

## XPG Core Reactor II 1200W

Anex

Lab ID#: AD12002298 Receipt Date: Nov 17, 2023 Test Date: Dec 2, 2023

Report: 23PS2298A

Report Date: Dec 4, 2023

<b>DUT INFORMATION</b>
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Brand	XPG
Manufacturer (OEM)	Channel Well Technology
Series	Core Reactor II
Model Number	
Serial Number	
DUT Notes	

DUT SPECIFICATIONS				
Rated Voltage (Vrms)	100-240			
Rated Current (Arms)	15			
Rated Frequency (Hz)	50-60			
Rated Power (W)	1200			
Туре	ATX12V			
Cooling	135mm Fluid Dynamic Bearing Fan (HA13525H12SF-Z)			
Semi-Passive Operation	×			
Cable Design	Fullv 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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## EFFICIENCY AND NOISE LEVEL CERTIFICATIONS

## XPG Core Reactor II 1200W

30-32 / 86-89.6
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115V		230V		
Average Efficiency	89.237%	Average Efficiency	91.489%	
Efficiency With 10W (≤500W) or 2% (>500W)	76.370	Average Efficiency 5VSB	76.374%	
Average Efficiency 5VSB	78.333%	Standby Power Consumption (W)	0.1545000	
Standby Power Consumption (W)	0.0350000	Average PF	0.963	
Average PF	0.985	Avg Noise Output	35.17 dB(A)	
Avg Noise Output	35.15 dB(A)	Efficiency Rating (ETA)	PLATINUM	
Efficiency Rating (ETA)	PLATINUM	Noise Rating (LAMBDA)	Standard+	
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)	21.7
AC Loss to PWR_OK Hold Up Time (ms)	19.1
PWR_OK Inactive to DC Loss Delay (ms)	2.6

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## EFFICIENCY AND NOISE LEVEL CERTIFICATIONS

## XPG Core Reactor II 1200W

#### **CABLES AND CONNECTORS**

Modular Cables					
Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors	
ATX connector 20+4 pin (640mm)	1	1	16-20AWG	No	
4+4 pin EPS12V (650mm)	2	2	16AWG	No	
6+2 pin PCIe (650mm+150mm)	3	6	16-18AWG	No	
2x 6+2 pin PCle (550mm)	1	2	16AWG	No	
12+4 pin PCIe (650mm) (600W)	1	1	16-24AWG	No	
SATA (500mm+150mm+150mm) / 4-pin Molex (+150mm)	3	9/3	18AWG	No	
AC Power Cord (1410mm) - C13 coupler	1	1	14AWG	-	

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## EFFICIENCY AND NOISE LEVEL CERTIFICATIONS

XPG Core Reactor II 1200W

General Data	-
Manufacturer (OEM)	CWT
РСВ Туре	Double-Sided
Primary Side	-
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV
Inrush Protection	NTC Thermistor SCK-207R0 (70hm @25°C) & Relay
Bridge Rectifier(s)	2x WB2560M
APFC MOSFETs	3x TF095A60 (600V, 38A) & 1x Sync Power SPN5003 (500V, 20mA @ 70°C, Rds(on): 2500hm) (for no load consumption)
APFC Boost Diode	1x ON Semiconductor 1N13AT (650V, 16A @ 135°C)
Bulk Cap(s)	1x Nippon Chemi-Con (400V, 470uF, 2000h @ 105°C, KMW) & 1x Nichicon (400V, 820uF, 2000h @ 105°C, GL)
Main Switchers	2x Infineon 6R099P6 (650V, 24A @ 100°C, Rds(on): 0.990hm)
APFC Controller	Champion CM6500UNX
Resonant Controller	Champion CM6901T6
Topology	Primary side: APFC, Half-Bridge & LLC converter Secondary side: Synchronous Rectification & DC-DC converters
Secondary Side	-
+12V MOSFETs	10x Infineon BSC014N04LS (40V, 100A @ 100°C, Rds(on): 1.4mOhm)
5V & 3.3V	DC-DC Converters: 2x Excelliance MOS EMB04N03A (30V, 55A @ 100°C, Rds(on): 4mOhm) & 2x UBIQ QN3107M6N (30V, 70A @ 100°C, Rds(on): 2.6mOhm) PWM Controllers: uP3861P
Filtering Capacitors	Electrolytic: 4x Nippon Chemi-Con (4-10,000 @ 105°C, W), 1x Nippon Chemi-Con (2-5,000 @ 105°C, KZE, 2x Rubycon (3-6,000 @ 105°C, YXG), 1x Nichicon (6,0000 @ 105°C, HV), Polymer: 31x Caps
Supervisor IC	Weltrend WT7502R (OVP, UVP, SCP, PG)
Fan Model	Hong Hua HA13525H12SF-Z (135mm, 12V, 0.5A, Fluid Dynamic Bearing Fan)
5VSB Circuit	-
Rectifier	ES1DF (200V,1A)
Standby PWM Controller	OB2365

