Corsair HX1200i (ATX v3.1)

Serial Number A74PA40291D67D

Lab ID CR12002510

Certification ID 252510

Test Result Report ID: 24PS2510A

Certificate Issue Date: Jul 24, 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	Corsair
Model	HX1200i (ATX v3.1)
OEM/ODM	Channel Well Technology
Serial Number	A74PA40291D67D
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240

Rated Current (Arms)	15-7
Rated Frequency (Hz)	47-63
Rated Power (W)	1200
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	140mm Fluid Dynamic Bearing Fan (NR140P)
Semi-Passive Operation	✓
Cybenetics Testing Information	
Lab ID	CR12002510
Date of receipt	Jul 4, 2024
Testing Date	Jul 17, 2024
Report Issued Date	Jul 24, 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 24 pin (610mm)	1	1	16-18AWG	No
4+4 pin EPS12V (750mm)	2	2	16AWG	No
6+2 pin PCIe (650mm)	4	4	16AWG	No
12+2 pin PCIe (650mm) (600W)	1	1	16-18AWG	No
SATA (460mm+110mm+110mm+110mm)	2	8	18AWG	No

4-pin Molex (450mm+100mm+100mm+100mm)	2	8	18AWG	No
USB Type C to Motherboard Header Cable (520mm)	1	1	24-28AWG	No
AC Power Cord (1370mm) - C13 coupler	1	1	16AWG	-

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	25	25	100	3	0.3
	Watts	150		1200	15	3.6
Total Max. Power (W)		1200				

Parts Description

General Data	
Manufacturer (OEM)	CWT
PCB Type	Double-Sided
Primary Side	
Transient Filter	6x Y caps, 3x X caps, 2x CM chokes, 1x MOV
Inrush Protection	2x NTC Thermistor SCK-075 (7 Ohm) & Relay
Bridge Rectifier(s)	2x Vishay LVB2560 (600V, 25A @ 105°C)
APFC MOSFETs	2x Infineon IPW60R099P6 (600V, 24A @ 100°C, Rds(on): 0.099Ohm)

APFC Boost Diode	2x Infineon IDH08G65C6 (650V, 8A @ 145°C)
Driver IC(s)	1x Texas Instruments UCC27324-Q1
Bulk Cap(s)	2x Rubycon (420V, 470uF each or 940uF combined, 2,000h @ 105°C,MXE) & 1x Nippon Chemi-Con (420V, 560uF, 2,000h @ 105°C, KMR)
Main Switchers	4x Alpha & Omega AOTF29S50 (500V, 18A @ 100°C, Rds(on): 0.15Ohm)
Digital Controllers	2x Texas Instruments UCD3138A
MCU	Microchip PIC32MM0064GPM036
Topology	Primary side: Semi-Digital, Interleaved PFC, Full-Bridge & LLC converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	
+12V MOSFETs	8x Vishay SiR626DP (60V, 100A @ 61°C, Rds(on): 4.8mOhm)
5V & 3.3V	DC-DC Converters: 8x Ubiq QM3054M (30V, 57A @ 100°C, 5.5mΩ) PWM Controller: uPI-Semi uP3861P
Filtering Capacitors	Electrolytic: 4x Nichicon (4,000h @ 105°C, HD), 4x Rubycon (4-10,000h @ 105°C, YXF), 6x Rubycon (6-10,000 @ 105, ZLH) 1x Rubycon (4-10,000h @ 105°C, YXJ), 1x Nichicon ((4-10,000h @ 105°C, HE(M)), Polymer: 13x FPCAP, 32x United Chemi-con, 1x Rubycon (YXF)
Driver IC(s)	2x Texas Instruments UCC27324-Q1
Supervisor IC	Weltrend WT7502R (OVP, UVP, SCP, PG)
Fan Controller	Microchip PIC32MM0064GPM036
Fan Model	Corsair NR140P (140mm, 12V, 0.22A, Fluid Dynamic Bearing Fan)
5VSB Circuit	
Rectifier	1x Silan SVF4N65RD (650V, 2.5A @ 100°C, Rds(on): 2.7 Ohm) FET
Standby PWM Controller	On Bright OB5282CP

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)	89.650%
Average Noise Output (>1450 Load Combinations)	18.31dBA
Average PF (>1450 Load Combinations)	0.994
Efficiency With 10W (≤500W) or 2% (>500W) Load	74.075%
Standby Power Consumption	0.0279W
Non-Accredited	
12V Ripple (Full Load)	24.75mV
5V Ripple (Full Load)	16.12mV
3.3V Ripple (Full Load)	16.06mV
5VSB Ripple (Full Load)	10.51mV
12V Load Regulation	0.64%
5V Load Regulation	0.54%
3.3V Load Regulation	0.73%
5VSB Load Regulation	1.48%
Inrush Current	13.540A

