

# 承认书



## SPECIFICATION FOR APPROVAL Switching power Supply/开关电源

客 户:

CUSTOMER: \_\_\_\_\_

产品描述:

DESCRIPTION: Input:100~240V AC 50/60Hz Output:5VDC2.0A

机种型号:

OUR MODEL NO: QX18W050200FG

样品编号:

日期:

SAMPLE NO: QX2014000802

DATE: 2014-07-16

产品颜色:

SAMPLE COLOR: Black  White

符合环保项: ROHS  PAH PHTHALTES  REACH

APPROVAL SIGNATURE/客户确认		
核准/APPROVED BY	审核/CHECKED BY	检测/TESTED BY

Manufacturer/制造商		
业务/SALES	核准/APPROVED BY	设计/DESIGNED BY

深圳市齐鑫电子有限公司

SHEN ZHEN QI XIN ELECTRONICS CO.,LTD

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深圳市齐鑫电子有限公司  
SHEN ZHEN QI XIN ELECTRONICS CO., LTD

型号/Our model: QX18W050200FG

客户/Customer:

日期/Date:2014-07-16

样品编号/SAMPLE No:QX2014000802

版本目录/Rev. List

版本/Rev.	日期/Date	描述/Description	制订/Design
A0	2014-07-16	新版本/New Rev.	XXJ

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深圳市齐鑫电子有限公司  
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型号/Our model: QX18W050200FG

客户/Customer:

日期/Date:2014-07-16

样品编号/SAMPLE No:QX2014000802

## 1、描述/ DESCRIPTION:

本规格书适应于 QX18W050200FG 型号的开关电源.

The purpose of the document is to specify the functional requirements of a 10W switching power supply.

## 2、输入特性/INPUT CHARACTERISTICS:

### 2.1 输入电压/Input Voltage:

额定电压/Rated Voltage:100~240Vac

调整范围/Variation Range:90-264Vac

### 2.2 输入频率/Input Frequency:

额定频率/ Rated Frequency: 50/60Hz.

调整频率/Variation Frequency:47-63Hz

### 2.3 输入电流/Input Current:

当输入交流电压为额定值的下限电压负载满载时,最大输入交流电流 0.5A.

0.5Amps max At any input voltage and rated, DC output rated load.

### 2.4 浪涌电流/Inrush Current:

当输出为额定负载,环境温度为 25℃,输入 240Vac 冷态起机时将不会损坏.

No damage shall be occurred and the input fuse shall not be blown up, Cold start at 240Vac input, with rated load and 25°C ambient.

### 2.5AC 漏电流/Ac Leakage Current:

当输入电压 240Vac 时,最大漏电流为 0.25mA.

0.25mA Max.At240Vac input.

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### 3、输出特性/OUTPUT CHARACTERISTICS:

#### 3.1 输出功率/Power output

电压 Voltage	最小负载 Min. Load	额定负载 Rated. Load	峰值功率 Peak	输出功率 Output power
5Vdc	0.01A	2.0A		10W

#### 3.2 负载特性,调整率/Combined Load/Line Regulation

电压 Voltage	最小负载 Min. Load	额定负载 Rated. Load	线性调整 Line Regulation	负载调整 Load Regulation
5Vdc	0.01A	2.0A	±2%	±5%

#### 3.3 纹波和噪音 Ripple and Noise:

测试条件:在输入 115/230Vac 25℃和输出最小及最大负载时, 使用示波器带宽为 20MHz 连接到适配器的输出端, 同时输出端并联一个 47uF 的电解电容和一个 0.1uF 的瓷片电容.

At 115/230Vac 25℃ input and output Min and Max.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.

电压 Voltage	最大纹波/最大噪音 Ripple and Noise(Max.)
+5Vdc	150mV p-p

#### 3.4 启动延迟时间/Turn on delay time:

当输入 115Vac 和输出最大负载时,最大启动时间为 3S.

2Second Max.at 115Vac input and output Max.load.

#### 3.5 上升时间/Rise time:

当输入 115Vac 和输出最大负载时最大时间为 40 mS.

40 mS Max.at 115Vac input and output Max load.