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XPG Core Reactor II 1200W

## Anex

#### EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE INFO Efficiency: XPG Core Reactor II 1200W Ambient: 37°C - 47°C (98.6°F - 116.6°F) The PSU`s efficiency under high ambient 94 % temperatures with 115V and 230V input. For this 92 % graph the results of the 10-110% load regulation table are used 90 % 88 % 86 % 84 % 82 % 80 % 78 % 76 % 74 % 600 h 200 4 ×00 h 800 h 1200 4 1800 4 04 1000 4 115V -230V (EU) No 617/2013

## **5VSB EFFICIENCY**



#### INFO

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

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## Anex

## XPG Core Reactor II 1200W

5VSB EFFICIENCY -115V (ERP LOT 3/6 & CEC)					
Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts	
	0.045A	0.229W		0.033	
I	5.071V	0.34W	67.497%	114.91V	
2	0.09A	0.46W	77 (200)	0.061	
2	5.07V	0.625W	/3.038%	114.91V	
_	0.55A	2.784W	78.417%	0.272	
3	5.061V	3.55W		114.9V	
	1A	5.052W	70 4020/	0.376	
4	5.051V	6.436W	78.493%	114.91V	
5	1.5A	7.562W		0.426	
	5.041V	9.589W	78.800%	114.9V	
6	ЗА	15.028W		0.505	
	5.01V	19.432W	//.330%	114.9V	

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

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
_	0.045A	0.234W		0.013
I	5.071V	0.45W	52.014%	229.89V
2	0.09A	0.46W	c1.0070/	0.022
2	5.07V	0.755W	61.087%	229.88V
	0.55A	2.784W		0.103
3	5.06V	3.684W	/5.586%	229.88V
	1A	5.052W		0.17
4	5.051V	6.517W	//.525%	229.88V
_	1.5A	7.562W		0.217
5	5.041V	9.622W	/8.618%	229.88V
6	ЗА	15.026W		0.327
	5.009V	18.984W	/9.153%	229.88V

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EFFICIENCY AND NOISE LEVEL CERTIFICATIONS

XPG Core Reactor II 1200W

# **115V**

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XPG Core Reactor II 1200W

## Anex



#### 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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## XPG Core Reactor II 1200W

## Anex

## VAMPIRE POWER -115V

Detailed Results											
	Average         Min         Limit Min         Max         Limit Max         Result										
Mains Voltage RMS:	114.92 V	114.83 V	113.85 V	115.02 V	116.15 V	PASS					
Mains Frequency:	60.00 Hz	59.95 Hz	59.40 Hz	60.05 Hz	60.60 Hz	PASS					
Mains Voltage CF:	1.422	1.420	1.340	1.424	1.490	PASS					
Mains Voltage THD:	0.30 %	0.22 %	N/A	0.39 %	2.00 %	PASS					
Real Power:	0.035 W	0.030 W	N/A	0.040 W	N/A	N/A					
Apparent Power:	10.116 W	10.092 W	N/A	10.145 W	N/A	N/A					
Power Factor:	0.004	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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## Anex

