

### **EMC CONFORMITY TEST REPORT**

For

### PC POWER SUPPLY

#### Model Number:

GPS-568, GPS-368, GPS-668, GPS-968, V-Plex-368, V-Plex-568, V-Plex-668, V-Plex-968, 3D. Power-368, 3D. Power-668, 3D. Power-968, ismart-368, ismart-568, ismart-968, Mr.power-368, Mr.power-368, Mr.power-968

Serial Number: N/A

Report Number: HST0801FCC0001E

Date Of Issue: Jan 15, 2008

Prepared for

#### **GPS ELECTRONIC TECHNOLOGY CO., LTD**

YinHu Industrial District XieShan Village XieGang Town DongGuan City
GuangDong

Prepared by

**Guangzhou Huesent Testing Service Co.,Ltd.** 

No. 91, Dongguanzhuang Road, Guangzhou, Guangdong, China

Tel: 86-20-87221905 Fax: 86-20-87223892



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### **VERIFICATION OF CONFORMITY**

Equipment Under Test.....: PC POWER SUPPLY

Trade Name.....: None

Model Number.....: See the model number show on cover page

Serial Number.....: N/A

Applicant.....: GPS ELECTRONIC TECHNOLOGY CO.,LTD

YinHu Industrial District XieShan Village XieGang Town

DongGuan City GuangDong

Manufacturer.....: GPS ELECTRONIC TECHNOLOGY CO.,LTD

Address...... YinHu Industrial District XieShan Village XieGang Town

DongGuan City GuangDong

Type of Test.....: Entrusted testing

Technical Standards.....: FCC PART 15, SUBPART B: 2006

Test Result.....: : Confirm

File Number .....: HST0801FCC0001E

**Date of test.....**: Jan.11, 2008-Jan 15,2008

Date of Sample Receive....: Jan 11,2008

**Deviation....**: None **Condition of Test Sample..**: Normal

The above equipment was teste by Guangzhou Huesent Testing Service Co., Ltd. for compliance with the requirements set forth in EMC Directive 2004/108/EC and the Technical Standards mentioned above. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment and the level of the immunity endurance of the equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Approved by: Date of Issue : Jan 15, 2008

(Henly.xie/QA Manager)

Guangzhou Huesent Testing Service Co., Ltd.

Lab: Guangzhou Huesent Testing Service Co., Ltd. Tel: 86-20-87221905 Fax: 86-20-87221453 Add: Self-ordained 68# courtyard, No. 91, Dongguanzhuang Road, Guangzhou, Guangdong, China. Http://www.hst.org.cn E-mail:hst@hst.org.cn Page 3 of 19

FCC ID: VYZGPS2008030999 Report Number: HST0801FCC0001E

#### 2. SYSTEM DESCRIPTION

#### **EUT Test Procedure:**

- 1. Connect the EUT to peripheral device. Then power on the EUT.
- 2. Make sure EUT work normally during the whole test.

#### 3. PRODUCT INFORMATION

Housing Type : metal

Power during Test : 120 Vac/ 60Hz

#### 4. TEST SUMMERY

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 1GHz)	FCC PART 15, SUBPART B: 2006	ANSI C63.4:2003	Class B	PASS
Conducted Emission (150KHz to 30MHz)	FCC PART 15, SUBPART B: 2006	ANSI C63.4:2003	Class B	PASS

#### Remark:

Only item GPS-568 was actually tested as all models were electric identical with difference for model No,shape.

### 5. TEST LOCATION

GuangZhou Huesent Testing Service Co., Ltd.

Self-ordained 68# courtyard, No.91, Dongguanzhuang Road, Guangzhou, China.

Tel: 86-20-87221905, Fax: 86-20-87223892

All tests were subcontract to the laboratory following-

Guangdong Electronic & Electrical Products Inspection and Supervision Institute.