#### 3.6 保持时间/Hold up time:

当输入 115Vac 和输出最大负载时,最小保持时间为 5 mS .

5 mS Min.at 115Vac input and output Max.Load.

#### 3.7 效率/Efficiency:

当 115/230Vac 输入电压时, 1/4, 1/2, 3/4 和满载计算平均效率, 最小 73.37%

73.37% Min,At 115/230Vac input voltage,1/4, 1/2, 3/4 and full load calculation average efficiency.

适配器满足能效 V.

Adapter meet efficiency lever V.

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### 3.8 过冲/Overshoot:

在电源开启或关闭的时候,最大 15%.

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

### 4、保护功能/PROTECTION FUNCTION:

#### 4.1 短路电路保护/Short circuit protection:

该电源供给器在短路解除时能正常工作恢复.

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

#### 4.2 过流保护/Over current Protection:

过流故障排除后,电源将自动恢复正常工作.

The power supply will be auto recovered when over current faults remove.

### 5、环境要求/ENVIRONMENTAL REQUIREMET:

#### 5.1 工作温度/Operating Temperature:

0°C-40°C,满载,正常工作.

0°C to 40°C,Full load, Normal operation.

#### 5.2 储藏温度/Storage Temperature:-20°C to 60°C

带外壳/With package

#### 5.3 工作湿度/Relative Humidity:

5%(0°C)~90%(40°C),72 小时,满载,正常工作.

5%(0°C)~90%(40°C)RH,72Hrs,Full load, Normal operating.

#### 5.4 振动/Vibration:

##### 1. 测试标准:国际电工电子委员会

Operating: IEC 721-3-3 3M3

5~9Hz,A=1.5mm

加速度(9~200Hz,Acceleration 5m/S2)

##### 2. 运输/Transportation:

IEC 721-3-2 2M2

5-9Hz,A=3.5mm

9~200Hz,加速度 Acceleration=5m/S2

200~500Hz,加速度 Acceleration=15m/S2

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**3. 轴向振动/Axes,10 cycles per axis.**

在测试过程中不能出现永久性的损坏.

No permanent damage may occur during testing.

在电源开启和关闭后,样机能够恢复到最初条件.

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

**5.5 跌落试验/Dropping Packed:**

跌落高度为 760mm;

Drop the height is760mm.

测试台面是厚 13mm 的夹木板, 离地面高 19-20mm

The horizontal surface Consists of hardwood at least 13mm thick,mounted on two layers of plywood each 19mm to 20mm thick,all supported on a concrete or equivalent non-resilient floor.

**6、安全及 EMC 要求/SAFETY AND EMC REQUIREMENT:**

**6.1 安全符合标准: EN 60950**

Safety:accord with: EN 60950

**6.2 高压/DIELECTRIC STRENGTH Hi-Pot:**

初级对次级/Primary to secondary: 4242Vdc/5mA/60S for type test.

**6.3 绝缘阻抗/Insulation resistance:**

初级对次级/Primary to secondary:20M $\Omega$  min at 500V DC.

**6.4 EMI 标准/EMI STANDARD**

Meets the Limits of/测试符合

<1>.Fcc part15 class B rules

<2>.EN55022 class B rules

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## 7、结构参数/MECHANICAL REQUIREMENT:

