



SPECIFICATION

Edition No.: 01

HGP-CH08 CHARGER

Draft _____ Date _____

Auditing _____ Date _____

Authorize _____ Date _____

Customer confirm

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Modify Record

Product Name	Mobile phone charger														
Model	HGP-CH08														
Modify:															
Edition.	01.	02.	03.	04.	05.	06.	07.	08.	09.	A	B	C	D	E	
	■														
Edition No.	Modify Date	Perform Date		Modify Content						Deviser Confirm		Auditing			

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1 Scope

This is the engineering specification of mobile phone charger, this charge has a wide voltage 100~240V AC input and single output 5V DC with USB port, packaged into a models covered.
Model: HGP-CH08

2 Connecting form

The input and output port connect style:

2.1 Input connector

Two sheet copper socket connector

2.2 Output connector

USB/A output port . 1.2 meters output cord with four pins one end and USB/5P the other end. Picture is attached,please check.

3 Electrical requirements

(Unless specified otherwise, all specifications are at nominal input voltage, full load, 25°C, PSU at warmed up condition.)

3.1 Input

The operating conditions with respect to the AC input voltage are described in this section.

3.1.1 Input Voltage

Input voltage range: 90~264VAC

Work voltage range: 100~240VAC

3.1.2 Input Current

When work on normal condition, the highest input current is less than 0.1A.

3.1.3 Input Frequency

Input frequency: 50/60HZ

3.1.4 Inrush Current

At 264VAC, the maximum inrush current is less than 20A.

3.1.5 Efficiency

The average efficiency is larger than 50%.

3.1.6 Standby power

At 100Vac~240Vac input voltage, the maximum standby power is 0.3W.

3.2 Output

3.2.1 Rated output voltage

Rated output voltage is DC5.0V \pm 5%, that is DC4.75V~5.25V.

3.2.2 Rated output current

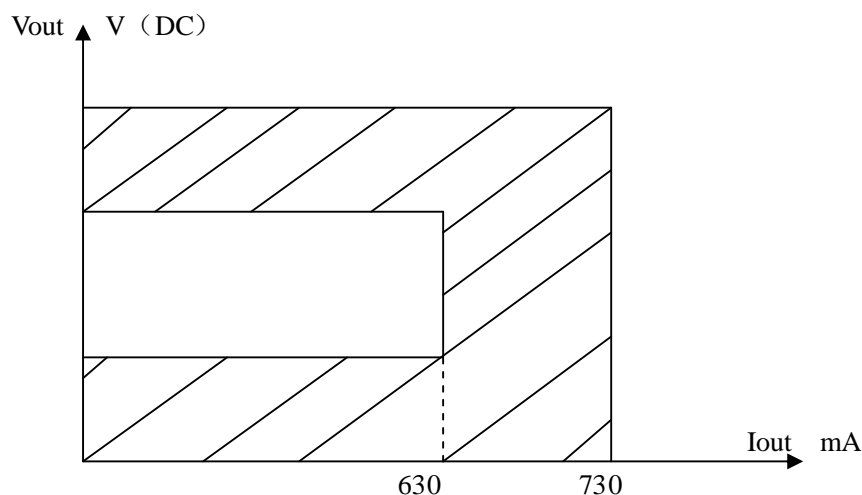
Rated output current DC680mA, the range DC630 mA~730mA.

3.2.3 Output ripple and noise voltage

At rated current load, the maximum ripple is less than 200mV.

(Measure condition: 20MHZ bandwidth, parallel a 0.1 μ F ceramic capacitor and a 47 μ F electrolytic capacitor at the oscillograph port) .

3.2.4 Output speciality curve



3.2.5 Turn-on delay

Turn-on delay time is measured from the charger turn on to the input and output voltage reach the allowed rang. At AC100V, the turn-on delay time is less than 2 seconds.

3.2.6 Output hold up time

The charge shall maintain its output voltage and current more than 10ms when cut off it's AC input voltage. Measured at normal input voltage of 100~240VAC and with a mutative load large than 50%.

