

## Anex

Deepcool PX1200G

Lab ID#: DC12002133  
 Receipt Date: Jan 31, 2023  
 Test Date: Feb 8, 2023

Report: 23PS2133A

Report Date: Feb 17, 2023

### DUT INFORMATION

Brand	Deepcool
Manufacturer (OEM)	CWT
Series	PXG
Model Number	PXC00G-FC
Serial Number	
DUT Notes	

### DUT SPECIFICATIONS

Rated Voltage (Vrms)	100-240
Rated Current (Arms)	15-7.5
Rated Frequency (Hz)	50-60
Rated Power (W)	1200
Type	ATX12V
Cooling	135mm Fluid Dynamic Bearing Fan (HA13525H12SF-Z)
Semi-Passive Operation	✓ (selectable)
Cable Design	Fully Modular

### TEST EQUIPMENT

Electronic Loads	Chroma 63601-5 x2 Chroma 63600-2 63640-80-80 x10 63610-80-20
AC Sources	Chroma 6530, APM SP300VAC4000W-P
Power Analyzers	RS HMC8015, N4L PPA1530, N4L PPA5530
Oscilloscopes	Picoscope 4444, Rigol DS7014, 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, Keithley 2015 - THD
UPS	FSP Champ Tower 3kVA, CyberPower OLS3000E 3kVA
Isolation Transformer	4kVA

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### RESULTS

Temperature Range (°C /°F)	30-32 / 86-89.6
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓
ALPM (Alternative Low Power Mode) compatible	✓
ATX v3.0 PSU Power Excursion	✓

### 115V

Average Efficiency	88.966%
Efficiency With 10W (≤500W) or 2% (>500W)	77.334
Average Efficiency 5VSB	78.948%
Standby Power Consumption (W)	0.0152000
Average PF	0.987
Avg Noise Output	38.64 dB(A)
Efficiency Rating (ETA)	PLATINUM
Noise Rating (LAMBDA)	Standard+

### POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	22	22	100	3	0.3
	Watts	120		1200	15	3.6
Total Max. Power (W)		1200				

### HOLD-UP TIME & POWER OK SIGNAL (230V)

Hold-Up Time (ms)	22
AC Loss to PWR_OK Hold Up Time (ms)	19.5
PWR_OK Inactive to DC Loss Delay (ms)	2.5

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### CABLES AND CONNECTORS

#### Modular Cables

Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors
ATX connector 20+4 pin (600mm)	1	1	16AWG	No
4+4 pin EPS12V (700mm)	2	2	16AWG	No
6+2 pin PCIe (650mm)	3	3	16AWG	No
12+4 pin PCIe (650mm) (600W)	1	1	16-24AWG	No
SATA (500mm+150mm+150mm+150mm)	2	8	18AWG	No
4-pin Molex (500mm+150mm+150mm+150mm)	1	4	18AWG	No

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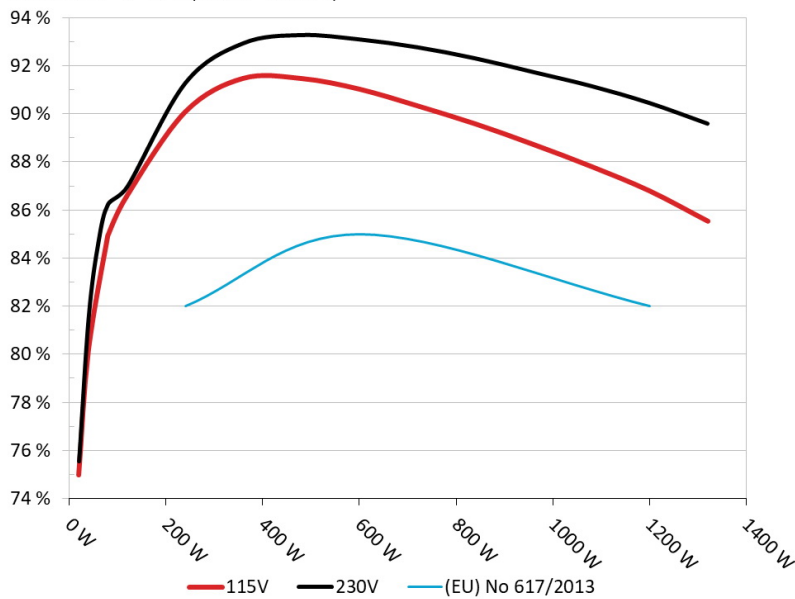
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### EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE

#### Efficiency: Deepcool PX1200G

Ambient: 37°C - 47°C (98.6°F - 116.6°F)



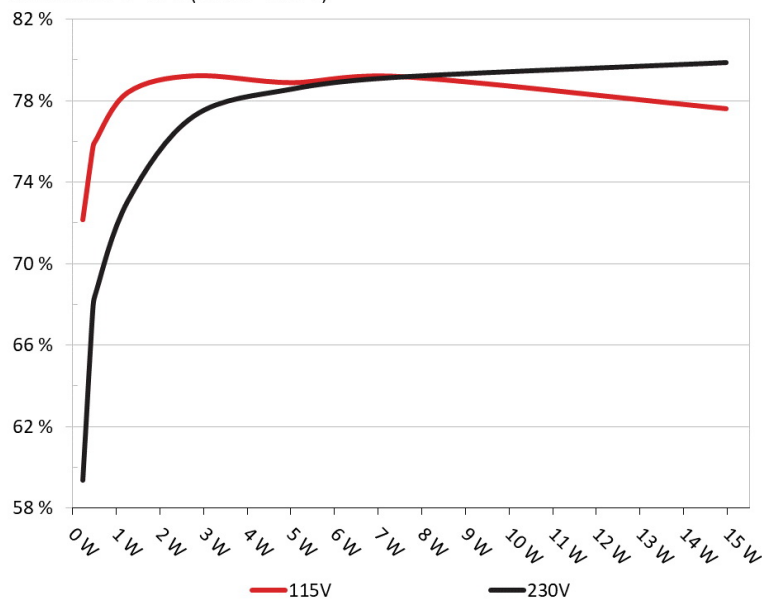
#### INFO

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

#### 5VSB Efficiency: Deepcool PX1200G

Ambient: 34°C - 36°C (93.2°F - 96.8°F)



#### INFO

This graph depicts the efficiency levels of the 5VSB rail with 115V and 230V input

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### 5VSB EFFICIENCY -115V (ERP LOT 3/6 & CEC)

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.227W	72.17%	0.031
	5.04V	0.315W		115.1V
2	0.09A	0.454W	75.66%	0.059
	5.039V	0.6W		115.11V
3	0.55A	2.768W	79.221%	0.269
	5.03V	3.494W		115.12V
4	1A	5.025W	78.881%	0.374
	5.022V	6.37W		115.12V
5	1.501A	7.523W	79.181%	0.429
	5.013V	9.501W		115.13V
6	3.001A	14.961W	77.609%	0.501
	4.986V	19.277W		115.12V

### 5VSB EFFICIENCY -230V (ERP LOT 3/6 & CEC)

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.227W	59.38%	0.011
	5.04V	0.383W		230.33V
2	0.09A	0.454W	67.694%	0.02
	5.039V	0.671W		230.33V
3	0.55A	2.768W	77.23%	0.102
	5.031V	3.585W		230.34V
4	1A	5.025W	78.564%	0.169
	5.023V	6.396W		230.34V
5	1.5A	7.523W	79.15%	0.23
	5.014V	9.506W		230.34V
6	3A	14.962W	79.857%	0.337
	4.987V	18.735W		230.34V

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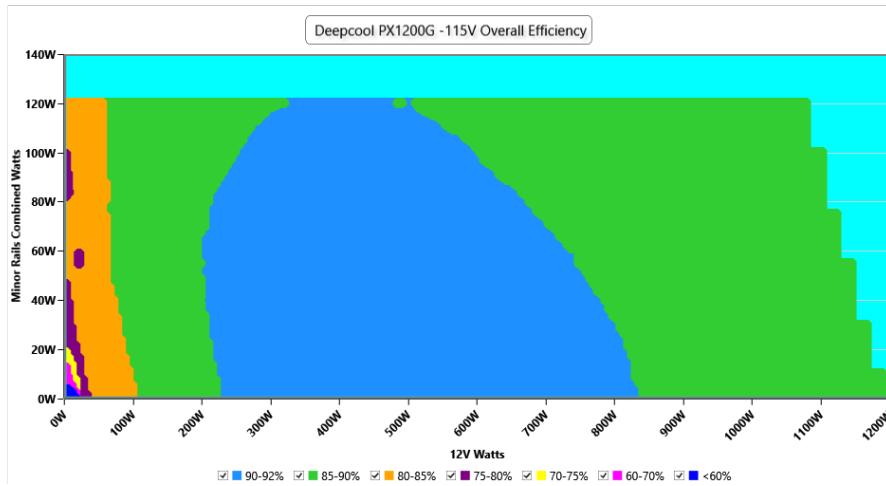
# 115V

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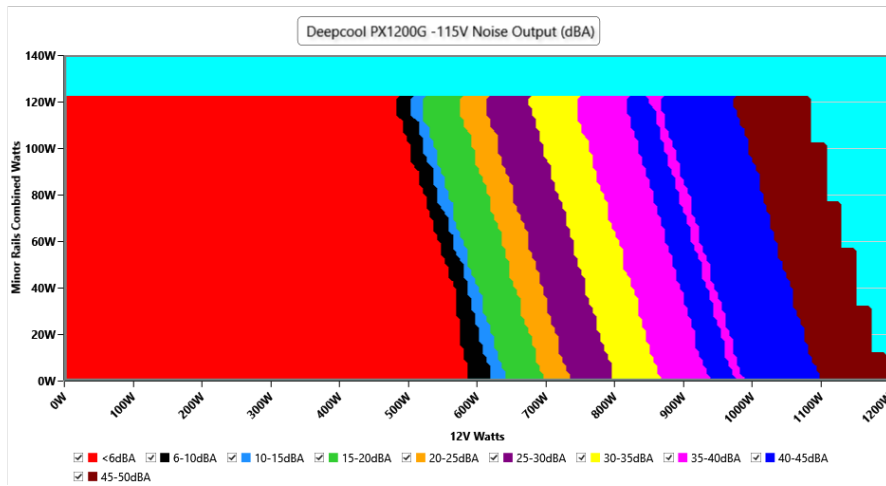
### EFFICIENCY GRAPH 115V



#### 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

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### VAMPIRE POWER -115V

#### Detailed Results

	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.13 V	115.13 V	113.85 V	115.16 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.91 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.13 %	0.11 %	N/A	0.15 %	2.00 %	PASS
Real Power:	0.015 W	0.013 W	N/A	0.018 W	N/A	N/A
Apparent Power:	10.064 W	10.059 W	N/A	10.072 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

#### INFO

*This graph is generated by the PPA Standby Power Analysis software which takes full control of the power analyzer during the whole procedure. This application features all of the EN50564 & IEC62301 test limits for standby power software testing*

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### 10-110% 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%	8.114A	1.983A	2.003A	0.994A	120.02	86.605%	0	<6.0	44.82°C	0.982
	12.129V	5.045V	3.294V	5.032V	138.588				40.48°C	115.08V
20%	17.244A	2.977A	3.006A	1.194A	239.984	90.087%	0	<6.0	45.51°C	0.988
	12.125V	5.041V	3.293V	5.026V	266.388				40.63°C	115.05V
30%	26.723A	3.473A	3.508A	1.394A	359.333	91.485%	0	<6.0	46.36°C	0.985
	12.097V	5.04V	3.293V	5.022V	392.775				41.13°C	115.02V
40%	36.297A	3.971A	4.01A	1.595A	479.666	91.482%	0	<6.0	47.41°C	0.987
	12.080V	5.038V	3.292V	5.017V	524.33				41.72°C	114.98V
50%	45.521A	4.968A	5.015A	1.797A	599.461	91.041%	449	<6.0	42.12°C	0.988
	12.059V	5.033V	3.29V	5.01V	658.448				48.23°C	114.95V
60%	54.839A	5.965A	6.02A	1.998A	719.982	90.342%	829	23.7	42.89°C	0.99
	12.038V	5.031V	3.289V	5.005V	796.944				49.39°C	114.92V
70%	64.120A	6.964A	7.026A	2.2A	839.723	89.591%	1118	32.7	43.7°C	0.992
	12.018V	5.028V	3.288V	5V	937.288				50.74°C	114.88V
80%	73.482A	7.964A	8.032A	2.302A	959.715	88.733%	1362	39.3	44.05°C	0.993
	12.001V	5.024V	3.286V	4.996V	1081.572				52.14°C	114.84V
90%	83.150A	8.468A	8.522A	2.405A	1079.54	87.814%	1593	45.5	44.49°C	0.994
	11.991V	5.02V	3.285V	4.991V	1229.349				53.54°C	114.81V
100%	92.612A	8.973A	9.044A	3.014A	1199.613	86.799%	1915	46.8	45.59°C	0.995
	11.985V	5.016V	3.283V	4.977V	1382.052				55.61°C	114.77V
110%	102.003A	9.98A	10.147A	3.017A	1320.219	85.537%	2123	51.2	46.76°C	0.995
	11.979V	5.01V	3.281V	4.973V	1543.464				57.68°C	114.73V
CL1	0.116A	14.303A	14.499A	0A	121.302	81.89%	401	<6.0	41.89°C	0.982
	12.136V	5.048V	3.29V	5.057V	148.13				47.38°C	115.1V
CL2	0.115A	21.746A	0A	0A	111.391	80.307%	399	<6.0	38.51°C	0.982
	12.143V	5.058V	3.291V	5.08V	138.71				45.57°C	115.11V
CL3	0.116A	0A	22.036A	0A	74.003	75.406%	397	<6.0	37.22°C	0.971
	12.127V	5.048V	3.294V	5.04V	98.138				46.3°C	115.12V
CL4	100.090A	0A	0A	0A	1200.367	86.917%	1993	51.8	47.13°C	0.995
	11.993V	5.027V	3.292V	5.034V	1381.042				58.08°C	114.78V

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### 20-80W 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	1.225A	0.494A	0.499A	0.198A	20.003	74.966%	0	<6.0	39.86°C	0.888
	12.129V	5.064V	3.303V	5.063V	26.682				36.78°C	115.1V
40W	2.695A	0.692A	0.7A	0.297A	40.001	80.146%	0	<6.0	40.38°C	0.947
	12.132V	5.06V	3.302V	5.058V	49.908				37.08°C	115.1V
60W	4.166A	0.892A	0.901A	0.397A	60	84.933%	0	<6.0	41.84°C	0.961
	12.129V	5.05V	3.297V	5.046V	70.639				38.06°C	115.09V
80W	5.636A	1.09A	1.101A	0.496A	79.964	84.95%	0	<6.0	43.07°C	0.971
	12.123V	5.047V	3.296V	5.041V	94.136				39.13°C	115.09V

### RIPPLE MEASUREMENTS 115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	5.06mV	2.91mV	4.25mV	4.18mV	Pass
20% Load	5.72mV	3.22mV	4.20mV	4.13mV	Pass
30% Load	11.73mV	3.73mV	5.48mV	4.49mV	Pass
40% Load	9.69mV	3.37mV	5.32mV	4.94mV	Pass
50% Load	8.31mV	3.32mV	4.76mV	4.43mV	Pass
60% Load	8.73mV	3.89mV	7.57mV	4.79mV	Pass
70% Load	9.35mV	12.32mV	13.61mV	13.15mV	Pass
80% Load	9.91mV	4.09mV	8.29mV	4.84mV	Pass
90% Load	10.62mV	4.04mV	9.26mV	4.84mV	Pass
100% Load	14.78mV	4.88mV	9.34mV	5.96mV	Pass
110% Load	15.02mV	4.97mV	9.94mV	6.02mV	Pass
Crossload1	6.48mV	4.55mV	9.91mV	5.09mV	Pass
Crossload2	7.41mV	5.17mV	4.55mV	4.23mV	Pass
Crossload3	52.97mV	3.78mV	15.40mV	5.56mV	Pass
Crossload4	14.15mV	3.93mV	6.19mV	5.17mV	Pass

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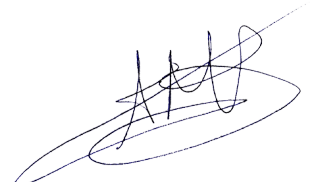
## Deepcool PX1200G



Top side



Power specifications label



**Aristeidis Bitziopoulos**  
Lab Director

## CERTIFICATIONS 115V



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