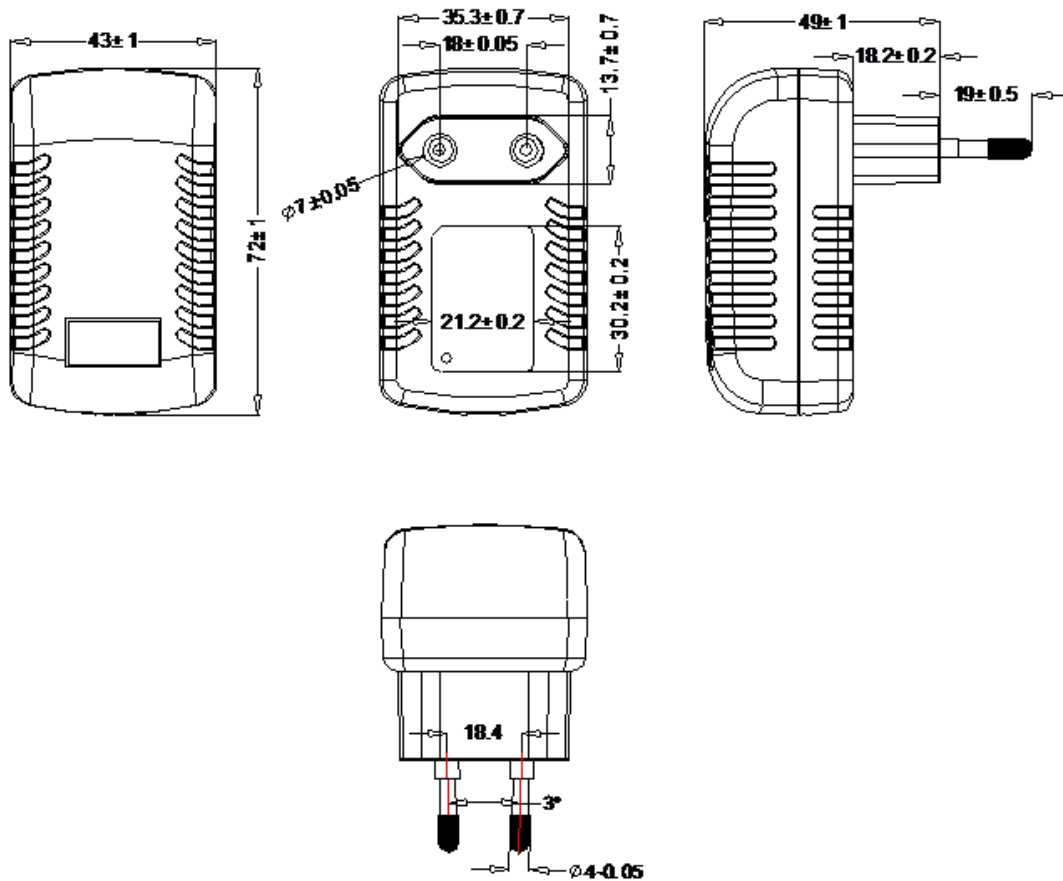
### 7.1 外壳/Enclosure:

The power supply size: L72x W43x H49mm;

外壳尺寸: L72x W43x H49mm;

### 7.2 输入线/Input Connector:

2 Pin EU 插脚/Two pin input plug of EU.



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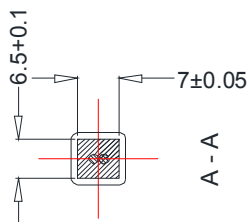
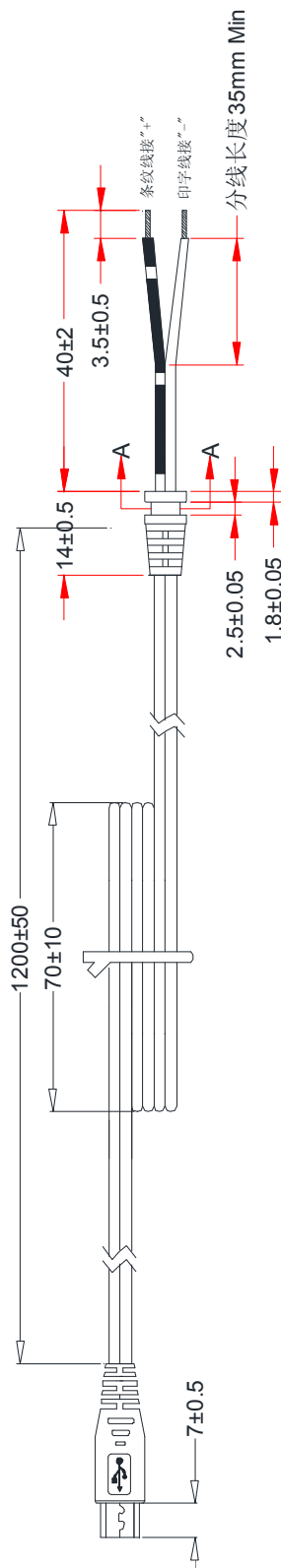
型号/Our model: QX18W050200FG

客户/Customer:

日期/Date:2014-07-16

样品编号/SAMPLE No:QX2014000802

8、线材/CORD:



NOTE:

- 1>UL 2468 20AWG 80°C 300V VW-1 L=1200±50mm;
- 2>PLUG:Micro 5Pin, 红色线接PIN1"+", 黑色线接PIN5"-"
- 3>Color:Black;
- 4>RoHS.