3.2.7 Output protection

Short circuit protection: the charger will be protected against output short circuit and will self recover after short circuit eliminated.

Over current protection: the charger will be protected when output current over 1.5A and will resume work after eliminate the fault.

Over voltage protection: the charger will be protected if any component invalidate. Measured method:cut the sampling resistor and change a 10K adjustable resistor,then modulate output voltage till it reach the highest value.

4 Environmental Requirements

4.1 Temperature

Operate temperature: -10 °C ~40 °C

Storage temperature: -25 °C ~70 °C

4.2 Altitude

Maximum operate altitude 3000 feet

Maximum storage altitude 10000 feet

4.3 Humidity

Non-condensing relative humidity range: 5%~95%

4.4.1 Vibration

The charger shall meet operating and non-operating.

Vibration	Frequency	Acceleration	Two time	Cycles
Operating	5-500Hz	0.5G	15min,xyz all 15min	2
Non-operating	5-500Hz	1G	15min,xyz all 15min	2

4.4.2 Falling

On concrete ground

Falling	Height	Direction	Cycles
Non-operating	1.0m	xyz ,all 2 times	6

4.5 Input inrush voltage

Minimum dielectric AC-line inrush voltage : Between AC input L to N:

Inrush	Tr /Td	Voltage	Phase	Time	Cycles
Operating	1.2us/50us	1.0KV	0°	1min	10
			90°		10
			270°		10
			360°		10

4.6 Antistatic strength

Contact discharge 4KV

Air discharge 8KV

5 Safety Requirements

5.1 Withstand Voltage

Minimum withstand voltage between input and output is AC3KV with stand time 1 minute, and leak current is less than 5mA.

5.2 Leakage Current

Minimum leakage current from primary to secondary shall less than 0.25mA at input voltage AC264V.

5.3 Insulation Resistor

Minimum insulation resistor from primary to secondary shall be more than 100M Ω at voltage DC500V.

5.4 Safety Spacing

Minimun 6.5mm between primary and secondary.

5.5 Safety Standard Approval

Meet CCC approval.

5.6 Reliability




MTBF: min 50000 hours, at 25°C, input voltage 240VAC,output current is the 3/4 of rated current.

6 EMI Requirements

EMI standard: EN55022 and EN55024.

7 Instruction For Safty Usage

IMPORTANT SAFETY INSTRUCTIONS

1. **Caution!**  This sign warns there are risks of electric shock.
2. **Warning!**  This sign warns there are important safety parts and Hi-Voltage together with the product.
3. **Indoor!**  This sign warns that the product can only be used indoor.

Usage

Note:

- For avoiding static shock or high-voltage arc, please use wide-notch socket & insert the plug into the socket completely.
- For Power Supply working reliable please be sure the socket must be suitable for the output plug and insert them tightly.
- Please always keep the Power Supply at ventilating place; otherwise it will enter into protecting situation.

Warning:

- Do not install this power supply in a confined space such as a book case or similar unit.
- There is no switch in the product. The mains plug or appliance coupler is used as disconnect device, it shall be easily accessible.
- No naked flame sources, such as lighted candles. Should be placed on the apparatus.
- Do not exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- The product is suitable to be used in moderate climate, do not use it in tropics.
- To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Caution! :

- Please don't use AC voltage which not in the range of 100-240V, otherwise the Power Supply may be damaged.
- When pull the plug out from the socket, please hold its base but never pull it by draw its wire, as the wire may be broken or damaged to cause short circuit & fire.

