

# APPROVAL SHEET

CUSTOMER NAME : A096  
CUSTOMER NO. : \_\_\_\_\_  
DESIGN NO. : GQ652011083105  
MODEL NO. : GQ65-120416-E1  
STANDARD: CE  
REV: A0  
DATE : 2011-8-31

<b>APPROVED BY CUSTOMER</b>



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MANUFACTURE		EDITION	A0

Switching Power Supply Specifications

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## 1. SCOPE:

This document describes the switching Adapter's electrical, mechanical, environmental, RoHS, safe certificate, and so on.

## 2. INPUT CHARACTERISTICS:

### 2.1 Input Voltage and Frequency:

Rated Voltage	Variation Range	Rated Frequency	Variation Frequency
100-240Vac	90-264Vac	50/60Hz	47-63Hz

### 2.2 Input Current:

AC current 2.0A max At input rated voltage with output full load.

### 2.3 Inrush Current:

In rated load, 25°C ambient temperature, Cold-state starting at 240Vac input, Inrush Current 60 Amps Max.

## 3. OUTPUT CHARACTERISTICS:

### 3.1 Power Output:

Voltage	Min. Load	Max. Load	Output Power
12Vdc	0A	4.16A	49.92W

### 3.2 Load character / Line Regulation:

Load	Min. Load	Max. Load
Current	0A	4.16A
Voltage	12Vdc $\pm$ 5%	12Vdc $\pm$ 5%

### 3.3 No load Standby Power:

0.5W Max

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### 3.4 Ripple And Noise:

Under Rated voltage and nominal load, The ripple and noise are as follows when measure with Max. Bandwidth of 20MHz and Parallel 47uF/0.1uF, crossed connected at testing point.

Voltage	Ripple And Noise(Max.)
12Vdc	150mVp-p

### 3.5 Turn On Delay Time:

Turn on time 3 second Max. At Rated Voltage input and output Max. Load.

### 3.6 Rise Time:

100mS Max. At Rated Voltage input and output Max. Load.

### 3.7 Hold Up Time:

10mS Min. At Rated Voltage input and output Max. Load.

### 3.8 Efficiency:

When input voltage 115/230VAC, the average efficiency of (25%. 50%. 75%. 100%) current at load shall be 85.19% Min. Meet ERP level IV.

### 3.9 Overshoot:

15% Max. When power supply at turn on or turn off.

## 4. PROTECTION REQUIREMENT:

### 4.1 Short Circuit Protection:

The power supply will be auto recovered when short circuit faults remove.

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#### 4.2 Over current Protection:

In the input voltage 115/230Vac, over-current protection points between 130% and 300%.

### 5. ENVIRONMENTAL REQUIREMET:

#### 5.1 Operating Temperature:

0°C to 35°C, Full load, Normal operation.

#### 5.2 Storage Temperature:

-10°C to 70°C (With Case)

#### 5.3 Relative Humidity:

5% (0°C) ~ 90% (35°C) RH, 72Hrs, Full load, Normal operating.

#### 5.4 Vibration:

##### 5.4.1

Operating: IEC 721-3-3 3M3

5-9Hz, A=1.5mm

9~200Hz, Acceleration 5m/s<sup>2</sup>

##### 5.4.2 Transportation:

IEC 721-3-2 2M2

5-9Hz, A=3.5mm

9~200Hz, Acceleration=5m/S<sup>2</sup>

200~500Hz, Acceleration=15m/S<sup>2</sup>

##### 5.4.3 Axes, 10 cycles per axis.

(No permanent damage may occur during testing.)

The product has to restore to its original situation after power off/on.)

#### 5.5 Dropping (Packed):

Height: 1m (Each side dropping once, total 6 side.)

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## 5.6 RELIABILITY:

According to the standard of MIL-STD-HDBK-217, when ambient temperature at 25°C, in full load, the life will more than 20,000 hours.

## 6. SAFETY AND EMC REQUIREMEN

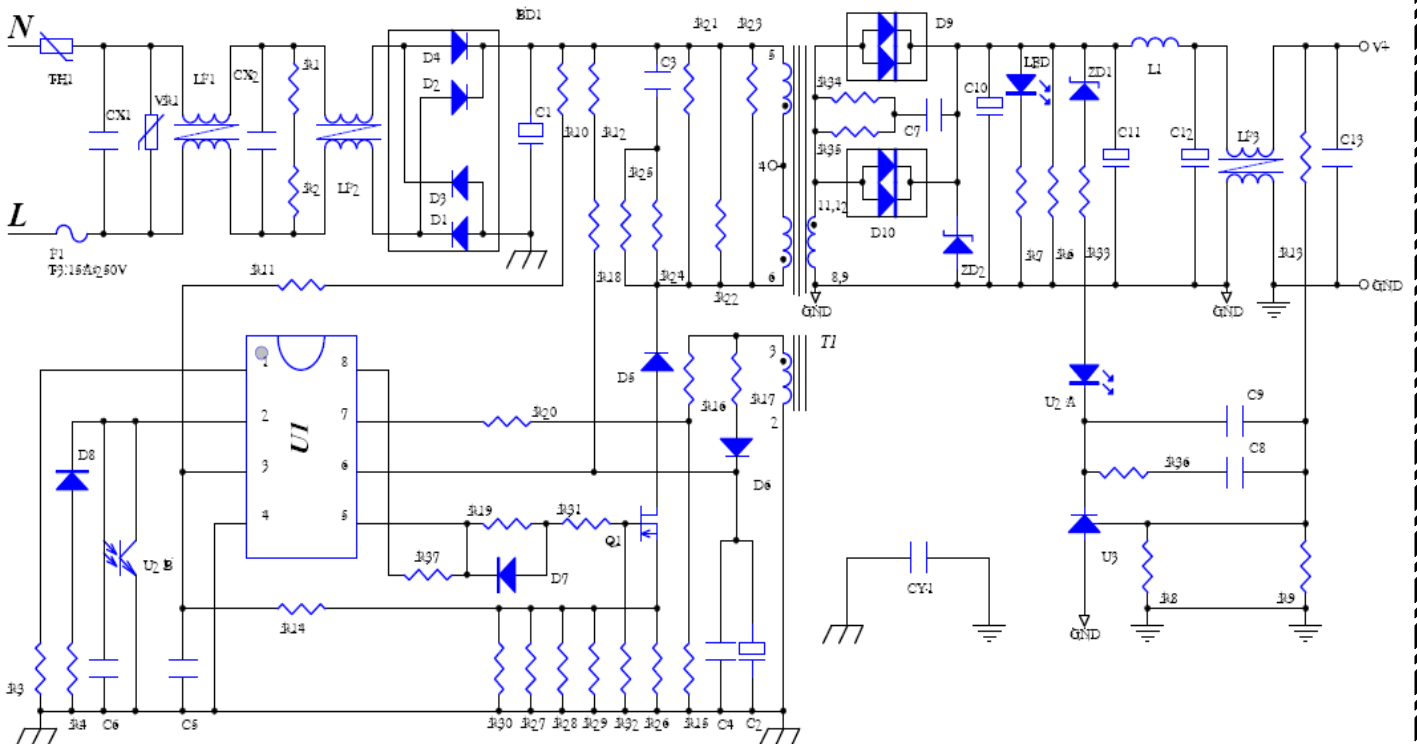
### 6.1 Safety:

Certified	Standard
CE	EN55022/EN55024
TUV (US)	TUV US60950

### 6.2 DIELECTRIC STRENGTH (Hi-Pot):

Primary to secondary, 1500Vac/10mA/60s.