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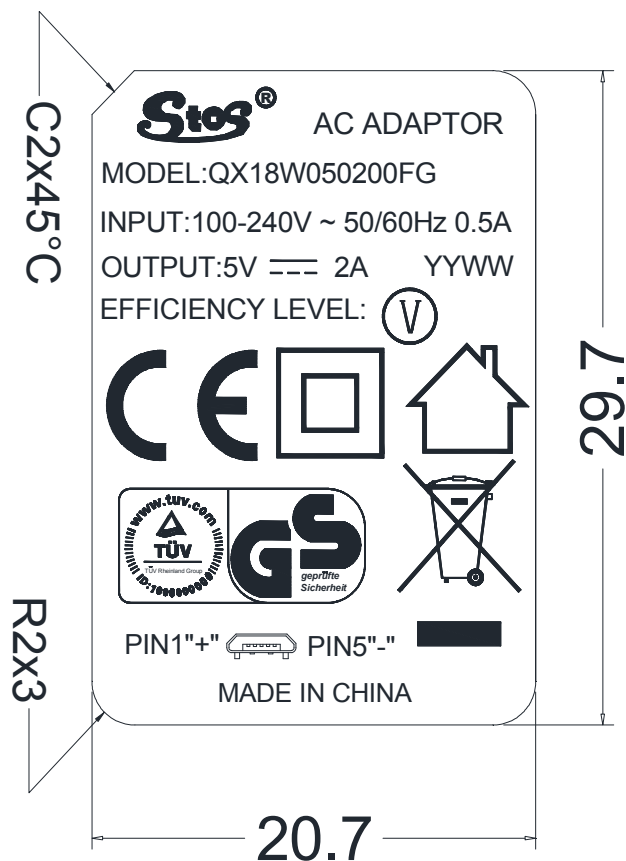
型号/Our model: QX18W050200FG

客户/Customer:

日期/Date:2014-07-16

样品编号/SAMPLE No:QX2014000802

9、铭牌/LABEL:



NOTE:

- 1.颜色/Coior:黑底白字/ Black ground white
- 2.材质/Material:PET+雾面/fog surface
- 3.厚度/Thickness:0.2mm
- 4.误差/Toilerance:+0/-0.2mm
- 5.环保/RoHS
- 6.YYWW,YY 表示年份,WW 表示周数

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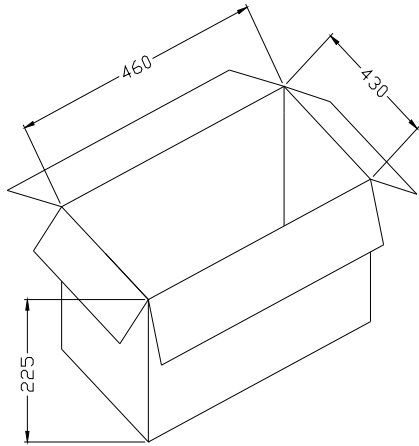
型号/Our model: QX18W050200FG

客户/Customer:

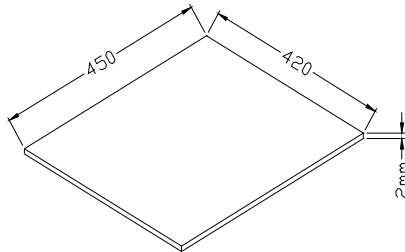
日期/Date:2014-07-16

样品编号/SAMPLE No:QX2014000802

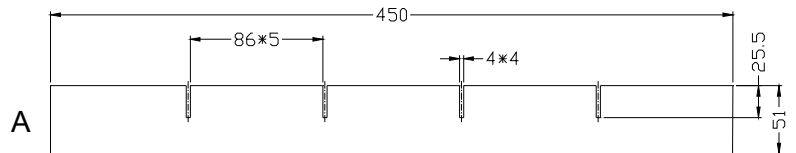
10、包装说明/PACKING:



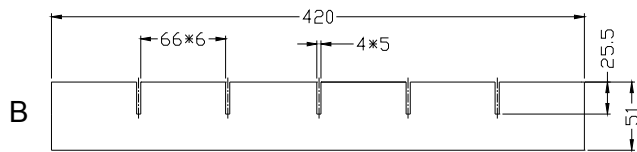
外箱/Outside box



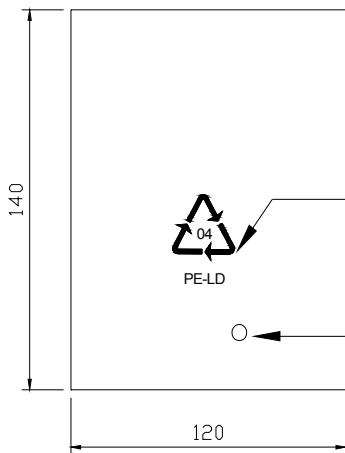
平板/Slab



A



B



绿色字体/  
Green lettering

透气孔  
Breathe freely os

包材/Packaging:

A:L450\*51mm

B:420\*51mm

外箱内径/Outside box:L460\*W430\*H225mm

平板/Slab:L450\*W420\*2mmT

胶袋/Pe bag:L140\*W120\*0.03mmT

数量/Quantity:120PCS/CTN

备注：此包装材料仅供参考。

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11、测试报告/ELECTRICAL TEST REPORT:

No 序号	Test item 测试项目	Test condition 测试条件	Standard spec 标准规格	Test data 测试数据					Unit 单位	Judge 判定
				1	2	3	4	5		Pass/ Fail
1	Output Voltage 输出电压	Vin100Vac 60Hz Io=0 输入 100Vac 空载	5.0+/-5%V	5.21	5.19				V	Pass
2	Output Voltage 输出电压	Vin100Vac60Hz Io=Rated Current 输入 100Vac 60Hz 负载	5.0+/-5%V	4.81	4.80				V	Pass
3	Average Efficiency 平均效率	Vin 115Vac 60Hz 输入 115Vac 60Hz	73.37%	74.60	74.73				%	Pass
4	Ripple&Noise mVp-p 纹波&杂讯	Vin100Vac 60Hz Full load 输入 100Vac 60Hz 满载	150mVp-p	70	70				mVp-p	Pass
5	Line Regulation 线性调整率	Vin=100V~240V Io=Rated Current 额定电流	±3%	OK	OK				/	Pass
6	Standby Power 待机功耗	Vin 115Vac 60Hz Io=0 输入 115Vac 60Hz	0.3W max	0.14	0.14				W	Pass
7	Short circuit test 短路测试	Vin100Vac 60Hz 输入 100Vac 空载	No odor smoke fire plastic deformation and excessive heat happen. 无冒烟,起火,外壳变 形及过热现象	OK	OK				/	Pass
8	OCP 过电流保护	Vin100Vac 60Hz 输入 100Vac	Amax	3.06	3.10				A	
9	Output Voltage 输出电压	Vin240Vac 50Hz Io=0 输入 240Vac 空载	5.0+/-5%V	5.21	5.19				V	Pass
10	Output Voltage 输出电压	Vin240Vac60Hz Io=Rated Current 输入 240Vac 60Hz 负载	5.0+/-5%V	4.81	4.80				A	Pass
11	Average Efficiency 平均效率	Vin230Vac 50Hz 输入 230Vac 50Hz	73.37%	73.59	73.63				%	Pass
12	Ripple & Noise mVp-p 纹波&杂讯	Vin240Vac 50Hz Full load 输入 240Vac 50Hz 额定电流	150mVp-p	70	70				mVp-p	Pass
13	Line Regulation 线性调整率	Vin=100V~240V Io=Rated Current 输入 100V~240V	3%	OK	OK				/	Pass
14	Standby Power 待机功耗	Vin230Vac 50Hz Io=0 输入 230V 50Hz	0.3W max	0.21	0.22					Pass
15	Short circuit test 短路测试	Vin240Vac 50Hz 输入 240Vac 50Hz	No odor smoke fire plastic deformation and excessive heat happen. 无冒烟,起火,外壳变 形及过热现象	OK	OK					Pass
16	OCP 过电流保护	Vin230Vac 50Hz 输入 230Vac 50Hz	Amax	3.23	3.37				A	
17	Hi-pot test 高压测试	高压 /DIELECTRIC STRENGTH Hi-Pot: 初级对次级 /Primary to secondary:4242Vdc/5mA/60S for type test		OK	OK					Pass
18	Burn in 老化	Input:220Vac/50Hz Full Load 4hrs 输入 220Vac/50Hz 满载 4 小时		OK	OK					Pass
19	Drop test 跌落	Heigh: 1m Three*faces(once on each plane) 高 1 米,3 个面,每面 1 次.		OK	OK					Pass