8. Radiation

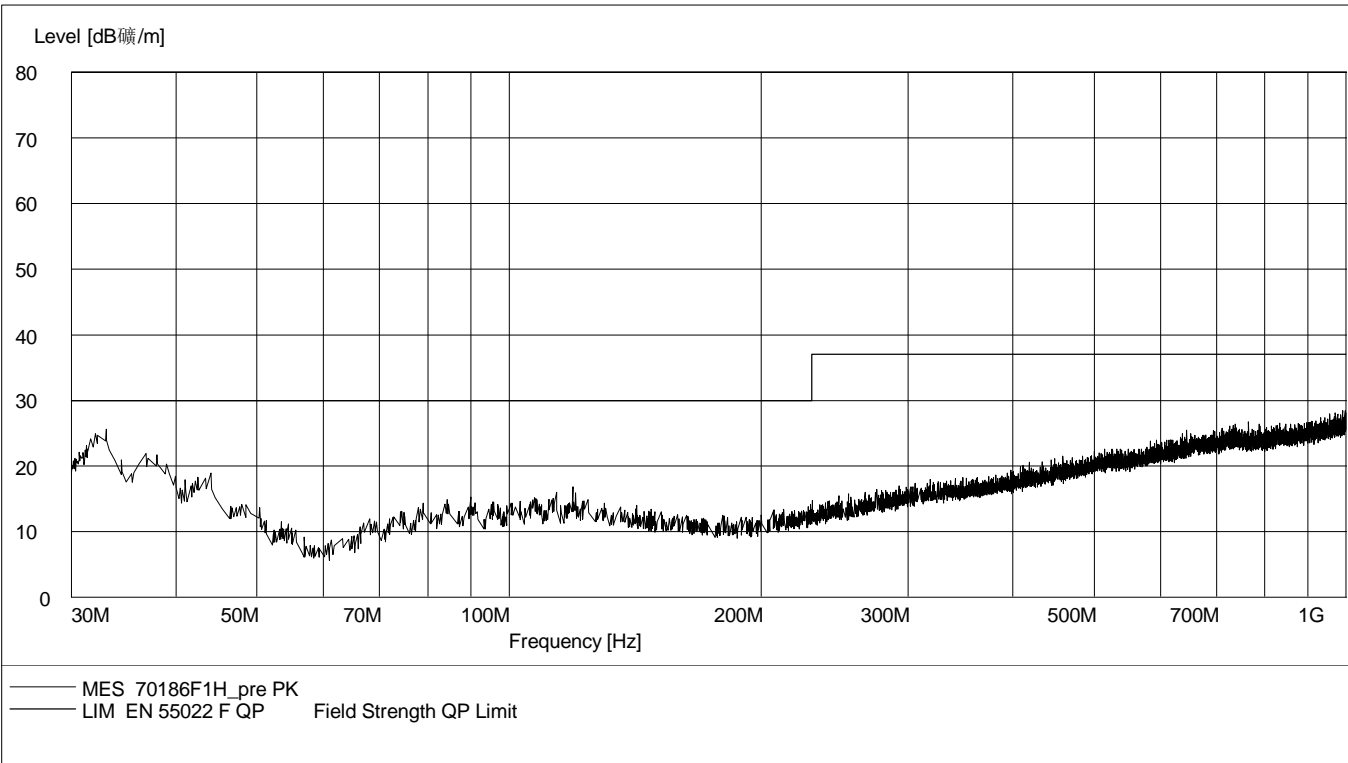
CPC EMC EMI TEST

Electric Field Strength

EUT:
Manufacturer:
Operating Condition: Run
Test Site: 10m Radiated Emission Chamber
Operator: xbrong
Test Specification: Horizontal AC:230V/50Hz
Comment: M/N: HGP-CH08
Start of Test: 6/23/2007 / 08:07:47

SCAN TABLE: "EN 55022 Field fin"

Short Description:		EN 55022 Field Strength fin				
Start	Stop	Step	Detector	Meas.	IF	Transducer
Frequency	Frequency	Width		Time	Bandw.	
30.0 MHz	1.0 GHz	80.0 kHz	QuasiPeak	1.0 ms	120 kHz	HL 562 UltraLog



CPCEMC EMI TEST***Electric Field Strength***

EUT:

Manufacturer:

Operating Condition: Run

Test Site: 10m Radiated Emission Chamber

Operator: xbrong

Test Specification: Vertical AC:230V/50Hz

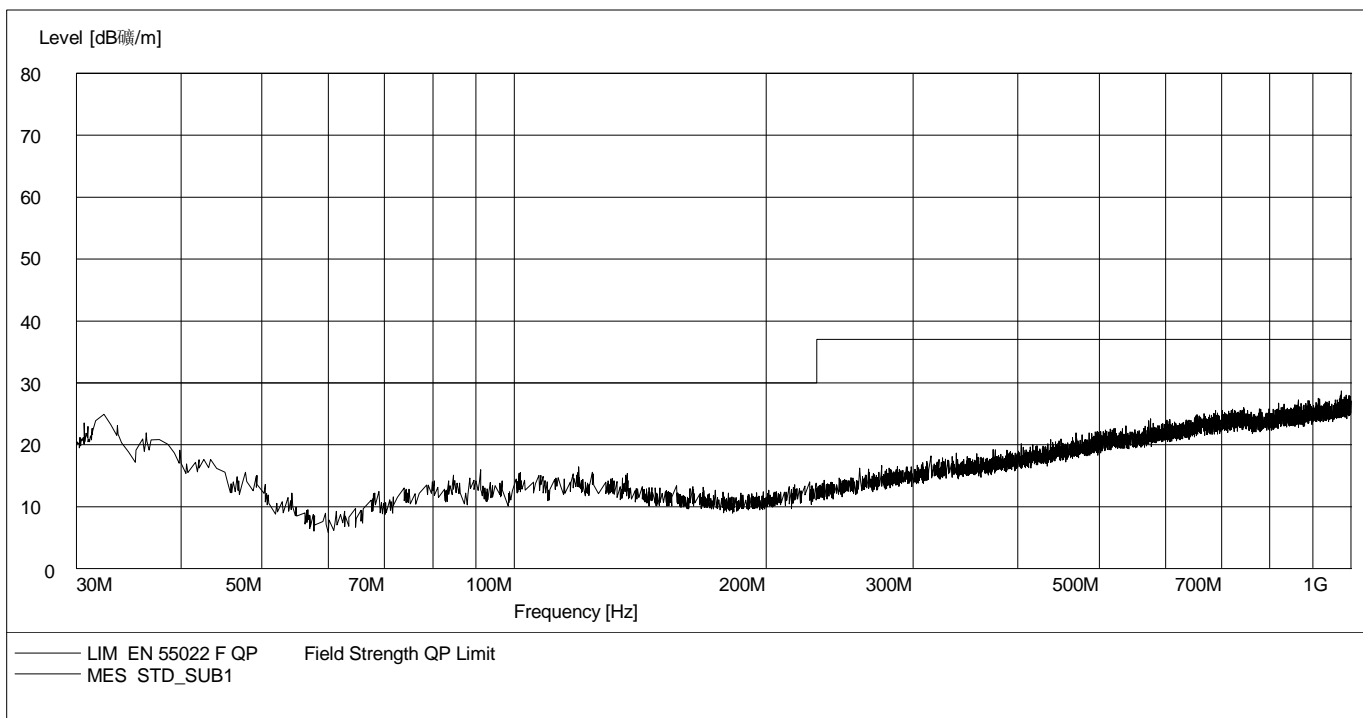
Comment: M/N: HGP-CH08

Start of Test: 6/23/2007 / 08:01:19

SCAN TABLE: "EN 55022 Field fin"

Short Description: EN 55022 Field Strength fin

Start	Stop	Step	Detector	Meas.	IF	Transducer
Frequency	Frequency	Width		Time	Bandw.	
30.0 MHz	1.0 GHz	80.0 kHz	QuasiPeak	1.0 ms	120 kHz	HL 562 UltraLog



