79.243%	715	15.7	40.69°C	0.965
	12.198V	5.055V	3.315V	5.084V	85.048				46.23°C	114.88V
CL4	**61.829A**	**0A**	**0A**	**0A**	749.548	88.295%	1311	32.1	45.06°C	0.989
	12.123V	5.037V	3.308V	5.044V	848.919				54.2°C	114.64V

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%	**4.378A**	**1.969A**	**1.971A**	**0.988A**	75.001	88.313%	710	15.5	40.29°C	0.766
	12.195V	5.079V	3.349V	5.06V	84.929				41.55°C	229.88V
20%	**9.768A**	**2.958A**	**2.963A**	**1.189A**	149.936	91.851%	718	15.8	40.54°C	0.894
	12.187V	5.071V	3.341V	5.049V	163.239				42°C	229.86V
30%	**15.510A**	**3.456A**	**3.464A**	**1.39A**	224.938	92.89%	715	15.7	41.09°C	0.934
	12.179V	5.064V	3.334V	5.038V	242.154				42.99°C	229.85V
40%	**21.265A**	**3.955A**	**3.967A**	**1.592A**	300.028	93.168%	716	15.7	41.74°C	0.952
	12.172V	5.058V	3.328V	5.027V	322.032				43.57°C	229.84V
50%	**26.631A**	**4.951A**	**4.97A**	**1.795A**	374.452	93.04%	777	17	42.43°C	0.961
	12.164V	5.05V	3.32V	5.015V	402.462				45.78°C	229.83V
60%	**32.045A**	**5.951A**	**5.979A**	**1.999A**	449.387	92.788%	800	18.1	42.58°C	0.966
	12.157V	5.042V	3.312V	5.004V	484.32				46.86°C	229.81V
70%	**37.468A**	**6.955A**	**6.994A**	**2.203A**	524.308	92.397%	1012	24.2	43.33°C	0.97
	12.149V	5.033V	3.304V	4.992V	567.45				48.55°C	229.79V
80%	**42.964A**	**7.959A**	**8.012A**	**2.308A**	599.5	91.946%	1123	27.9	43.69°C	0.973
	12.141V	5.025V	3.295V	4.983V	652.017				49.93°C	229.78V
90%	**48.799A**	**8.468A**	**8.515A**	**2.412A**	674.507	91.459%	1229	30.3	44.7°C	0.975
	12.132V	5.018V	3.288V	4.975V	737.492				52.49°C	229.77V
100%	**54.441A**	**8.979A**	**9.052A**	**3.03A**	749.716	90.856%	1428	34.2	45.42°C	0.976
	12.124V	5.011V	3.281V	4.951V	825.174				53.66°C	229.76V
110%	**59.974A**	**9.994A**	**10.175A**	**3.033A**	824.743	90.136%	1687	39.7	45.68°C	0.977
	12.113V	5.002V	3.273V	4.945V	915				54.51°C	229.75V
CL1	**0.115A**	**11.926A**	**11.966A**	**0A**	101.29	86.476%	840	20.1	41.11°C	0.842
	12.201V	5.047V	3.318V	5.083V	117.133				48.46°C	229.87V
CL2	**0.113A**	**19.806A**	**0A**	**0A**	101.349	85.113%	779	17	40.14°C	0.845
	12.200V	5.047V	3.331V	5.084V	119.076				45.92°C	229.87V
CL3	**0.113A**	**0A**	**19.912A**	**0A**	67.396	80.613%	715	15.7	40.72°C	0.762
	12.198V	5.055V	3.315V	5.084V	83.604				45.34°C	229.88V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL4	**61.816A**	**0A**	**0A**	**0A**	749.606	91.506%	1430	34.2	45.51°C	0.977
	12.126V	5.037V	3.308V	5.044V	819.192				52.85°C	229.77V

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	**1.218A**	**0.491A**	**0.492A**	**0.197A**	19.999	56.864%	718	15.8	36.75°C	0.872
	12.196V	5.086V	3.356V	5.086V	35.165				40.14°C	114.89V
40W	**2.680A**	**0.688A**	**0.689A**	**0.295A**	39.999	82.574%	719	15.8	37.85°C	0.918
	12.197V	5.084V	3.354V	5.082V	48.442				39.06°C	114.89V
60W	**4.144A**	**0.885A**	**0.886A**	**0.394A**	59.999	86.006%	715	15.7	38.05°C	0.951
	12.195V	5.083V	3.353V	5.078V	69.744				39.52°C	114.88V
80W	**5.602A**	**1.082A**	**1.083A**	**0.493A**	79.946	87.852%	716	15.7	39.45°C	0.966
	12.194V	5.081V	3.351V	5.074V	91.003				40.44°C	114.89V