REMARK  
备注

# Zertifikat

# Certificate



Zertifikat Nr. *Certificate No.*  
S1 50252586

Blatt *Page*  
0001

Ihr Zeichen *Client Reference*  
174009534

Unser Zeichen *Our Reference*  
05-JQL- 16037665 002

Längstens gültig bis *Latest expiration date*  
15.04.2018 (day/mo/yr)

## Genehmigungsinhaber *License Holder*

SHENZHEN QI XIN ELECTRONICS  
CO., LTD

North 3F, Bldg. A6, Xinfu Ind. Zone  
Chongqing Rd., Fuyong Ind.

Thoroughfare, Fuyong St., Baoan Dist.  
Shenzhen, Guangdong 518013

P.R. China

## Fertigungsstätte *Manufacturing Plant*

SHENZHEN QI XIN ELECTRONICS  
CO., LTD

North 3F, Bldg. A6, Xinfu Ind. Zone  
Chongqing Rd., Fuyong Ind.

Thoroughfare, Fuyong St., Baoan Dist.  
Shenzhen, Guangdong 518013

P.R. China

## Prüfzeichen *Test Mark*



www.tuv.com  
ID 1000000000

## Geprüft nach *Tested acc. to*

EN 60950-1:2006+A11+A1+A12  
ZEK 01.4-08/11.11

Der Anhang I der Richtlinie 2006/95/EG ist eingehalten. Das Zertifikat kann im Rahmen der Konformitätserklärung nach Anhang III verwendet werden.  
*Annex I of the directive 2006/95/EC is complied with. The certificate can be used in connection with the EC declaration of conformity acc. to Annex III.*

Zertifiziertes Produkt (Geräteidentifikation)  
*Certified Product (Product Identification)*

Lizenzentgelte - Einheit  
*License Fee - Unit*

Netzgerät (AC Adaptor)

Serienbezeichnung : Nenneingangswerte 15  
(Series Type Designation) (Rated Input)  
QX18WxyFG AC100-240V, 50/60Hz, 0,5A  
QX18WxyHG AC 200-240V, 50/60Hz, 0,5A

x = 050-190;

Eine dreistellige Zahl, welche die Ausgangsspannung  
in Volt nach Teilung der Zahl durch 10 angibt.

(Is a 3 digit numerical code, which represents  
the output voltage in Volt after dividing by 10)

y = Eine dreistellige Zahl, welche den Ausgangsstrom  
in A nach Teilung der Zahl durch 100 angibt.

(Is a 3 digit numerical code, which represents the  
output current in A after dividing by 100)

Schutzklasse (Protection Class) : II

max. Umgebungstemperatur (max. Ambient Temperature) : 40°C

Fortsetzung auf Blatt 0002 (Continuation on page 0002)

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Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.  
Produkt und Fertigungsstätte erfüllen § 20 und § 21 des  
Produktsicherheitsgesetzes.