## 7. CIRCUIT DESCRIPTION:

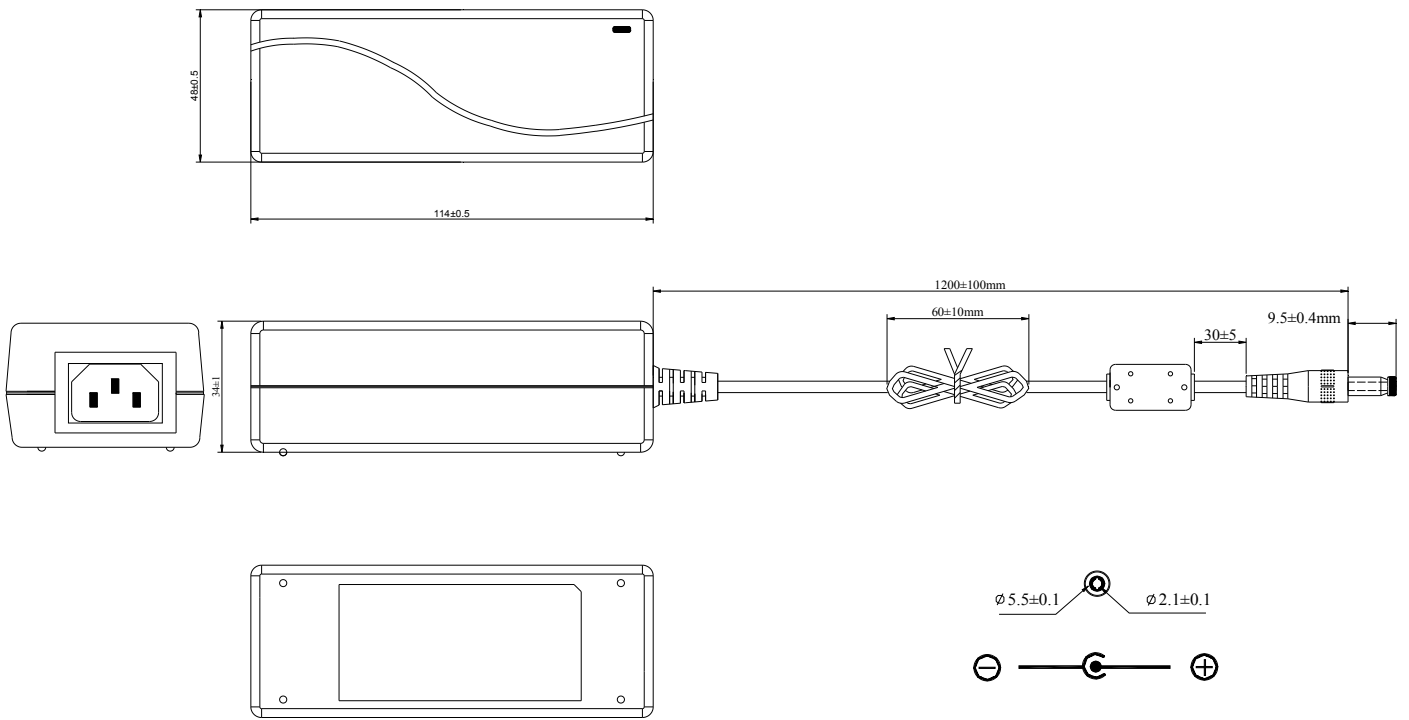


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## 8. MECHANICAL REQUIREMENT:

8.1 Enclosure: PC+ABS ; BLACK (LEAD FREE)

The power supply size: L:114\*W:48\*H:34mm

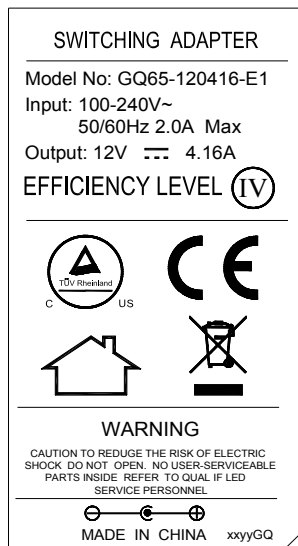


8. 2. DC CABLE SPEC:

UL1185 18AWG 1.2M BLACK. DC PLUG:  $\varnothing 5.5 \times 2.1 \times 9.5 / 180^\circ$

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## 9. NAME LABEL :



Note: MATERIAL:

SILVER characters BLACK background

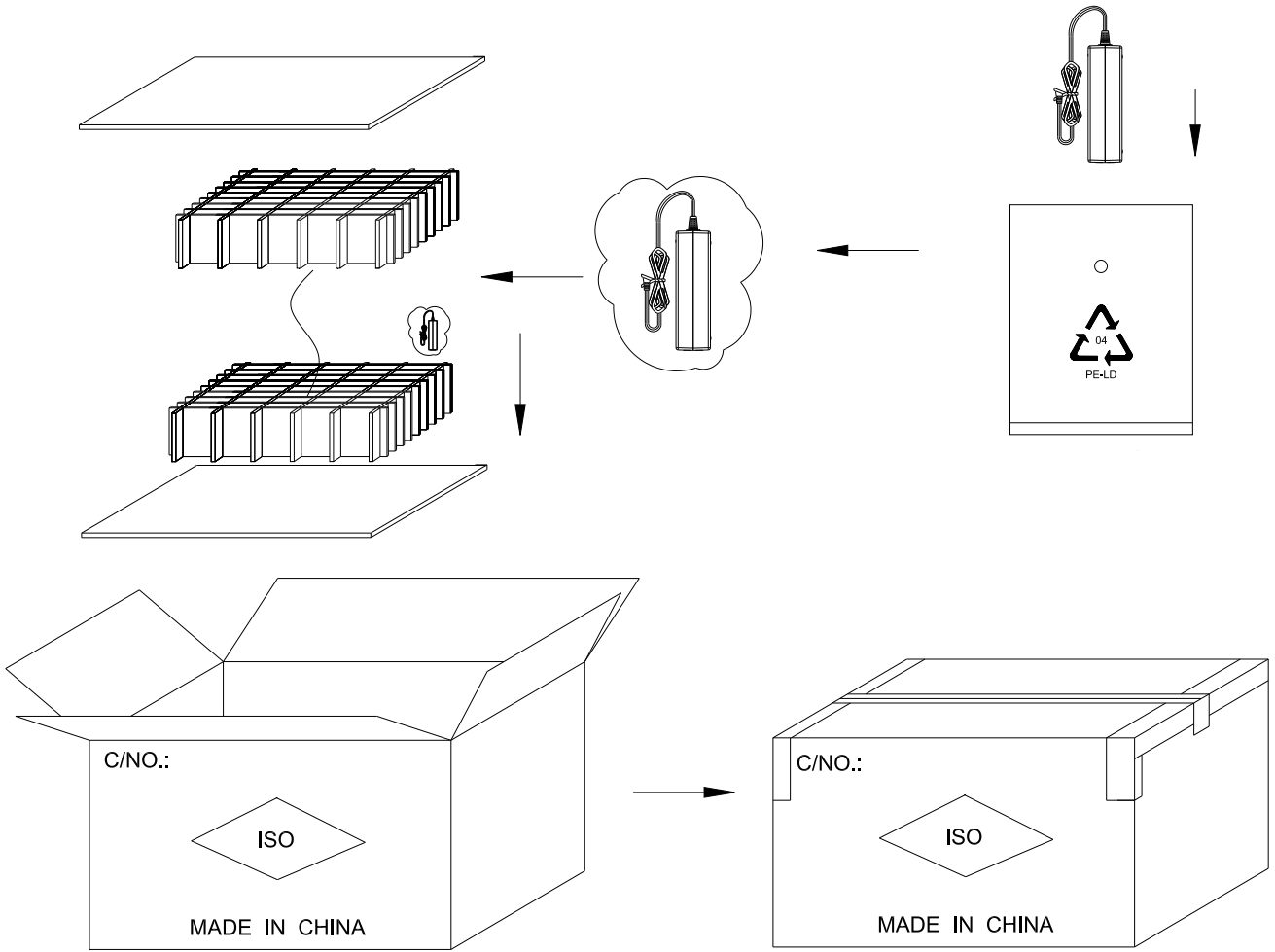
Thickness: 0.13mmT

ROHS

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## 10. PACKAGE :





P/O:  
 Design NO:  
 Q'TY:            PCS  
 N.W:            KGS  
 G.W:            KGS  
 SIZE:

C/NO.:  
  
 ISO  
 MADE IN CHINA

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11. TEST REPORT:

Sample checkout Record