## XPG Core Reactor II 1200W

10-1:	LO% LOAD	D TESTS 1	L15V							
Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100/	8.134A	1.98A	1.964A	0.993A	119.989	07.000%	20.4		40.36°C	0.972
10%	12.096V	5.049V	3.36V	5.038V	137.883	87.023%	394	<6.0	44.64°C	114.87V
200/	17.316A	2.971A	2.948A	1.192A	239.948	00.0020/	20.4		40.6°C	0.982
20%	12.072V	5.049V	3.359V	5.034V	263.964	90.903%	394	<0.0	45.2°C	114.84V
200/	26.782A	3.466A	3.44A	1.392A	359.16	01 5740/	204	-6.0	41.35°C	0.981
30%	12.064V	5.049V	3.358V	5.03V	392.211	91.574%	394	<6.0	46.38°C	114.79V
400/	36.355A	3.961A	3.932A	1.592A	479.546	01 5740/	205	-6.0	41.82°C	0.984
40%	12.057V	5.049V	3.357V	5.027V	523.666	91.574%	395	<0.0	47.35°C	114.75V
E00/	45.541A	4.951A	4.917A	1.791A	599.314	01 100/	206	-6.0	42.38°C	0.987
50%	12.051V	5.05V	3.356V	5.025V	657.291	91.18%	390	<0.0	48.46°C	114.71V
	54.795A	5.94A	5.901A	1.991A	719.854	00 52 40/	421	<6.0	42.7°C	0.99
60%	12.046V	5.051V	3.356V	5.023V	795.199	90.524%	431		49.22°C	114.65V
700/	63.996A	6.931A	6.888A	2.191A	839.567	00 7020/	761	20.7	43.46°C	0.992
70%	12.039V	5.051V	3.354V	5.02V	935.12	89.782%	701	20.7	50.49°C	114.61V
000/	73.279A	7.922A	7.877A	2.292A	959.588	00.0000/	1108	32.2	44.15°C	0.993
80%	12.032V	5.049V	3.352V	5.017V	1079.637	88.882%			52.25°C	114.55V
000/	82.894A	8.419A	8.358A	2.394A	1079.377	07.0510/	1/02	41.0	44.71°C	0.994
90%	12.026V	5.047V	3.35V	5.013V	1227.244	87.951%	1485	41.3	53.73°C	114.51V
1000/	92.320A	8.917A	8.87A	ЗA	1199.421	06.0620/	10.40	40.0	45.82°C	0.994
100%	12.020V	5.046V	3.349V	5V	1380.804	80.803%	1949	48.8	55.89°C	114.46V
1100/	101.684A	9.912A	9.953A	3.001A	1320.007	05.0260/	2161	E0 4	47.32°C	0.995
110%	12.015V	5.044V	3.346V	4.999V	1537.836	83.830%	2101	50.4	58.26°C	114.41V
CI 1	0.116A	14.297A	14.24A	0A	121.306	01.0550/	200	-6.0	40.97°C	0.975
	12.103V	5.049V	3.35V	5.089V	148.016	81.900%	398	<0.0	46.45°C	114.86V
CL 2	0.116A	21.729A	0A	0A	111.314	00 4070/	207	-60	41.89°C	0.974
ULΖ	12.107V	5.059V	3.361V	5.11V	138.404	80.427%	397	<0.0	48.92°C	114.87V
CL 2	0.116A	0A	21.671A	0A	74.007	75 1000/	205	-60	42.35°C	0.964
ULS .	12.057V	5.062V	3.351V	5.071V	98.515	13.123%	590	<0.0	51.38°C	114.89V
CI 4	99.806A	0A	0A	0A	1199.965	07 5620/	1902	16.6	45.56°C	0.994
CL4	12.023V	5.063V	3.364V	5.041V	1370.415	07.203%	1802	40.0	56.54°C	114.47V