*This certificate is based on our Testing and Certification Regulation.  
Product and production fulfill par § 20 and § 21 of the  
Product Safety Law.*

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com

Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Zertifizierungsstelle



Dipl.-Ing. (FH) T. Zimmer

Ausstellungsdatum *Date of Issue* : 16.04.2013 (day/mo/yr)

# Zertifikat

# Certificate



Zertifikat Nr. *Certificate No.*  
S1 50252586

Blatt *Page*  
0002

Ihr Zeichen *Client Reference* 174009534  
Unser Zeichen *Our Reference* 05-JQL- 16037665 002  
Längstens gültig bis *Latest expiration date* 15.04.2018  
(day/mo/yr)

### Genehmigungsinhaber *License Holder*

SHENZHEN QI XIN ELECTRONICS  
CO., LTD  
North 3F, Bldg. A6, Xinfu Ind. Zone  
Chongqing Rd., Fuyong Ind.  
Thoroughfare, Fuyong St., Baoan Dist.  
Shenzhen, Guangdong 518013  
P.R. China

### Fertigungsstätte *Manufacturing Plant*

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Thoroughfare, Fuyong St., Baoan Dist.  
Shenzhen, Guangdong 518013  
P.R. China

### Prüfzeichen *Test Mark*



### Geprüft nach *Tested acc. to*

EN 60950-1:2006+A11+A1+A12  
ZEK 01.4-08/11.11

www.tuv.com  
ID 1000000000

Der Anhang I der Richtlinie 2006/95/EG ist eingehalten. Das Zertifikat kann im Rahmen der Konformitätserklärung nach Anhang III verwendet werden.  
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Zertifiziertes Produkt (Geräteidentifikation)  
*Certified Product (Product Identification)*

Lizenzentgelte - Einheit  
*License Fee - Unit*

Netzgerät (AC Adaptor)

wie Blatt (as page) 01	Fortsetzung (Continuation)	
Ausgangsspannung (Output Voltage)	Ausgangsstrom (Output Current)	Ausgangsleistung (Output Power)
DC (V)	A	Max. (W)
5,0-8,0	0,01-2,50	13,5
8,1-12,0	0,01-1,50	18,0
12,1-14,9	0,01-1,32	16,0
15,0-19,0	0,01-1,20	18,0

Vermerk: Ausgangsspannung und strom haben Werte mit der Schrittweite 0,1V bzw. 0,01A. Nach Multiplikation beider Werte sind Modellbezeichnungen limitiert durch die max. Ausgangsleistung. (Remark: Output voltage and current have values in steps of 0,1V resp. 0,01A. By multiplication of both values the type designations are limited through the max.output power.)

Hinweis: Dieses Netzgerät erfüllt die Anforderung nach Abschnitt 2.5 als Stromquelle mit begrenzter Leistung. (Remark: The power supply complies with clause 2.5 as a limited power source.)

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.  
Produkt und Fertigungsstätte erfüllen § 20 und § 21 des Produktsicherheitsgesetzes.  
*This certificate is based on our Testing and Certification Regulation.  
Product and production fulfill par § 20 and § 21 of the Product Safety Law.*

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg  
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Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Zertifizierungsstelle



Dipl.-Ing. (FH) T. Zimmer

Ausstellungsdatum *Date of Issue* : 16.04.2013 (day/mo/yr)

# C E R T I F I C A T E



of Conformity  
Low Voltage Directive 2006/95/EC

Registration No.: AN 50252588 0001

Report No.: 16037665 002

Holder: SHENZHEN QI XIN ELECTRONICS  
CO., LTD  
North 3F, Bldg. A6, Xinfu Ind. Zone  
Chongqing Rd., Fuyong Ind.  
Thoroughfare, Fuyong St., Baoan Dist.  
Shenzhen, Guangdong 518013  
P.R. China

Product: Power Supply  
(AC Adaptor)

Identification: Series Type Designation: QX18WxyFG , QX18WxyHG  
For a detailed listing of the variables x, y refer to  
license S1 50252586 0001-0002.

Serial No.: n.a.  
(Issued in conjunction with above TÜV Rheinland license.)

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with all revision of Annex I of Council Directive 2006/95/EC, in its latest amended version, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex III of the Directive.

Certification Body



Date 16.04.2013

  
Dipl.-Ing. (FH) T. Zimmer

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE