



CHANNEL WELL TECHNOLOGY

SPECIFICATION FOR REFERENCE

APPROVAL SIGNATURE

DATE:

CUSTOMER: _____ **CWT**

PART NO: _____ **REV:** A

DESCRIPTION: _____ **PC POWER SUPPLY**

***PLEASE SIGN AND RETURN ONE COPY.**

***ALL PRODUCTION UNITS WILL BE BUILT ACCORDING
TO THIS SPECIFICATIONS.**

PREPARED	CHECKED	APPROVED
DATE:	DATE:	DATE:

MODEL NO: _____ **GPX850S-G**

CATALOG NO: _____

AGENCY APPROVAL: _____

PRESENTED BY: _____

NO. _____

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1.0 INPUT:**1.1 VOLTAGE**

MINIMUM	NOMINAL	MAXIMUM	UNITS
90	100-240	264	Vrms

1.2 FREQUENCY

47Hz ~ 63Hz

1.3 CURRENT

115Vac/12.0A max. 230Vac/6.0A max.

1.4 INRUSH CURRENT150A max. when ac input 230Vac and 25⁰C cold start.**1.5 POWER EFFICIENCY**

Meet 80 Plus Gold requirement at 115Vac input.

Loading	+12V	+5V	+3.3V	-12V	+5Vsb	Required minimum efficiency
20%	12.33A	2.32A	2.32A	0.05A	0.44A	87%
50%	30.82A	5.79A	5.79A	0.13A	1.09A	90%
100%	61.64A	11.59A	11.59A	0.26A	2.19A	87%

1.6 LEAKAGE CURRENT

3.5mA max.

1.7 POWER FACTOR

PF > 0.96 at 230Vac input and full load

1.8 ErP REQUIREMENT

Meet ASM and ErP Lot 3 2014

2.0 OUTPUT:

Voltage	+5V	+3.3V	+12V	-12V	+5Vsb
*① Max load	20.0A	20.0A	70.5A	0.3A	2.5A
Min load	0.0A	0.0A	0.0A	0.0A	0.0A
Peak load	--	--	--	--	3.0A
*① Combined power	110W		--	--	--
*③ Regulation	+3,-3%	+3,-3%	+3,-3%	+10,-10%	+3,-3%
*② Ripple & Noise	30mV	30mV	40mV	40mV	30mV

*① The continuous total output power is 850W max.

- The combined power of +5V and +3.3V is 110W max.
- Peak currents may last up to 12 seconds with not more than one occurrence per minute.

*② Add 0.1uF and 10uF capacitors across output terminal during ripple & noise test.

*③ LOAD REGULATION TEST TABLE:

	+5V	+12V	+3.3V	-12V	+5Vsb
LOAD1	0.0A	0.0A	0.0A	0.0A	0.0A
LOAD2	5.0A	0.0A	5.0A	0.1A	0.1A
LOAD3	15.4A	1.0A	10.0A	0.1A	0.5A
LOAD4	20.0A	4.0A	3.0A	0.2A	1.0A
LOAD5	8.8A	10.0A	20.0A	0.2A	2.5A
LOAD6	0.0A	70.5A	0.0A	0.3A	0.5A
LOAD7	11.59A	61.64A	11.59A	0.3A	0.0A

2.1 REMOTE ON/OFF

TTL High/PS-OFF; TTL Low/PS-ON

$V_{IL}=0.8V_{max}$, $I_{IL}=-1.6mA_{max}$ @ $V_{in}=0.4V$

$V_{IH}=2.0V_{min}$ @ $I_{in}=-200uA$, $V_{IH}=5.25V_{max}$ @ open ckt.

2.2 HOLD-UP TIME

14msec (minimum) at 80% of full load at 230Vac input.

2.3 POWER GOOD DELAY

100-500 msec.

2.4 POWER FAIL DELAY

>1 msec.

2.5 TURN-ON DELAY TIME

2000 msec max. At nominal line full load.

2.6 TRANSIENT OVERSHOOT

DC output transient step sizes as below table:

Output voltage	+5V	+3.3V	+12V
Max. step size	30%	30%	60%

Load-changing repetition rate of 10m seconds.

Load slew rated 1.0A/uS and capacitive load as below :

+5V	+3.3V	+12V	-12V	+5Vsb
10000uF	10000uF	10000uF	470uF	3300uF

2.7 RISE TIME

20ms max at full load.

3.0 PROTECTION:

When OVP ,OPP ,OCP,OTP or short protection is triggered, the main outputs will be latched off. The main outputs can be reset by cycling the DC remote on/off or AC power. +5Vsb output is auto recovery when fault condition removed.

3.1 OVER VOLTAGE PROTECTION

+3.3V output 4.5 Vmax.

+5.0V output 7.0 Vmax.

+12.0V output 15.6 Vmax.

3.2 SHORT PROTECTION

All output to GND.

3.3 OVER POWER PROTECTION

Foldback at 110%~150% over peak load

3.4 OVER CURRENT PROTECTION

+3.3V output: 22A-32A.

+5.0V output: 22A-32A.

+12.0V output: 77.55A-105.75A.

3.5 OVER TEMPERATURE PROTECTION

Protection temperature is 45°C to 55°C at 115V and full load

4.0 ENVIRONMENT:

4.1 OPERATING TEMP. 0 °C to +40 °C

4.2 STORAGE TEMP. -20 °C to +70 °C

4.3 OPERATING HUMIDITY 20% to 90%,non-condensing

4.4 STORAGE HUMIDITY 5% to 95%, non-condensing

4.5 OPERATING ALTITUDE 0 to 10,000 feet

4.6 STORAGE ALTITUDE 0 to 50,000 feet

5.0 HI-POT:**5.1 PRIMARY TO SECONDARY**

1800Vac for 1 minute

6.0 SAFETY AND EMC REQUIREMENTS**6.1 CONDUCTED EMI**

1.MEET FCC:Class B

2.MEET BSMI:Class B

3. MEET CISPR 22 : Class B

6.2 SAFETY STANDARDS

1. MEET CUL(UL60950/62368-1)
2. MEET TUV (EN60950/62368-1)
3. MEET CB (IEC 950/62368-1)
4. MEET CE
5. MEET CCC

6.3 HARMONIC

MEET IEC61000-3-2,Class D

7.0 MTBF at 25°C(demonstrated)

100K hrs minimum

8.0 DIMENSIONS

WxLxH=150x140x86mm 120*25mm FAN x1 ON CASE TOP