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## XPG Core Reactor II 1200W

20-80W LOAD TESTS 115V									
12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
1.230A	0.494A	0.49A	0.198A	19.992	74 4520/	277	<6.0	36.61°C	0.892
12.061V	5.062V	3.369V	5.06V	26.852	74.452%	3//		39.67°C	114.92V
2.710A	0.692A	0.686A	0.297A	39.994	79.678%	378	<6.0	37.02°C	0.925
12.061V	5.06V	3.368V	5.057V	50.175				40.31°C	114.91V
4.192A	0.891A	0.883A	0.396A	59.994	02.0050/	379	<6.0	38.52°C	0.966
12.055V	5.052V	3.363V	5.047V	72.201	83.095%			42.29°C	114.9V
5.668A	1.089A	1.08A	0.496A	79.939	- 04.0240/	200	<6.0	39.34°C	0.962
12.050V	5.05V	3.362V	5.045V	95.132	84.034%	380		43.29°C	114.89V
	OW LOAD 12V 1.230A 12.061V 2.710A 12.061V 4.192A 12.055V 5.668A 12.050V	OW LOAD TESTS           12V         5V           1.230A         0.494A           12.061V         5.062V           2.710A         0.692A           12.061V         5.06V           12.061V         5.06V           12.061V         5.06V           12.055V         5.052V           5.668A         1.089A           12.050V         5.05V	SV         SV         S.3V           12V         5V         3.3V           1.230A         0.494A         0.49A           12.061V         5.062V         3.369V           2.710A         0.692A         0.686A           12.061V         5.062V         3.368V           12.061V         5.062V         3.368V           12.051V         5.052V         3.363V           12.055V         5.052V         3.363V           5.668A         1.089A         1.08A           12.050V         5.052V         3.362V	SV         S.3.V         SVSB           1.230A         0.494A         0.49A         0.198A           1.2.061V         5.062V         3.369V         5.06V           2.710A         0.692A         0.686A         0.297A           12.061V         5.06V         3.368V         5.057V           12.061V         5.06V         3.368V         5.057V           12.051V         5.052V         3.363V         5.047V           12.055V         5.052V         3.363V         5.047V           5.668A         1.089A         1.08A         0.496A           12.050V         5.055V         3.362V         5.045V	SV         SVSB         DC/AC (Watts)           12V         5V         3.3V         5VSB         DC/AC (Watts)           1.230A         0.494A         0.49A         0.198A         19.992           12.061V         5.062V         3.369V         5.06V         26.852           2.710A         0.692A         0.686A         0.297A         39.994           12.061V         5.06V         3.368V         5.057V         50.175           12.061V         5.06V         3.363V         5.047V         59.94           12.055V         5.052V         3.363V         5.047V         72.201           5.668A         1.089A         1.08A         0.496A         79.939           12.055VV         5.055V         3.362V         5.045V         95.132	OW LOAD TESTS 115V12V5V3.3V5VSBDC/AC (Watts)Efficiency1.230A0.494A0.198A19.992 $\mathcal{A}452\%$ 12.061V5.062V3.369V5.06V26.852 $\mathcal{A}452\%$ 2.710A0.692A0.686A0.297A39.994 $\mathcal{A}-76.78\%$ 12.061V5.06V3.368V5.057V50.175 $\mathcal{A}-76.78\%$ 12.061V5.06V3.363V5.057V50.175 $\mathcal{A}-76.78\%$ 12.055V5.052V3.363V5.047V72.201 $\mathcal{A}-30.95\%$ 5.668A1.089A1.08A0.496A79.939 $\mathcal{A}-30.49\%$ 12.050V5.05V5.05V5.045V95.132 $\mathcal{A}-30.49\%$	NUME CONSTRUCTION12V5V3.3V5VSBDC/AC (Watts)EfficiencyFan Speed (RPM)1.230A0.494A0.49A0.198A19.99234.452%3.7712.061V5.062V3.369V5.06V26.8523.773.7712.061V0.692A0.686A0.297A39.9943.967%3.7812.061V5.06V3.368V5.057V50.1753.783.7812.061V5.06V3.368V5.057V50.1753.793.7912.055V5.052V3.363V5.047V72.2013.095%3.7912.050V1.089A1.08A0.496A79.9393.803.8012.050V5.057V5.045V50.1223.803.80	NUME CONSTRUCTION12V5V3.3V5VSBDC/AC (Watts)EfficiencyFan Speed (RPM)PSU Noise (dB[A])1.230A0.494A0.49A0.198A19.9923.733.77-6.012.061V5.062V3.369V5.06V26.8523.77-6.02.710A0.692A0.686A0.297A39.9943.78-6.012.061V5.06V3.368V5.057V50.1753.78-6.012.051V5.06V3.363V5.057V50.1753.79-6.012.055V5.052V3.363V5.047V72.2013.79-6.05.668A1.089A0.496A79.39-8.039%3.80-6.012.050V5.05V3.362V5.045V95.132-8.034%3.80-6.0	I2V $5V$ $3.3V$ $5VSB$ $DC/AC$ (Watts) $Efficiency$ $Fan Speed$ (RPM) $PSU Noise$ (dB(A)) $Temps$ (In/Out)           1.230A         0.494A         0.49A         0.198A         19.992 $A_{452\%}$ $ATT$ $e60$ $3661^\circ$ 12.061V         5.062V $3.369V$ $5.06V$ $26.852$ $74.452\%$ $377$ $e60$ $3661^\circ$ 2.710A $0.692A$ $0.686A$ $0.297A$ $39.994$ $79.678\%$ $378$ $e60$ $40.31^\circ$ C           12.061V $5.06V$ $3.368V$ $50.57V$ $50.175$ $79.678\%$ $378$ $e60$ $40.31^\circ$ C           12.051V $5.06V$ $3.368V$ $50.97V$ $50.175$ $379.97$ $379$ $e60$ $42.29^\circ$ C           12.055V $5.057V$ $5.047V$ $72.01$ $8.039\%$ $380$ $e60$ $39.34^\circ$ C           12.055V $5.057V$ $5.047V$ $72.01$ $8.034\%$ $80.94\%$ $380$ $e60$ $42.29^\circ$ C           12.050V $5.05V$

