IEI Integration Corp.
威強電工業電腦

SPECIFICATION FOR APPROVAL

IEI Part Number：	**63040-010036-131-RS**
Description：	ADAPTER,C6/S3P,WO/PFC, POWER DIN(4PIN),180',1500mm
Manufacturer / Supplier：	FSP TECHNOLOGY CORP.
Mfr Model Name：	FSP036-RBBN2
Mfr Part Number：	9NA0362311
Mfr Description：	ADAPTER,C6/S3P,WO/PFC, POWER DIN(4PIN),180',1500mm
RoHS or Halogen	RoHS

Supplier
全漢企業股份有限公司 桃園縣 統一發票專用章 統一編號 84239055 TEL:03-3759888 負責人:王宗舜 桃園市大林里建國東路22號

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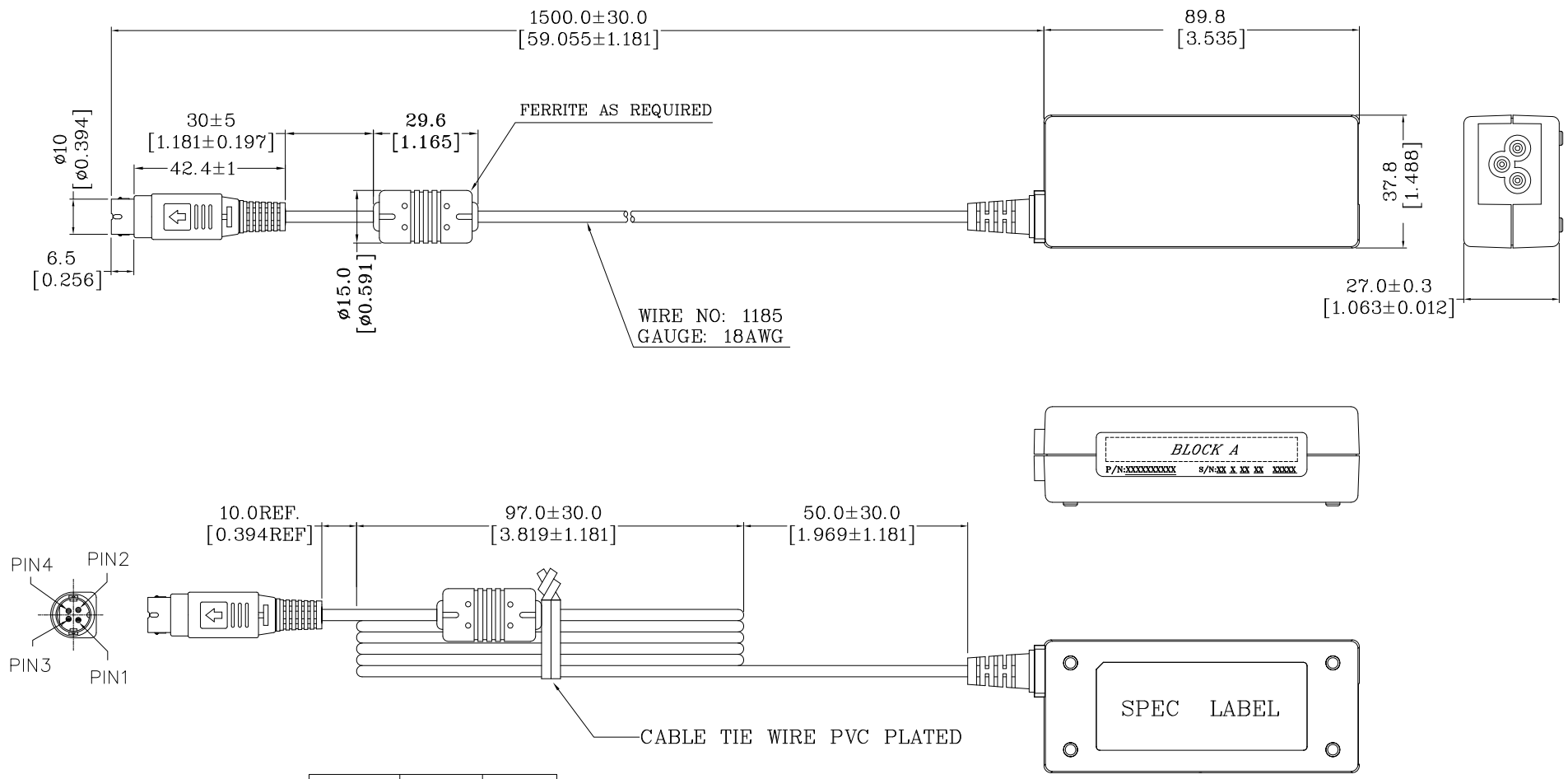
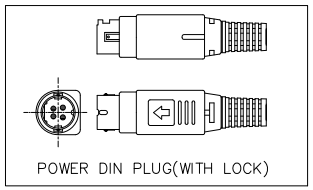
全漢企業股份有限公司
FSP GROUP FSP TECHNOLOGY INC.