Address: 45 Cunnan Street, Shayongnan, Sanyuanli District Guang Zhou,

FCC- Registratrion No: 597719 CNAS- Accreditation No: L 0307

CQC Authorized Subcontract Lab V-016



## **6.** EQUIPMENTS USED DURING TEST

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL.NO	SER NO	Cal. date
70-137	EMI TEST RECEIVER	R&S	ESIB7	100192	2007.03.30
1	PULSE LIMITER	R&S	ESH3-Z2	100300	2007.03.30
37-021	LISN	R&S	ESH3-Z5		2007.03.30
70-136	ULTRALOG ANTENNAS	R&S	HL-562	100172	2003.08.19
74-008	CHAMBER	ETS-LINDREN	CACT-3	/	2004.07.16
74-007	SHIELDING ROOM	ETS-LINDREN	Celltype	1	2005.05.25
10-049	Signal generator	Anritsu	MG3602A	M17634	2006.09.30



### 7. TEST RESULT

### **7.1.** Radiated Emissions, 30MHz to 1GHz

Test Requirement: FCC Part15 B
Test Method: ANSI C63.4
Class: Class B

Detector: Peak for pre-scan (120kHz resolution bandwidth)

Quasi-Peak if maximised peak within 6dB of limit

Test Date: Jan 10 2007

### 7.1.1.E.U.T. Operation

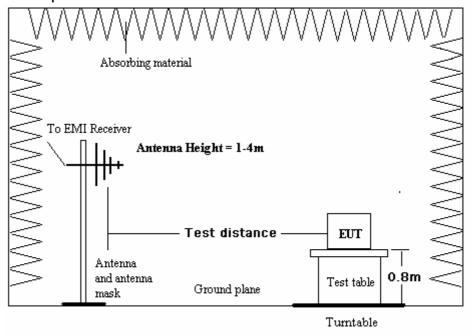
**Operating Environment:** 

Temperature:24.0°C Humidity:52% RH Atmospheric Pressure: 1012mBar

**EUT Operation:** 

Pretest EUT in half load and full load to find worse case. Compliance test the EUT in full load mode which was worse case found.

### 7.1.2. Test Setup



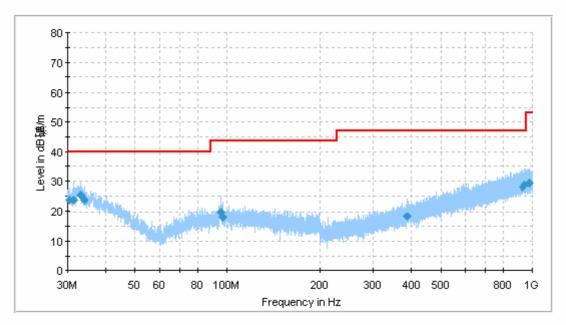
### 7.1.3. Measurement Data

An initial pre-scan was performed in the 3m chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by Bilog antenna with 2 orthogonal polarities

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### **Vertical** Peak scan

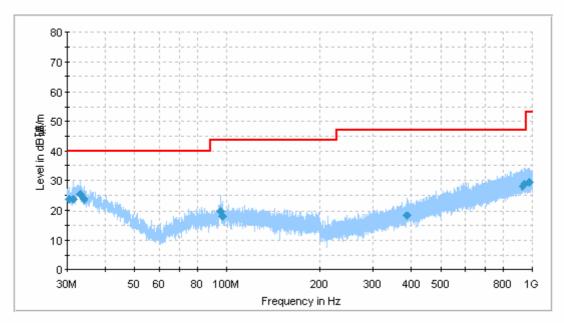


Frequency (MHz)	QuasiPeak (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Corr. (dB)	Turntable position (deg)	Antenna height (cm)	Meas. Time (ms)
30.480000	23.8	40.0	16.2	17.3	0.0	102.0	100
33.120000	25.1	40.0	15.9	18.7	0.0	102.0	100
38.000000	22.1	40.0	17.8	15.7	0.0	102.0	100
82.200000	16.8	40.0	23.2	8.5	0.0	102.0	100
96.400000	18.4	40.0	21.6	9.0	0.0	102.0	100
177.870000	14.2	43.5	29.3	6.9	0.0	102.0	100
784.000000	26.3	46.0	19.7	19.4	0.0	102.0	100
968.480000	29.2	46.0	16.8	21.2	0.0	102.0	100
993.320000	29.7	46.0	16.3	21.4	0.0	102.0	100
996.120000	29.7	46.0	16.3	21.5	0.0	102.0	100