#### **RIPPLE MEASUREMENTS 115V**

10% Load         8.08mV         7.97mV         7.62mV         8.75mV         Pass           20% Load         13.49mV         8.94mV         8.65mV         9.67mV         Pass           30% Load         10.49mV         7.66mV         7.78mV         8.39mV         Pass	Test
20% Load         13.49mV         8.94mV         8.65mV         9.67mV         Pass           30% Load         10.49mV         7.66mV         7.78mV         8.39mV         Pass	10% Load
30% Load 10.49mV 7.66mV 7.78mV 8.39mV Pass	20% Load
	30% Load
40% Load 10.08mV 8.27mV 8.34mV 8.29mV Pass	40% Load
50% Load 9.82mV 11.95mV 14.37mV 12.02mV Pass	50% Load
60% Load 9.82mV 7.66mV 8.03mV 8.08mV Pass	60% Load
70% Load 11.77mV 7.97mV 8.85mV 9.51mV Pass	70% Load
80% Load 10.75mV 8.58mV 9.56mV 9.05mV Pass	80% Load
90% Load 11.05mV 7.46mV 9.00mV 8.85mV Pass	90% Load
100% Load 17.20mV 9.78mV 11.06mV 9.37mV Pass	100% Load
110% Load 17.71mV 9.48mV 12.26mV 9.56mV Pass	110% Load
Crossload1         9.41mV         9.76mV         10.98mV         7.60mV         Pass	Crossload1
Crossload2         12.07mV         18.49mV         8.59mV         7.67mV         Pass	Crossload2
Crossload3         47.27mV         7.76mV         15.96mV         7.52mV         Pass	Crossload3
Crossload4         16.00mV         7.55mV         10.47mV         8.44mV         Pass	Crossload4