230V		
Accredited		
Average Efficiency (>1450 load combinations)		91.473%
Average Noise Output (>1450 Load Combinations)		18.33dBA
Average PF (>1450 Load Combinations)		0.956
Efficiency With 10W (≤500W) or 2% (>500W) Load		69.324%
Standby Power Consumption		0.1162W
Non-Accredited		
12V Ripple (Full Load)		23.41mV
5V Ripple (Full Load)		14.41mV
3.3V Ripple (Full Load)		14.90mV
5VSB Ripple (Full Load)		9.58mV
12V Load Regulation		0.63%
5V Load Regulation		0.52%
3.3V Load Regulation		0.79%
5VSB Load Regulation		1.48%
Inrush Current		24.330A
12V Transient Response (200%)		11.14V
5V Transient Response (200%)		4.899V
3.3V Transient Response (200%)		3.134V
5VSB Transient Response (200%)		4.888V
Hold-Up Time & PWR_OK Signal		21.80ms
AC Loss to PWR_OK Hold Up Time		18.70ms
PWR_OK Inactive to DC Loss Delay		3.10ms
PSU Timings: T1 (20% / 100%)	67.0ms	70.0ms
PSU Timings: T3 (20% / 100%)	137.0ms	135.0ms
12V OCP (27.3°C / 42.0°C)	124.40A (124.40%), 12.030V	124.80A (124.80%), 12.032V
5V OCP (27.3°C / 42.0°C)	34.6A (138.40%), 5.019V	34.7A (138.80%), 5.019V
3.3V OCP (27.3°C / 42.0°C)	34.5A (138.00%), 3.293V	34.5A (138.00%), 3.291V
5VSB OCP (27.3°C / 42.0°C)	5.6A (186.67%), 4.849V	5.5A (183.33%), 4.842V
OPP (28.46°C / 43.27°C)	121.22%	123.84%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	21.8
AC Loss to PWR_OK Hold Up Time (ms)	18.7
PWR_OK Inactive to DC Loss Delay (ms)	3.1

Vampire Power

Tables

115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.07 V	115.04 V	113.85 V	115.12 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 %	0.10 %	N/A	0.18 %	2.00 %	PASS
Real Power:	0.028 W	0.024 W	N/A	0.032 W	N/A	N/A
Apparent Power:	15.309 W	15.028 W	N/A	15.601 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

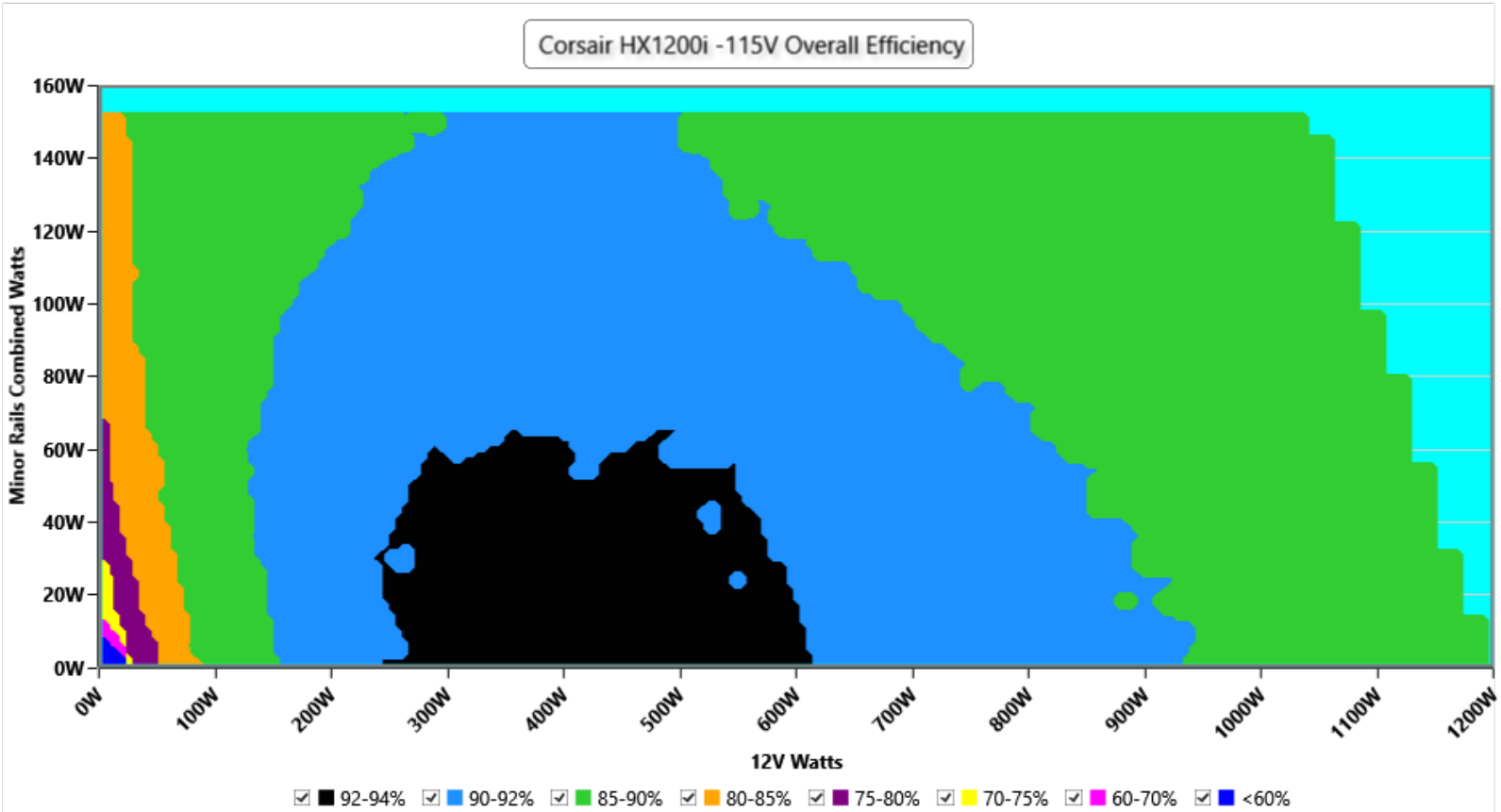
230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	231.03 V	230.95 V	227.70 V	231.11 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 %	0.15 %	N/A	0.26 %	2.00 %	PASS
Real Power:	0.116 W	0.101 W	N/A	0.198 W	N/A	N/A
Apparent Power:	51.489 W	50.950 W	N/A	52.059 W	N/A	N/A

Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

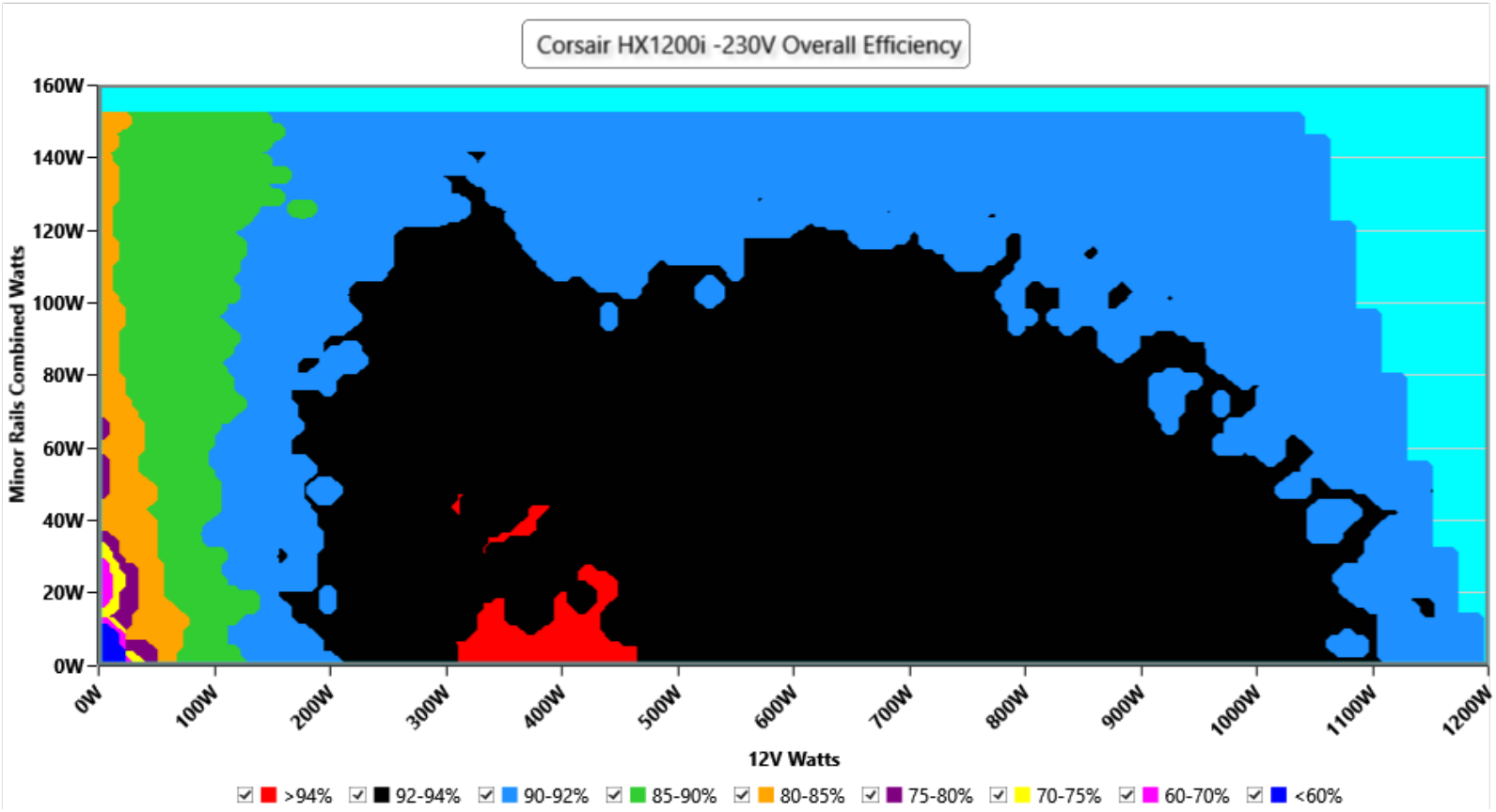
115V



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

230V

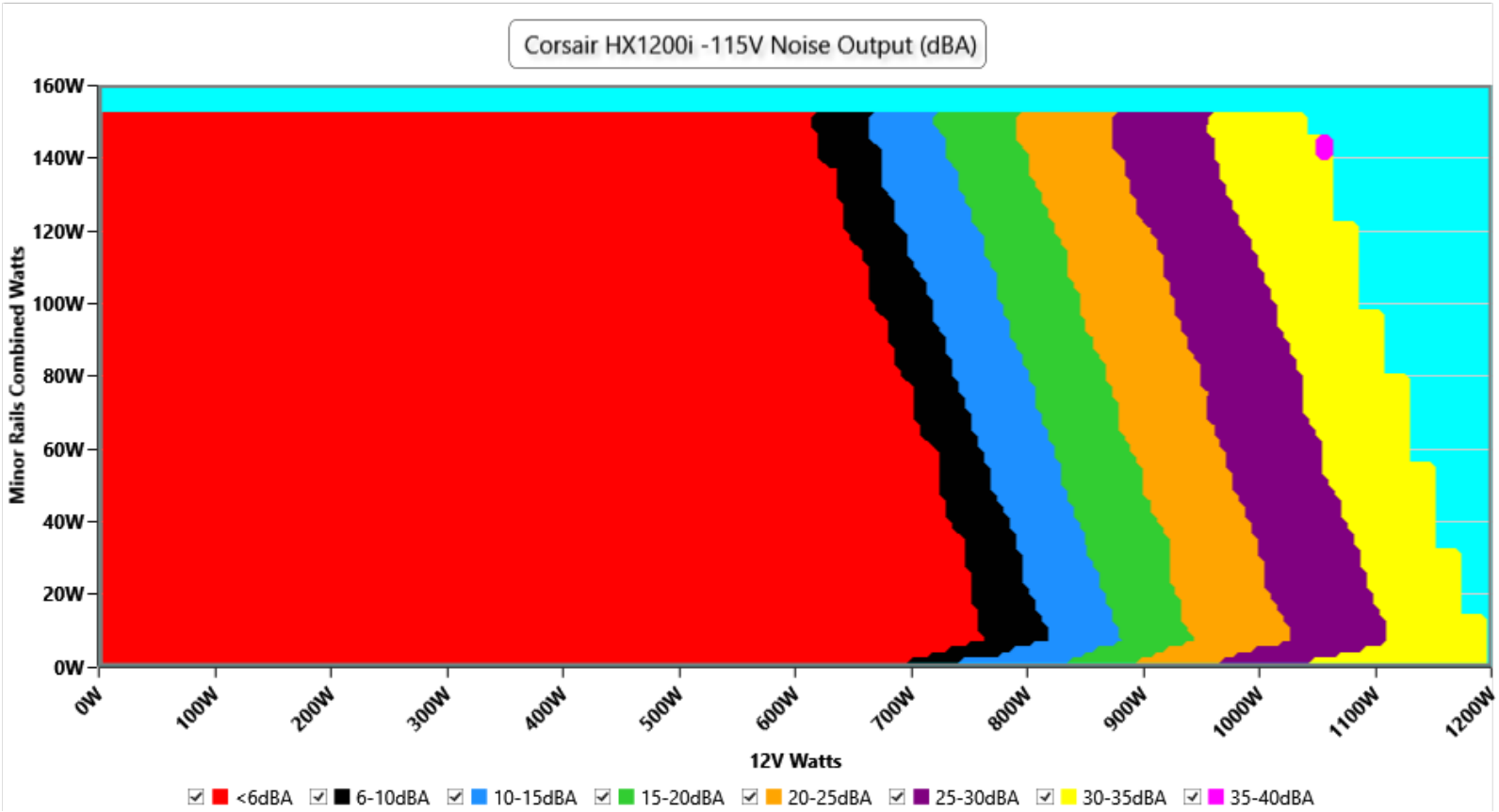


INFO

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

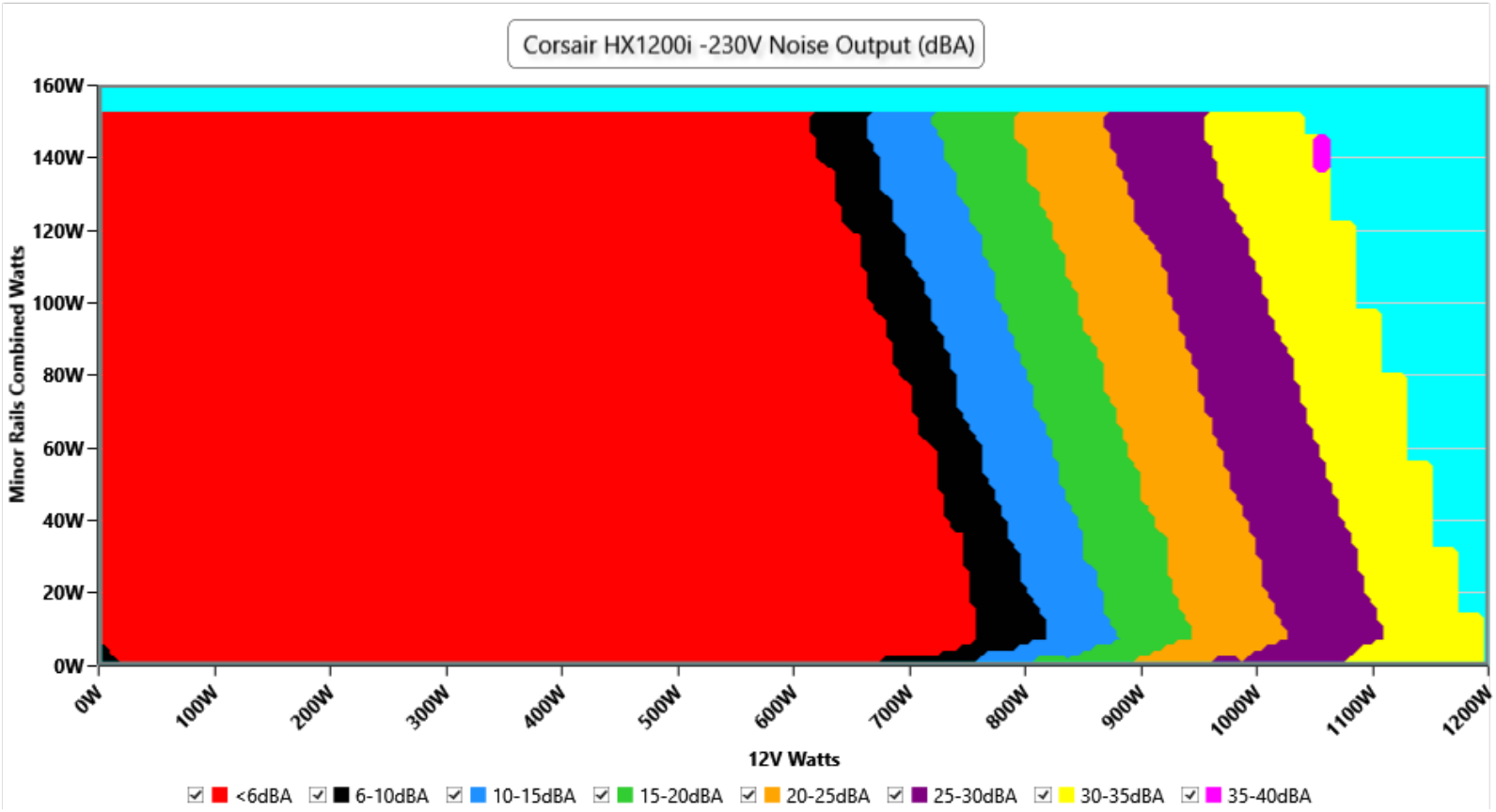
115V



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%	0 RPM · <6.0 dB(A) · 32.9 °C	0 RPM · <6.0 dB(A) · 43.5 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 33.1 °C	0 RPM · <6.0 dB(A) · 42.0 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 33.2 °C	0 RPM · <6.0 dB(A) · 50.0 °C	fan off in both
100%	1212 RPM · 34.5 dB(A) · 30.6 °C	1389 RPM · 38.4 dB(A) · 46.0 °C	**+3.9 dB(A)**

230V

Load	Normal ambient fan · noise · intake	High ambient fan · noise · intake	Noise change
10%	0 RPM · <6.0 dB(A) · 31.5 °C	0 RPM · <6.0 dB(A) · 42.8 °C	fan off in both
20%	0 RPM · <6.0 dB(A) · 31.8 °C	0 RPM · <6.0 dB(A) · 43.0 °C	fan off in both
50%	0 RPM · <6.0 dB(A) · 31.9 °C	0 RPM · <6.0 dB(A) · 42.7 °C	fan off in both
100%	1207 RPM · 34.3 dB(A) · 30.3 °C	1492 RPM · 39.6 dB(A) · 45.8 °C	**+5.3 dB(A)**

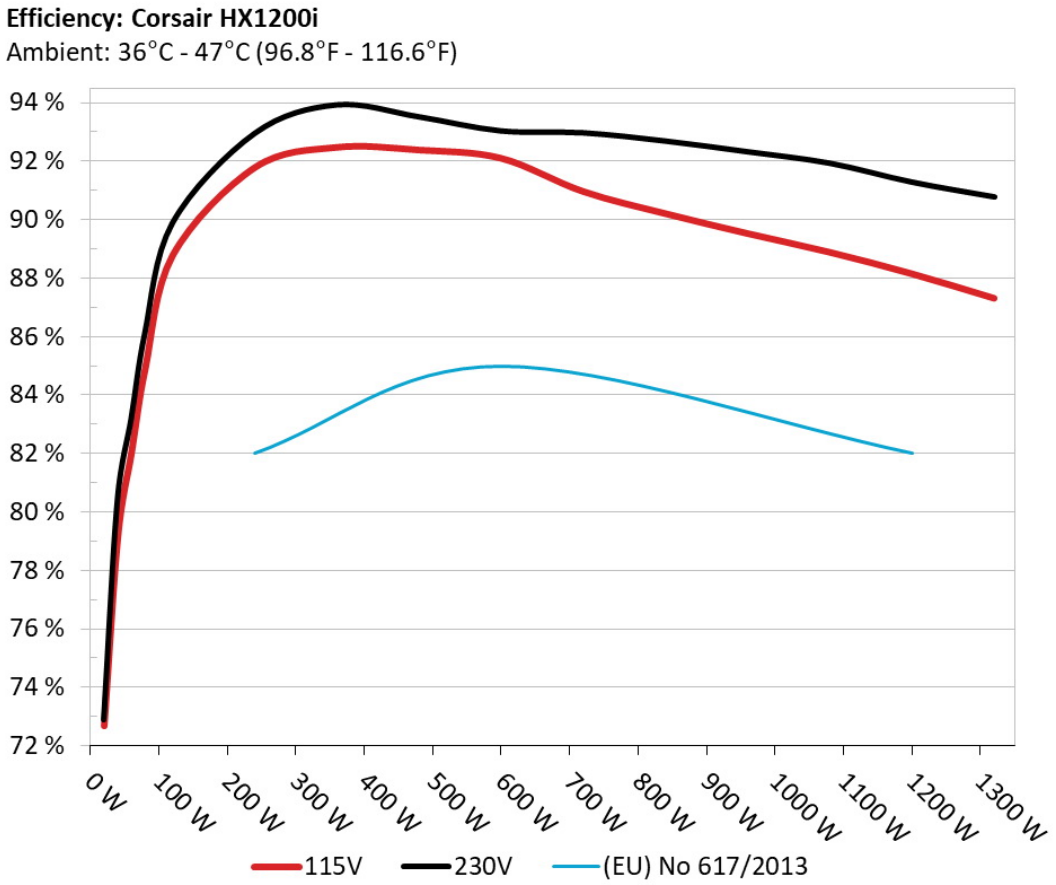
INFO

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

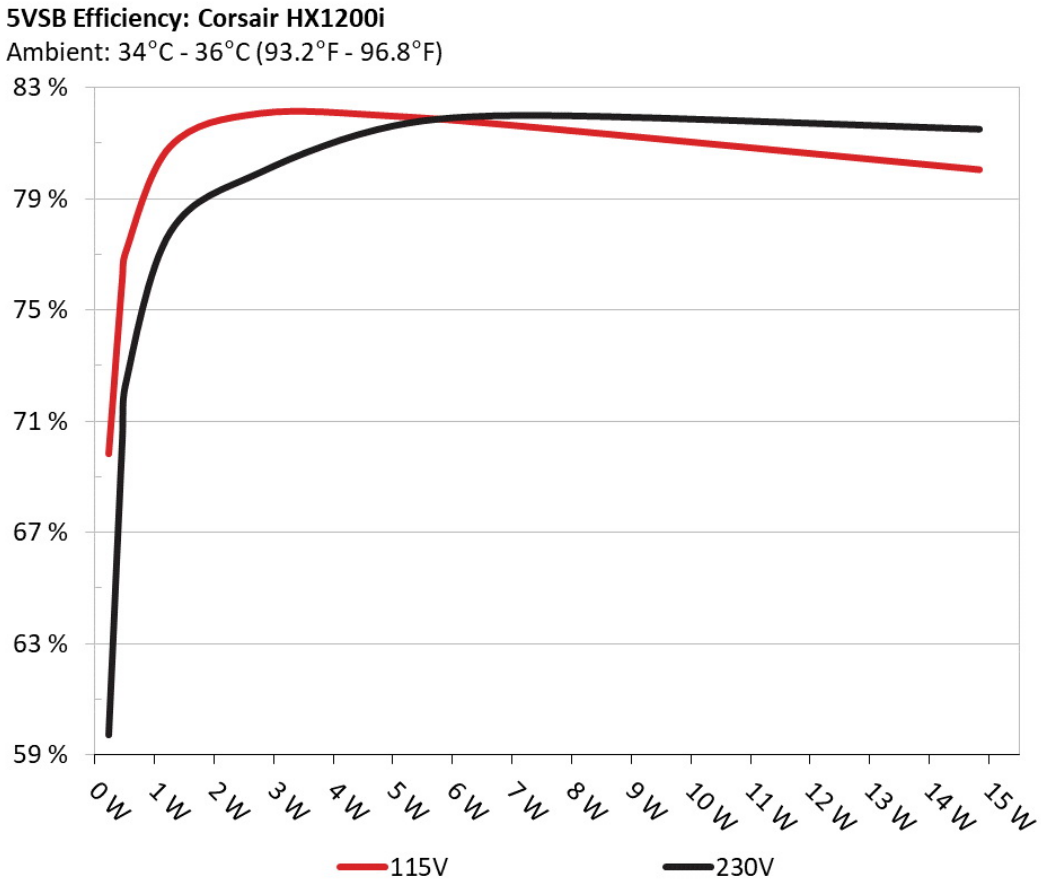
Efficiency under high ambient temperature



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**	0.227W	69.845%	0.022
	5.051V	0.325W		114.85V
2	**0.09A**	0.454W	76.129%	0.04
	5.049V	0.597W		114.85V
3	**0.55A**	2.768W	82.09%	0.204
	5.033V	3.372W		114.84V
4	**1A**	5.017W	81.988%	0.319
	5.017V	6.119W		114.85V
5	**1.5A**	7.5W	81.562%	0.404
	4.999V	9.196W		114.84V
6	**3A**	14.839W	80.064%	0.518
	4.946V	18.534W		114.83V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.227W	59.722%	0.007
	5.051V	0.382W		229.86V
2	**0.09A**	0.454W	70.298%	0.013
	5.049V	0.646W		229.83V
3	**0.55A**	2.768W	79.936%	0.068
	5.033V	3.463W		229.84V
4	**1A**	5.017W	81.617%	0.117
	5.017V	6.147W		229.84V
5	**1.5A**	7.499W	81.982%	0.168
	4.999V	9.147W		229.84V
6	**3A**	14.838W	81.489%	0.287
	4.946V	18.209W		229.84V

Protection Features

OCP (Cold @ 27.3°C)	12V: 124.4A (124.4%), 12.03V 5V: 34.6A (138.4%), 5.019V 3.3V: 34.5A (138%), 3.293V 5VSB: 5.6A (186.67%), 4.849V
OCP (Hot) @ 42°C)	12V: 124.8A (124.8%), 12.032V 5V: 34.7A (138.8%), 5.019V 3.3V: 34.5A (138%), 3.291V 5VSB: 5.5A (183.33%), 4.842V
OPP (Cold @ 28.5°C)	1454.7W (121.22%)
OPP (Hot @ 43.3°C)	1486.13W (123.84%)
OTP	✓ (130°C @ Secondary Side)
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%	**8.137A**	**1.976A**	**2.002A**	**0.991A**	119.983	88.77%	0	<6.0	43.46°C	0.984
	12.092V	5.06V	3.297V	5.048V	135.123				40.13°C	114.81V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20%	**17.296A**	**2.966A**	**3.005A**	**1.19A**	239.934	91.774%	0	<6.0	41.95°C	0.991
	12.085V	5.057V	3.294V	5.042V	261.431				40.59°C	114.78V
30%	**26.749A**	**3.463A**	**3.506A**	**1.391A**	359.088	92.465%	0	<6.0	46.57°C	0.993
	12.077V	5.053V	3.294V	5.033V	388.348				41.39°C	114.73V
40%	**36.314A**	**3.96A**	**4.01A**	**1.591A**	479.471	92.376%	0	<6.0	47.94°C	0.997
	12.069V	5.051V	3.292V	5.027V	519.029				41.85°C	114.7V
50%	**45.497A**	**4.952A**	**5.018A**	**1.792A**	599.248	92.095%	0	<6.0	50.02°C	0.998
	12.061V	5.048V	3.288V	5.022V	650.7				42.28°C	114.65V
60%	**54.745A**	**5.946A**	**6.026A**	**1.994A**	719.792	90.954%	396	<6.0	42.6°C	0.999
	12.056V	5.046V	3.286V	5.016V	791.467				51.16°C	114.6V
70%	**63.945A**	**6.941A**	**7.037A**	**2.195A**	839.505	90.203%	608	11.5	43.17°C	0.999
	12.048V	5.043V	3.283V	5.01V	930.678				52.22°C	114.57V
80%	**73.229A**	**7.935A**	**8.049A**	**2.297A**	959.493	89.521%	800	20.9	43.73°C	0.999
	12.039V	5.04V	3.28V	5.006V	1071.804				52.96°C	114.52V
90%	**82.848A**	**8.436A**	**8.543A**	**2.4A**	1079.35	88.883%	1064	30.3	44.25°C	0.999
	12.032V	5.038V	3.277V	5.001V	1215.15				54.02°C	114.48V
100%	**92.286A**	**8.936A**	**9.069A**	**3.008A**	1199.372	88.146%	1389	38.4	45.98°C	0.998
	12.024V	5.035V	3.275V	4.986V	1360.671				54.9°C	114.41V
110%	**101.663A**	**9.936A**	**10.178A**	**3.01A**	1319.985	87.307%	1641	42.4	46.79°C	0.998
	12.017V	5.032V	3.271V	4.983V	1511.922				56.03°C	114.37V
CL1	**0.116A**	**17.931A**	**18.202A**	**0A**	151.277	83.555%	395	<6.0	41.2°C	0.989
	12.080V	5.035V	3.274V	5.093V	181.053				51.81°C	114.79V
CL2	**0.115A**	**24.789A**	**0A**	**0A**	126.239	82.512%	771	19.6	40.02°C	0.986
	12.086V	5.037V	3.282V	5.106V	153.027				46.21°C	114.8V
CL3	**0.114A**	**0A**	**25.178A**	**0A**	83.879	75.271%	776	19.7	41.13°C	0.981
	12.086V	5.047V	3.276V	5.058V	111.538				46.03°C	114.83V
CL4	**99.724A**	**0A**	**0A**	**0A**	1199.93	88.758%	1208	34.3	45.13°C	0.998
	12.033V	5.045V	3.286V	5.018V	1351.899				52.21°C	114.43V

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%	**8.137A**	**1.976A**	**2.001A**	**0.99A**	119.988	89.881%	0	<6.0	42.8°C	0.774
	12.092V	5.061V	3.299V	5.049V	133.491				40.08°C	229.82V
20%	**17.298A**	**2.965A**	**3.004A**	**1.19A**	239.945	92.956%	0	<6.0	43°C	0.94
	12.085V	5.058V	3.296V	5.043V	258.161				40.52°C	229.8V
30%	**26.751A**	**3.461A**	**3.507A**	**1.39A**	359.122	93.936%	0	<6.0	43.58°C	0.957
	12.077V	5.056V	3.294V	5.036V	382.303				41.12°C	229.78V
40%	**36.311A**	**3.957A**	**4.01A**	**1.591A**	479.49	93.53%	0	<6.0	43.36°C	0.971
	12.070V	5.054V	3.291V	5.03V	512.676				41.73°C	229.76V
50%	**45.489A**	**4.949A**	**5.019A**	**1.791A**	599.268	93.047%	0	<6.0	42.7°C	0.981
	12.064V	5.051V	3.288V	5.024V	644.047				42.01°C	229.74V
60%	**54.743A**	**5.943A**	**6.027A**	**1.993A**	719.796	92.979%	398	<6.0	42.55°C	0.984
	12.056V	5.048V	3.285V	5.018V	774.115				51.57°C	229.72V
70%	**63.946A**	**6.938A**	**7.037A**	**2.194A**	839.524	92.699%	708	17.2	43.26°C	0.985
	12.048V	5.045V	3.283V	5.012V	905.595				52.54°C	229.7V
80%	**73.230A**	**7.932A**	**8.049A**	**2.296A**	959.519	92.331%	953	26.5	43.75°C	0.987
	12.039V	5.042V	3.28V	5.008V	1039.304				53.07°C	229.68V
90%	**82.849A**	**8.432A**	**8.542A**	**2.399A**	1079.332	91.939%	1181	33.5	44.66°C	0.988
	12.032V	5.04V	3.277V	5.003V	1173.994				54.2°C	229.66V
100%	**92.284A**	**8.933A**	**9.069A**	**3.007A**	1199.367	91.292%	1492	39.6	45.75°C	0.99
	12.025V	5.037V	3.275V	4.988V	1313.841				55.36°C	229.64V
110%	**101.663A**	**9.932A**	**10.177A**	**3.009A**	1319.991	90.784%	1741	44	46.31°C	0.991
	12.017V	5.034V	3.272V	4.985V	1454.036				55.65°C	229.61V
CL1	**0.116A**	**17.925A**	**18.203A**	**0A**	151.281	84.575%	396	<6.0	41.21°C	0.912
	12.080V	5.037V	3.274V	5.095V	178.859				51.85°C	229.81V
CL2	**0.115A**	**24.786A**	**0A**	**0A**	126.242	83.406%	777	19.8	41.58°C	0.893
	12.086V	5.037V	3.282V	5.107V	151.35				49°C	229.82V
CL3	**0.114A**	**0A**	**25.184A**	**0A**	83.882	76.041%	778	19.9	40.68°C	0.846
	12.087V	5.048V	3.276V	5.059V	110.329				47.41°C	229.83V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL4	**99.723A**	**0A**	**0A**	**0A**	1200.017	91.681%	1213	34.5	45.34°C	0.99
	12.033V	5.047V	3.286V	5.02V	1308.952				53.24°C	229.64V

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	**1.226A**	**0.494A**	**0.5A**	**0.198A**	19.994	72.684%	0	<6.0	38.67°C	0.778
	12.102V	5.061V	3.299V	5.06V	27.647				36.56°C	114.84V
40W	**2.702A**	**0.691A**	**0.7A**	**0.296A**	39.994	79.166%	0	<6.0	39.81°C	0.873
	12.100V	5.061V	3.299V	5.059V	50.518				37.5°C	114.84V
60W	**4.176A**	**0.889A**	**0.9A**	**0.395A**	59.995	82.05%	0	<6.0	40.48°C	0.91
	12.099V	5.062V	3.299V	5.057V	73.141				38.4°C	114.83V
80W	**5.647A**	**1.086A**	**1.1A**	**0.494A**	79.932	84.908%	0	<6.0	42.31°C	0.975
	12.096V	5.062V	3.299V	5.056V	94.257				39.84°C	114.83V

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	**1.228A**	**0.494A**	**0.5A**	**0.198A**	20.004	72.88%	0	<6.0	34.66°C	0.394
	12.101V	5.063V	3.301V	5.062V	27.544				36.91°C	229.84V
40W	**2.702A**	**0.691A**	**0.7A**	**0.296A**	40	80.409%	0	<6.0	36.34°C	0.551
	12.099V	5.063V	3.301V	5.06V	49.87				37°C	229.83V
60W	**4.177A**	**0.889A**	**0.9A**	**0.395A**	59.999	83.173%	0	<6.0	40.94°C	0.64
	12.098V	5.063V	3.301V	5.059V	72.175				38.53°C	229.83V
80W	**5.648A**	**1.086A**	**1.1A**	**0.494A**	79.939	86.106%	0	<6.0	41.86°C	0.692
	12.096V	5.062V	3.301V	5.057V	92.835				39.47°C	229.82V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	17.2 mV	12.3 mV	12.6 mV	7.5 mV	Pass
20% Load	17.7 mV	12.6 mV	12.8 mV	7.9 mV	Pass
30% Load	18.1 mV	13.0 mV	13.6 mV	8.1 mV	Pass
40% Load	18.3 mV	13.1 mV	13.9 mV	8.2 mV	Pass
50% Load	18.3 mV	13.8 mV	14.4 mV	8.8 mV	Pass
60% Load	16.6 mV	12.2 mV	11.8 mV	7.9 mV	Pass
70% Load	19.6 mV	13.8 mV	14.2 mV	8.9 mV	Pass
80% Load	20.1 mV	15.3 mV	16.7 mV	8.9 mV	Pass
90% Load	14.2 mV	11.8 mV	12.5 mV	8.2 mV	Pass
100% Load	24.8 mV	16.1 mV	16.1 mV	10.5 mV	Pass
110% Load	25.9 mV	15.5 mV	17.6 mV	10.9 mV	Pass
Crossload 1	23.5 mV	18.5 mV	18.4 mV	9.3 mV	Pass
Crossload 2	20.8 mV	20.0 mV	14.0 mV	8.8 mV	Pass
Crossload 3	17.3 mV	13.8 mV	15.1 mV	8.3 mV	Pass
Crossload 4	25.1 mV	14.3 mV	15.5 mV	9.8 mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	16.0 mV	12.3 mV	13.3 mV	8.2 mV	Pass
20% Load	15.5 mV	12.1 mV	12.3 mV	7.3 mV	Pass
30% Load	15.7 mV	12.1 mV	12.3 mV	7.9 mV	Pass
40% Load	16.2 mV	12.4 mV	12.4 mV	8.0 mV	Pass
50% Load	16.9 mV	13.0 mV	13.1 mV	8.3 mV	Pass
60% Load	16.5 mV	14.3 mV	13.4 mV	8.4 mV	Pass

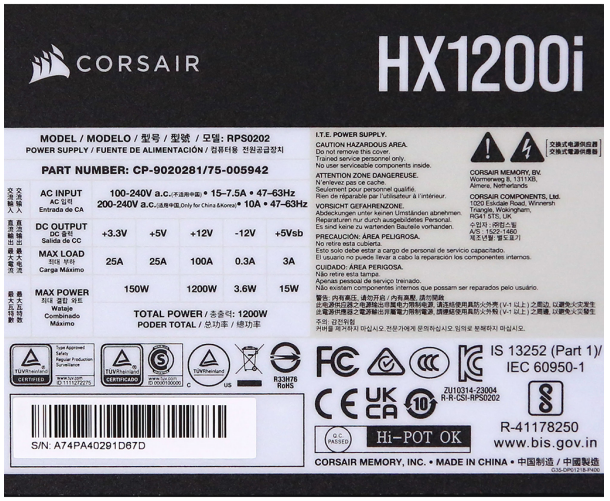
Test	12V	5V	3.3V	5VSB	Pass/Fail
70% Load	18.8 mV	13.8 mV	12.9 mV	8.8 mV	Pass
80% Load	18.1 mV	13.7 mV	15.2 mV	8.7 mV	Pass
90% Load	19.8 mV	13.6 mV	16.5 mV	8.8 mV	Pass
100% Load	23.4 mV	14.4 mV	14.9 mV	9.6 mV	Pass
110% Load	25.9 mV	15.0 mV	14.6 mV	9.2 mV	Pass
Crossload 1	19.2 mV	17.7 mV	14.8 mV	8.1 mV	Pass
Crossload 2	17.9 mV	19.2 mV	12.7 mV	7.6 mV	Pass
Crossload 3	17.1 mV	13.8 mV	15.3 mV	7.9 mV	Pass
Crossload 4	23.7 mV	14.5 mV	14.2 mV	9.2 mV	Pass

The results above are not used in the certification process

Corsair HX1200i (ATX v3.1)



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Power specifications label

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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