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#### Horizontal Peak scan



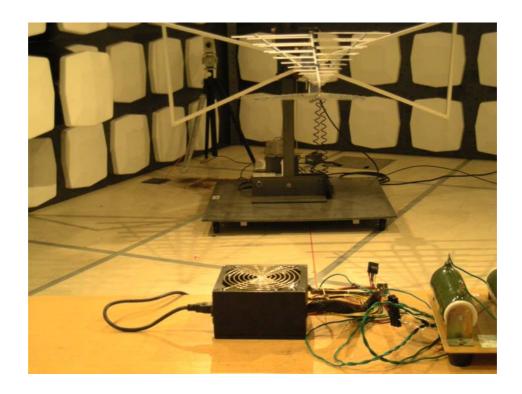
**Quasi-peak measurement** 

Frequency (MHz)	QuasiPeak (dB µ V/m)	Limit (dB µ V/m)	Margin (dB)	Corr. (dB)	Turntable position (deg)	Antenna height (cm)	Meas. Time (ms)
30.440000	23.8	40.0	16.2	17.3	0.0	102	100
31.280000	23.7	40.0	16.3	17.3	0.0	102	100
32.960000	25.5	40.0	14.5	19.0	0.0	102	100
34.040000	23.7	40.0	16.3	17.3	0.0	102	100
95.360000	19.8	43.5	23.7	8.9	0.0	102	100
96.720000	17.7	43.5	25.8	9.0	0.0	102	100
388.400000	18.0	46.0	28.0	13.2	0.0	102	100
925.720000	28.2	46.0	17.8	21.1	0.0	102	100
945.880000	28.7	46.0	17.3	21.0	0.0	102	100
978.680000	29.3	46.0	16.7	21.3	0.0	102	100

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# 7.1.4. Photographs-- Radiated Emission Test Setup





### 7.2. Conducted Emission, 30MHz to 1GHz

Test Requirement: FCC Part15 B
Test Method: ANSI C63.4
Class: Class B

Detector: Peak for pre-scan (9kHz Resolution Bandwidth)

Quasi-Peak if maximised peak within 6dB of Quasi-Peak limit

Test Date: Jan 10 2008

### 7.2.1.E.U.T. Operation

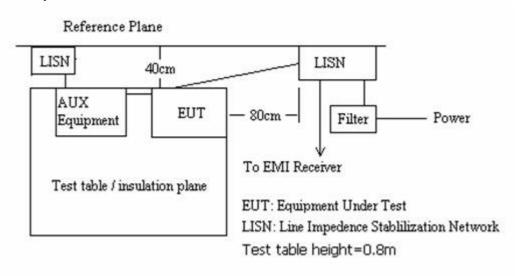
Operating Environment:

Temperature:24.0°C Humidity:52% RH Atmospheric Pressure:1012mBar

**EUT Operation:** 

Pretest EUT in half load and full load to find worse case. Compliance test the EUT in full load mode which was worse case found.

### 7.2.2.Test Setup



#### 7.2.3. Measurement Data

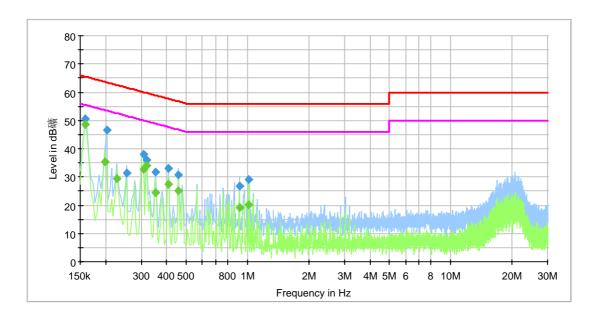
An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

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# Live Line Peak Scan



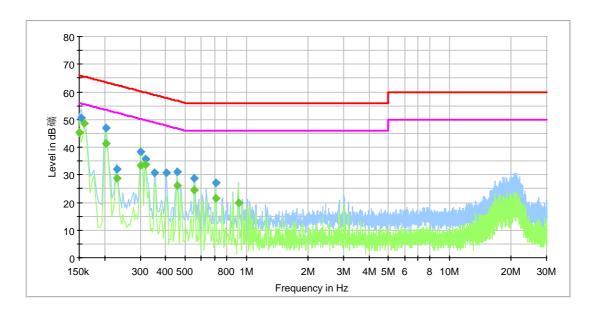
### **Quasi-peak and Average measurement**

Freque	QuasiPeak	Limit	Margin	Frequency	Average	Limit	Margin	Corr.
ncy	(dB	(dB μ V)	(dB)	(MHz)	(dB μ V)	(dB µ V)	(dB)	(dB)
0.15800	50.6	65.6	15.0	0.158000	48.6	55.6	7.0	10.1
0.20200	46.5	63.5	17.0	0.198000	35.2	53.7	18.5	10.1
0.25400	31.3	61.6	30.3	0.226000	29.3	52.6	23.3	10.1
0.30600	37.9	60.1	22.1	0.306000	32.7	50.1	17.3	10.1
0.31800	36.0	59.8	23.8	0.318000	34.1	49.8	15.7	10.1
0.35400	31.9	58.9	27.0	0.354000	24.5	48.9	24.3	10.1
0.40600	33.0	57.7	24.7	0.406000	27.6	47.7	20.2	10.1
0.45800	30.7	56.7	26.0	0.458000	25.0	46.7	21.7	10.1
0.91400	26.7	56.0	29.3	0.914000	19.1	46.0	26.9	10.1
1.01400	29.2	56.0	26.8	1.014000	20.3	46.0	25.7	10.1



### **Neutral Line**

#### **Peak Scan**



### **Quasi-peak and Average measurement**

Freque ncy	QuasiPeak (dB µ V)	Limit (dB µ V)	Margin (dB)	Frequency (MHz)	Average (dB µ V)	Limit (dB µ V)	Margin (dB)	Corr. (dB)
0.15400	50.5	65.8	15.3	0.150000	45.2	56.0	10.8	10.1
0.20200	46.9	63.5	16.7	0.158000	48.6	55.6	6.9	10.1
0.23000	32.1	62.4	30.3	0.202000	41.2	53.5	12.4	10.1
0.30200	38.3	60.2	21.9	0.230000	28.7	52.4	23.7	10.1
0.31800	35.6	59.8	24.1	0.302000	33.3	50.2	16.9	10.1
0.35400	30.7	58.9	28.2	0.318000	33.6	49.8	16.2	10.1
0.40200	30.7	57.8	27.1	0.454000	26.0	46.8	20.8	10.1
0.45400	30.9	56.8	25.9	0.554000	24.3	46.0	21.7	10.1
0.55400	28.8	56.0	27.2	0.706000	21.4	46.0	24.6	10.1
0.70600	27.0	56.0	29.0	0.910000	19.9	46.0	26.1	10.1