9 Conduction

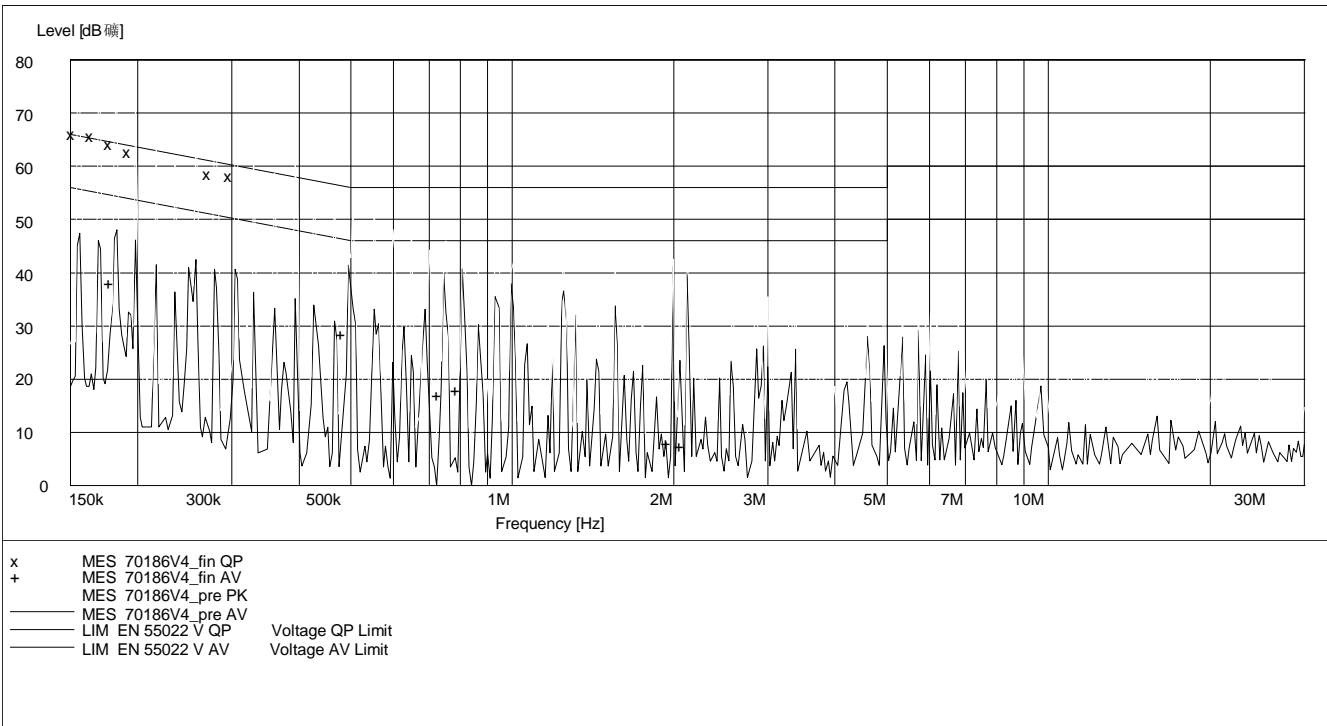
CPC EMC EMI TEST

Conducted Disturbance

EUT:
Manufacturer:
Operating Condition:
Test Site: SAC 10m
Operator: xbrong
Test Specification: AC:230V/50Hz
Comment: M/N: HGP-CH08
L

SCAN TABLE: "EN 55022 Voltage fin"

Short Description:		EN 55022 Voltage				
Start	Stop	Step	Detector	Meas.	IF	Transducer
Frequency	Frequency	Width		Time	Bandw.	
150.0 kHz	30.0 MHz	0.4 %	QuasiPeak	1.0 s	9 kHz	None
Average						



CPCEMC EMI TEST

Conducted Disturbance

EUT:
Manufacturer:
Operating Condition:
Test Site: SAC 10m
Operator: xbrong
Test Specification: AC:230V/50Hz
Comment: M/N: HGP-CH08
N

SCAN TABLE: "EN 55022 Voltage fin"

Short Description:		EN 55022 Voltage				
Start	Stop	Step	Detector	Meas.	IF	Transducer
Frequency	Frequency	Width		Time	Bandw.	
150.0 kHz	30.0 MHz	0.4 %	QuasiPeak	1.0 s	9 kHz	None
Average						