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EFFICIENCY AND NOISE LEVEL CERTIFICATIONS

XPG Core Reactor II 1200W

# **230V**

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XPG Core Reactor II 1200W

## Anex

## **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

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## XPG Core Reactor II 1200W

## Anex

#### VAMPIRE POWER -230V

Detailed Results											
	Average         Min         Limit Min         Max         Limit Max         Result										
Mains Voltage RMS:	229.88 V	229.77 V	227.70 V	229.99 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:	1.418	1.416	1.340	1.419	1.490	PASS					
Mains Voltage THD:	0.21 %	0.15 %	N/A	0.29 %	2.00 %	PASS					
Real Power:	0.154 W	0.140 W	N/A	0.184 W	N/A	N/A					
Apparent Power:	34.118 W	34.092 W	N/A	34.151 W	N/A	N/A					
Power Factor:	0.004	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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## Anex

## XPG Core Reactor II 1200W

10-11	LO% LOAD	TESTS 2	230V							
Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100/	8.134A	1.98A	1.964A	0.992A	119.999	00.100/	202	<u> </u>	40.46°C	0.904
10%	12.098V	5.051V	3.361V	5.039V	136.069	88.19%	392	<6.0	44.67°C	229.87V
200/	17.315A	2.971A	2.948A	1.192A	239.963	02.1000/	202		40.63°C	0.949
20%	12.074V	5.05V	3.359V	5.035V	260.298	92.188%	392	<0.0	45.21°C	229.85V
200/	26.783A	3.466A	3.44A	1.392A	359.196	02.2250/	202	-6.0	41.24°C	0.965
30%	12.065V	5.049V	3.358V	5.031V	385.303	93.225%	393	<0.0	46.29°C	229.83V
400/	36.355A	3.961A	3.932A	1.592A	479.583	02 550/	202	-6.0	41.87°C	0.971
40%	12.058V	5.05V	3.357V	5.027V	512.64	93.55%	393	<0.0	47.37°C	229.81V
E00/	45.540A	4.951A	4.917A	1.791A	599.348	02 41 00/	204	-6.0	42.45°C	0.977
50%	12.052V	5.05V	3.356V	5.025V	641.575	93.418%	394	<0.0	48.39°C	229.79V
<b>CO</b> 0/	54.794A	5.941A	5.902A	1.991A	719.866	02 11 50/	570	11.0	42.69°C	0.979
60%	12.046V	5.051V	3.355V	5.023V	773.092	93.115%			49.27°C	229.77V
700/	63.991A	6.931A	6.889A	2.192A	839.55	02 6770/	040	24.2	43.13°C	0.981
70%	12.040V	5.05V	3.354V	5.019V	905.887	92.077%	842	24.3	50.14°C	229.75V
000/	73.276A	7.923A	7.876A	2.293A	959.523	02 1520/	1107	32.2	43.86°C	0.982
80%	12.032V	5.048V	3.352V	5.016V	1041.234	92.152%			51.89°C	229.72V
000/	82.888A	8.42A	8.357A	2.394A	1079.316	01 5050/	1510	42.0	44.88°C	0.984
90%	12.026V	5.047V	3.35V	5.012V	1178.35	91.595%	1213	42.0	54.01°C	229.7V
1000/	92.314A	8.917A	8.869A	ЗA	1199.348	00.0520/	1010	40.1	45.07°C	0.985
100%	12.020V	5.046V	3.349V	5V	1318.66	90.952%	1910	48.1	55.16°C	229.68V
1100/	101.683A	9.914A	9.952A	3.001A	1319.949	00 1000/	2161	FO 4	46.75°C	0.986
110%	12.014V	5.043V	3.346V	4.998V	1463.393	90.198%	2101	50.4	57.66°C	229.66V
0.1	0.116A	14.297A	14.239A	0A	121.296	02.0440/	205	-6.0	41.1°C	0.914
	12.103V	5.049V	3.35V	5.088V	146.064	83.044%	390	<0.0	46.52°C	229.86V
CLO	0.114A	21.729A	0A	0A	111.306	01 2720/	204	-6.0	40.36°C	0.907
ULZ	12.107V	5.059V	3.361V	5.109V	136.791	01.575%	394	<0.0	47.41°C	229.86V
	0.115A	0A	21.67A	0A	73.999	76 2460/	201	-6.0	40.83°C	0.862
ULS .	12.058V	5.062V	3.351V	5.071V	97.055	/0.240%	CAT	<0.0	49.86°C	229.87V
CI 4	99.801A	0A	0A	0A	1199.922	01 5010/	1706	16 F	45.07°C	0.985
CL4	12.023V	5.064V	3.364V	5.042V	1311.101	91.521%	1190	46.5	56.05°C	229.69V

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## Anex

## XPG Core Reactor II 1200W

20-80W LOAD TESTS 230V										
Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
2014/	1.230A	0.494A	0.49A	0.198A	19.997			<6.0	36.71°C	0.526
2000	12.064V	5.064V	3.37V	5.063V	26.814	/4.5/2%	389		39.76°C	229.88V
40144	2.710A	0.691A	0.686A	0.296A	39.997	00.070%	200	-6.0	37.32°C	0.724
4077	12.062V	5.062V	3.368V	5.059V	49.457	390	<0.0	40.68°C	229.88V	
CO141	4.191A	0.89A	0.883A	0.396A	59.998	041740/	200	<6.0	38.18°C	0.813
60W 12.056V	12.056V	5.053V	3.363V	5.049V	71.279	84.174%	390		41.66°C	229.88V
80W 5	5.669A	1.089A	1.08A	0.495A	79.946		200	<6.0	39.26°C	0.856
	12.051V	5.051V	3.362V	5.046V	93.389	85.605%	390		43.12°C	229.88V

#### **RIPPLE MEASUREMENTS 230V**

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	8.85mV	7.76mV	8.75mV	10.69mV	Pass
20% Load	15.95mV	9.35mV	9.82mV	10.74mV	Pass
30% Load	11.07mV	7.82mV	8.13mV	10.95mV	Pass
40% Load	10.28mV	7.51mV	8.34mV	9.72mV	Pass
50% Load	10.28mV	13.49mV	15.86mV	14.22mV	Pass
60% Load	10.69mV	8.02mV	8.85mV	9.41mV	Pass
70% Load	10.90mV	8.63mV	9.26mV	9.98mV	Pass
80% Load	11.66mV	8.99mV	10.44mV	10.84mV	Pass
90% Load	11.87mV	9.35mV	10.28mV	10.94mV	Pass
100% Load	17.77mV	10.00mV	12.50mV	11.94mV	Pass
110% Load	18.87mV	10.36mV	11.84mV	11.73mV	Pass
Crossload1	10.03mV	10.42mV	11.25mV	10.86mV	Pass
Crossload2	12.13mV	18.90mV	9.00mV	10.18mV	Pass
Crossload3	45.79mV	8.23mV	16.17mV	9.62mV	Pass
Crossload4	17.83mV	8.07mV	9.77mV	10.50mV	Pass

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## EFFICIENCY AND NOISE LEVEL CERTIFICATIONS

## XPG Core Reactor II 1200W



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