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	**1.218A**	**0.491A**	**0.492A**	**0.197A**	20.001	57.636%	720	15.9	36.26°C	0.481
	12.196V	5.086V	3.356V	5.086V	34.704				40.67°C	229.88V
40W	**2.680A**	**0.688A**	**0.689A**	**0.295A**	39.999	83.877%	719	15.8	37.48°C	0.589
	12.197V	5.084V	3.354V	5.082V	47.687				39.7°C	229.88V
60W	**4.144A**	**0.885A**	**0.886A**	**0.394A**	59.998	87.459%	717	15.8	38.72°C	0.705
	12.194V	5.083V	3.352V	5.078V	68.602				40.02°C	229.88V
80W	**5.602A**	**1.082A**	**1.083A**	**0.493A**	79.943	89.408%	717	15.8	39.88°C	0.78
	12.193V	5.082V	3.351V	5.074V	89.414				40.74°C	229.87V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	16.5 mV	11.5 mV	11.9 mV	12.4 mV	Pass
20% Load	12.9 mV	9.4 mV	9.7 mV	11.7 mV	Pass
30% Load	12.8 mV	11.3 mV	12.7 mV	13.7 mV	Pass
40% Load	11.8 mV	10.6 mV	10.0 mV	12.3 mV	Pass
50% Load	12.7 mV	10.5 mV	11.6 mV	13.9 mV	Pass
60% Load	13.1 mV	12.6 mV	12.1 mV	14.1 mV	Pass
70% Load	13.9 mV	12.5 mV	13.1 mV	14.9 mV	Pass
80% Load	13.1 mV	12.5 mV	12.7 mV	14.3 mV	Pass
90% Load	14.4 mV	13.8 mV	15.3 mV	15.5 mV	Pass
100% Load	22.3 mV	14.9 mV	15.8 mV	17.9 mV	Pass
110% Load	22.0 mV	12.7 mV	14.3 mV	18.1 mV	Pass
Crossload 1	21.9 mV	11.1 mV	11.3 mV	12.1 mV	Pass
Crossload 2	14.0 mV	13.7 mV	9.9 mV	10.5 mV	Pass
Crossload 3	15.6 mV	10.4 mV	12.6 mV	10.2 mV	Pass
Crossload 4	21.4 mV	13.8 mV	14.6 mV	15.8 mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	17.3 mV	10.7 mV	10.5 mV	11.8 mV	Pass
20% Load	13.4 mV	10.9 mV	10.3 mV	12.0 mV	Pass
30% Load	12.5 mV	12.6 mV	12.9 mV	14.9 mV	Pass
40% Load	12.0 mV	10.9 mV	11.5 mV	13.7 mV	Pass
50% Load	12.5 mV	11.0 mV	11.4 mV	13.2 mV	Pass
60% Load	13.5 mV	11.2 mV	12.6 mV	13.8 mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	13.1 mV	12.0 mV	13.3 mV	14.2 mV	Pass
80% Load	13.7 mV	13.3 mV	13.5 mV	15.5 mV	Pass
90% Load	14.1 mV	13.3 mV	15.5 mV	15.7 mV	Pass
100% Load	22.4 mV	15.9 mV	16.4 mV	19.6 mV	Pass
110% Load	22.2 mV	14.1 mV	15.0 mV	19.0 mV	Pass
Crossload 1	22.6 mV	11.5 mV	12.4 mV	12.6 mV	Pass
Crossload 2	14.2 mV	14.7 mV	10.9 mV	11.4 mV	Pass
Crossload 3	15.7 mV	10.4 mV	12.5 mV	11.5 mV	Pass
Crossload 4	21.5 mV	14.0 mV	15.5 mV	15.5 mV	Pass

The results above are not used in the certification process

FSP Technology VITA GM 750W



Top side



Power specifications label

Cybenetics 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