# 7.2.4. Photographs-- Conducted Emission Test Setup





# 8 APPENDIX I PHOTOGRAPHS OF EUT

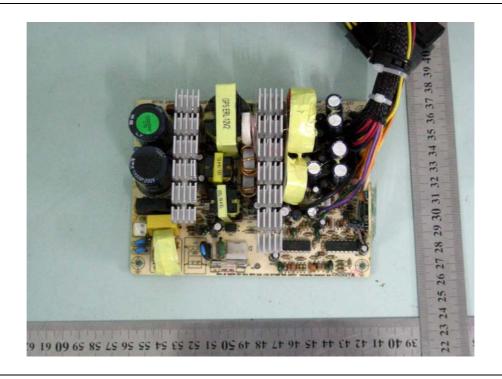


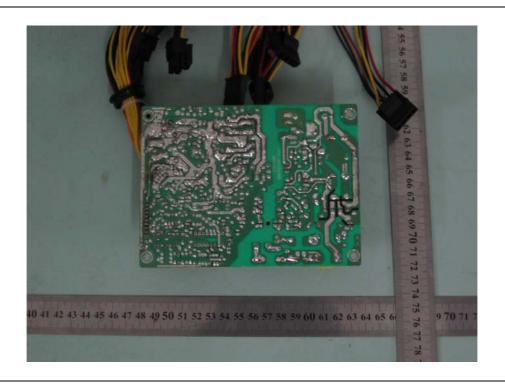
Photos of the model GPS-568 are shown as below:





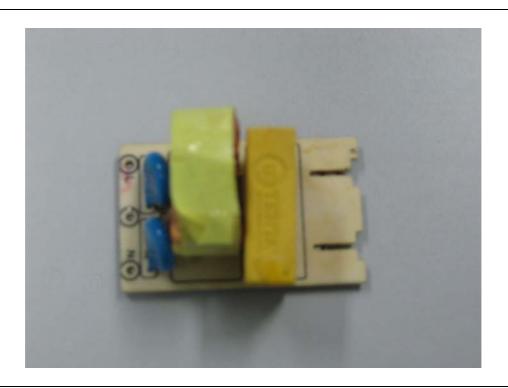


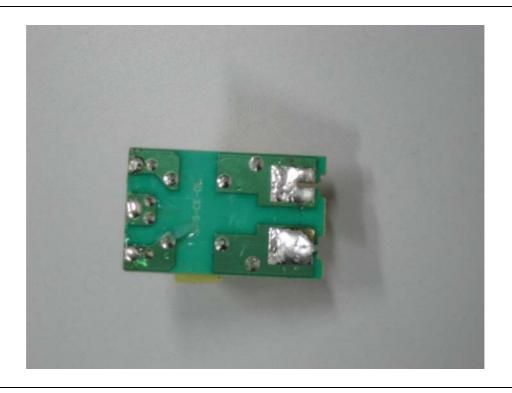




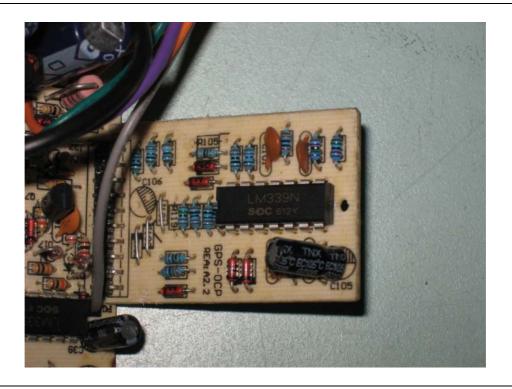
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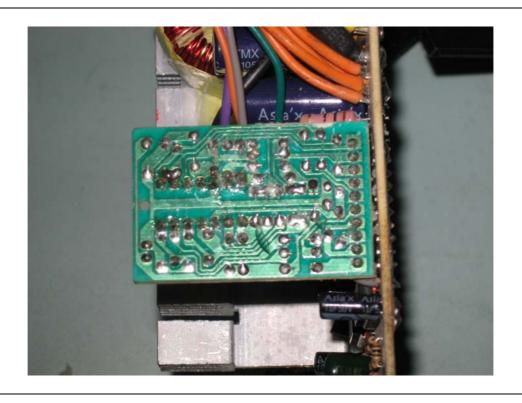














\*\*\*End of report\*\*\*