DIN PLUG	POLARITY	COLOR
P2	V0(+)	WHITE
P4		
SHIELD	GND(−)	BLACK
P1		
P3		



P/N. :9NA0362311

1.CABLE&CASE COLOR:BLACK
2.INLET:C6
3.未標示之公差值爲±0.5mm[0.020inch]
4.超音熔接

UNIT:mm[inch]

MODEL NO.:FSP036−RBBN2		TITLE:OUTLINE	SHEET: 1 OF 1	REV:1
R&D(SH)	PE	DRAWN	DATE	
		WULONG	08/DEC/14'	
INTERIOR COUNTERSIGN:				

Mechanical Drawing (外觀/機構圖) 表單編號:7000F-0111

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全漢企業股份有限公司
FSP GROUP FSP TECHNOLOGY INC.
台灣桃園市建國東路22號 統一編號：84239055
No. 22, Jianguo East Road., Taoyuan City, Taiwan, R.O.C.
TEL:+886-3-375-9888 Website：www.FSP-group.com
FAX:+886-3-375-6966 Email：sales@fsp-group.com.tw

SPECIFICATION

文件資料管制
FSP GROUP
禁止翻印外傳

ESD13004109

Released Date:2014/07/24-10:18:43

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全漢企業股份有限公司

FSP GROUP

FSP TECHNOLOGY INC.

SPECIFICATION

MODEL: FSP036-RBBN2 (36Watt)

P.E	R/D	REV.
Zhang HB	Zhang HB	02

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Electrical Specification

History

REV.	Description	Date	Drawn	Electrical	Approved
01	Original release	2012-12-28	Zhang HB	Zhang HB	Tony
02	Over Voltage Protection	2013-8-14	Zhang HB	Zhang HB	Tony

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Electrical Specification

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Electrical Specification

1. SCOPE

This specification describes a 36w power supplies intended for use in I.T.E applications. The AC input operates over a wide range that allows worldwide operation with no manual selection required. The Power Supply unit is external to the notebook application system.

1.1 Cooling

Free air convection is sufficient to meet the Rating specifications

2. ELECTRICAL SPECIFICATIONS

2.1 Input

Parameter	Test Conditions	Min	Typ	Max	Units
Input Voltage Range	single Range.	90	100/240	264	Vac
Input Frequency Range		47	50/60	63	Hz
Efficiency	Vin = 115V/230 VAC,	86			%
No Load Power Consumption	Vin = 115V/230 VAC, 60，50 Hz.			0.1	Watts
Input Power Factor	Vin = 115V/230 VAC，60，50HZ	-	-	-	
Electric Strength	Hi-Pot			1500	VAC
Peak Inrush Current	Vin = 230 VAC (25℃ Ambient, Cold and Hot Start).	Shall be less than the rating of adapter critical component (including rectifiers, fuse and current limiting device)			
Average Efficiency	(1) Warm Up The UUT shall be measured after operated at 100% of rated current output for at least 30 minutes. (2) Tested sequence Efficiency tests shall be conducted in sequence: ① 100% maximum load ② 75% maximum load ③ 50% maximum load ④ 25% maximum load	Average efficiency of 25%, 50%, 75% and 100% load shall be more than 87.5% tested at 115V/230Vac.			

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Electrical Specification

2.2 Output

Parameter	Test Conditions	Min	Typ	Max	Units
Output Voltage Rating	±5% Initial tolerance	11.4	12	12.6	VDC
Output Power Rating	At typical voltage; 5ºC to 40ºC		36		Watts
Average Output Current	At typical voltage; 5ºC to 40ºC	0		3.0	A
Output Voltage Line Regulation	under AC Input operating range			0.5	%
Output Voltage Load Regulation	No load to rated load			2.5	%
Ripple and Noise	47uF/35V cap and 0.1uF ceramic cap on output, 20MHz BW			300	mVp-p
Transient Load Response	Dynamic load condition I1(A) / I2(A) / Tmax / di/dt(mA/us) 0 / 1.5 / 10msec / ≥50 1.5 / 3.0 / 10msec / ≥50 0 / 3.0 / 10msec / ≥50	10.8		13.2	VDC
Turn-On Delay	100VAC,			3	sec

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Electrical Specification

Parameter	Test Conditions	Min	Typ	Max	Units
Over Voltage Protection	Output voltage limit range Latch off			19.5V	VDC
Over Current Protection	Output current limit range 90Vac~264Vac			5.5	A
Over Temperature Protection	No damage				
Short Circuit Protection	Output power limit Auto-recovery			5	W
Overshoot	At power-up or power-down			10	%
Holdup Time	Rated Load, 100VAC, 12V +/– 5 %	5			mS
Rise Time	5%~95% of output voltage	2		100	mS

2.3 Short Circuit Protection

The power supply has protection at short circuits conditions.

2.3.1 Short Circuit Recovery

The power supply output automatically recovers when the short circuit condition is removed.

2.4 Over Circuit Protection

The power supply has protection at over circuits conditions.

2.4.1 Over Circuit Recovery

The OCP shall limit the output current to 5.5 amperes by monotonically shutting down all voltage rails in the event of an over current condition. Auto recovery is required. The power supply shall be able to survive an OCP condition for an indefinite period of time without damage.

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Electrical Specification

2.5 Output Voltage Protection Limit

When the output is outside the voltage output limit range, the power supply latches off and remains shutdown. The AC input must be cycled to restart. The power supply shall be able to survive an OVP condition for an indefinite period of time without damage.

2.6 Over temperature Protection

A temperature sensor and associated protection circuitry are installed inside the AC adapter to detect the case internal temperature and provide protection against damage to the AC adapter. If the power supply shuts down due to over temperature, the power supply latches off and remains shutdown. The AC input must be cycled to restart.

2.7 System Capacitive Load

The system load capacitance is 2200uF. And shall be capable of start up with a 2200uF load.

3. ENVIRONMENTAL

3.1 Temperatures and Humidity

Parameter	Test Conditions	Min	Typ	Max	Units
Temperature	Operating Range:	0		+40	ºC
	Storage Range:	–20		+70	ºC
Cooling	Free Air Convection	N/A	N/A	N/A	
Humidity	Operating Range:	20		80	%
	Storage Range:	10		90	%

3.2 Altitude

The Power Supply operates up to an altitude of 5000m above sea level.

3.3 Impact

The Power Supply withstands a drop from a height of 36 inches onto a concrete floor across the operating ranges of temperature and humidity. The Power Supply remains functional and the case will not crack or break. The number of units per drop = 1.

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Electrical Specification

3.4 Shock and Vibration

Operation vibration shall be 0.5G`S peak, 10-60Hz, 3Axes, after test no abnormally to be noted. Non operation vibration with shipping container shall be 2G`S peak, 7-50Hz,4G`S peak 50-500Hz,after test no abnormally to be found.

3.5 Drop-Test

Test height 100cm/6 faces, after drop test no function abnormally to be noted.

4. EMC

4.1 Electrostatic Discharge (ESD)

The Power Supply meets EN61000–4-2, Level 4 requirements.

4.2 Electrical Fast Transient Test (EFT)

The Power Supply meets IEC 61000–4-4/1995, Level 2 requirements.

4.3 Surge Immunity Requirement

The Power Supply meets IEC 61000–4-5, Level 3 requirements.

4.4 Dielectric Withstand Voltage (Hi-Pot)

Between AC input and secondary applied 1500Vac/ test time 1 minute.

4.5. ELECTROMAGNETIC COMPATIBILITY

The Power Supply meets EN55022/CISPR 22 (Class B),
FCC Part 15 (Class-B) with 6dB margin.

5. REGULATORY AGENCY APPROVALS

5.1 Certifications

Certification is to IEC60950.

5.2 Other Requirements

Complies with Energy Star 2.0 (LevelⅤ)

5.3 Leakage Current:

The AC leakage current is less than 250uA when adapter is connected to 264Vac/60Hz.

5.4 Insulation Resistance

The insulation resistance shall be not less than 20 M Ohm after application of 500VDC for 1minute.

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Electrical Specification

6. RELIABILITY

6.1 Mean Time Between Failure (MTBF)

The MTBF is calculated to be not less than 100,000 hours with 90% confidence at 25 ºC.

6.2 Burn-In

The power supply is burned in at 40ºC ambient temperature under nominal input and full rated load.

7. MECHANICAL

7.1 Mechanical Dimensions

L: 89.8mm
W: 37.8mm
H: 27.5mm

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全漢企業股份有限公司
FSP GROUP FSP TECHNOLOGY INC.

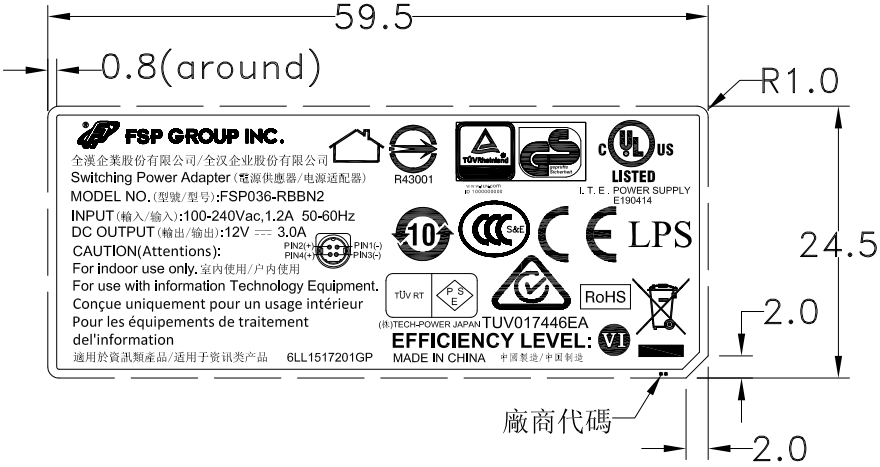
P/N:6LL1517201GP

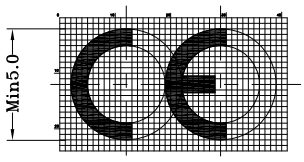
MODEL:FSP036-RBBN2	MAIN LABEL,FSP,FSP036-RBBN2,AS,BSMI,CCC(5K+熱帶),CE,PSE,TUV/GS,,,,,,UL/cUL LISTED(E190414),PET 100#(WHITE)+半霧面,,,EFFICIENCY LEVEL:VI,WEEE,CHINA ROHS,100-240V,1.2A,12V,,RoHS,,,,,,,LPS,,,MADE IN CHINA	SHEET: 1 OF 1	REV:1

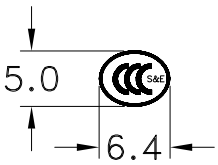
REV	修改內容	REV	修改內容

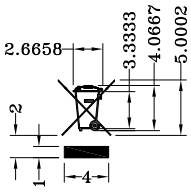
注意事項:

1.材質：PET 100#(WHITE)+半霧面,黑底白字.厚度：0.15±0.05,#字背膠.
2.LABEL MUST BE UL RECOGNIZED: PGDQ2 OR PGJI2,LABEL MUST BE CSA CERTIFIED.
3.THE PLASTIC MATERIAL OF APPLICATION SURFACE FOR THIS LABEL IS PC.
4.印刷字大小、位置、內容詳見DRAWING
5.印刷必須清晰，不得有斷線、模糊不清等不良現象
6.背膠耐溫80° C不會產生翹起,起泡
7.未注公差±0.2mm
材質須符合"SPI環境管制物質技術標准(SGP-0401)"









SCALE: 2/1

R&D(SH)		CHECKED	DESIGN BY	DRAWING	DATE
				WULONG	03/DEC/14'
INTERIOR COUNTERSING:					

Mechanical Drawing (外觀/機構圖) 表單編號:7000P-0111

IEC IECEE CB SCHEME

Ref. Certif. No.

JPTUV-051184

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE

CERTIFICAT D'ESSAI OC

Product Produit	Switching Power Adapter
Name and address of the applicant Nom et adresse du demandeur	FSP Group Inc. No. 22, Jianguo E. Road Taoyuan 330 Taiwan
Name and address of the manufacturer Nom et adresse du fabricant	FSP Group Inc. No. 22, Jianguo E. Road Taoyuan 330 Taiwan
Name and address of the factory Nom et adresse de l'usine	See additional page(s)
Ratings and principal characteristics Valeurs nominales et charactéristiques principales	Input : 1) AC 100-240V; 1.5A; 50-60Hz; Class I 2) AC 100-240V; 1.2A; 50-60Hz; Class I Output: refer to the test report.
Trademark (if any) Marque de fabrique (si elle existe)	FSP
Type of Manufacturer's Testing Laboratories used Type de programme du laboratoire d'essais constructeur	N/A
Model / Type Ref. Ref. de type	1) FSP045-REBN2, FSP045-RABN2 2) FSP036-RBBN2
Additional information (if necessary may also be reported on page 2) Les informations complémentaires (si nécessaire, peuvent être indiqués sur la 2ème page)	For model differences, refer to the test report.
A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la	IEC 60950-1:2005+A1 National differences see test report
As shown in the Test Report Ref. No. which forms part of this Certificate Comme indiqué dans le Rapport d'essais numéro de référence qui constitue partie de ce Certificat	11033085 001

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme National de Certification

TÜVRheinland®

TÜV Rheinland Japan Ltd.
Global Technology Assessment Center
4-25-2 Kita-Yamata, Tsuzuki-ku
Yokohama 224-0021 Japan
Phone + 81 45 914-3888
Fax + 81 45 914-3354
Mail: info@jpn.tuv.com
Web: www.tuv.com

Date: 10.05.2013

Signature: Best C.C. Chen

10/061 CB 05.12

IEC IECEE CB SCHEME

Ref. Certif. No.

JPTUV-051184

1. ShenZhen HuiLi Electronics CO., LTD
   Block C,
   Building 4、6、7、8、9、10、11、
   County 73, Xin'an, Bao'an,
   Shenzhen, Guangdong, P.R. China

2. Zhonghan Electronics (Shenzhen)
   Co., Ltd.
   Building 2,3,4,10,
   JuYuan Industrial Zone,
   TangWei Village, FuYong Town, BaoAn District, ShenZhen City, P.R. China

3. Wuxi SPI Technology Co., Ltd.
   No. 96, XinmeiRoad,
   New District, Wuxi city, Jiangsu
   P.R. China

4. ZHONGHAN SCIENCE &TECH CO.LTD
   BLD5, JuYuan Industrial
   TangWei Village, FuYong Town
   BaoAn, District. ShenZhen City
   P.R. China

5. Wuxi ZhongHan Technology Co., Ltd.
   Block 106-E,
   Wuxi Nation HI-TECH Industrial
   Development Zone,
   Wuxi City, Jiangsu, Province, P.R. China

Additional information (if necessary)
Information complémentaire (si nécessaire)

Report Ref. No.: 11033085 001

Date: 10.05.2013

Signature: Best C. C. Chen

10/061a 8.06

CERTIFICATE OF COMPLIANCE

Certificate Number 20130523-E190414A
Report Reference E190414-A551-UL
Issue Date 2013-MAY-23

Issued to: FSP GROUP INC
22 JIANGUO E RD
TAOYUAN CITY
330 TAIWAN

This is to certify that representative samples of POWER SUPPLIES, INFORMATION TECHNOLOGY EQUIPMENT INCLUDING ELECTRICAL BUSINESS EQUIPMENT
Switching Power Adapter
Models: FSP036-RBBN2, FSP045-REBN2, FSP045-RABN2

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 60950-1-Information Technology Equipment - Safety - Part 1: General Requirements.
CSA C22.2 No. 60950-1-07-Information Technology Equipment - Safety - Part 1: General Requirements.

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.
The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers: c UL us the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

William R. Carney

William R. Carney, Director, North American Certification Programs

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at www.ul.com/contactus

CERTIFICATE OF CONFORMITY

Equipment	:	Switching Power Adapter
Test Model No.	:	FSP036-RBBN2, FSP045-REBN2, FSP045-RABN2
Applicant	:	FSP Group Inc.
Test Report No.	:	CE130513D02

We, **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, declare that the equipment above has been tested in our facility and found compliance with the requirement limits of applicable standards. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate under the standards herein specified.

EN 55022:2010 + AC:2011, Class B
CISPR 22:2008, Class B
AS/NZS CISPR 22:2009 +A1:2010, Class B
EN 61000-3-2:2006 +A1:2009 +A2:2009
EN 61000-3-3:2008
EN 55024:2010
IEC 61000-4-2:2008 ED.2.0
IEC 61000-4-3:2010 ED.3.2
IEC 61000-4-4:2012 ED.3.0
IEC 61000-4-5:2005 ED.2.0
IEC 61000-4-6:2008 ED.3.0
IEC 61000-4-8:2009 ED.2.0
IEC 61000-4-11:2004 ED.2.0

Notes: The above IEC basic standards are applied with latest version if customer has no special requirement

In accodance with the council directive 2004/108/EC

Kenny Meng

Kenny Meng / Assistant Manager

May 17, 2013

No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)

Tel: 886-2-26052180 Fax: 886-2-26051924

http://www.bureauveritas-adt.com E-Mail: service.adt@tw.bureauveritas.com

CERTIFICATE OF CONFORMITY

Equipment	:	Switching Power Adapter
Test Model No.	:	FSP036-RBBN2, FSP045-REBN2, FSP045-RABN2
Applicant	:	FSP Group Inc.
Test Report No.	:	FV130513D02

We, **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, declare that the equipment above has been tested in our facility and found compliance with the requirement limits of applicable standards. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate under the standards herein specified.

FCC Part 15, Subpart B, Class B

ICES-003:2012 Issue 5, Class B

ANSI C63.4-2009

Kenny Meng

Kenny Meng / Assistant Manager

May 17, 2013

No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City 244, Taiwan (R.O.C.)

Tel: 886-2-26052180 Fax: 886-2-26051924

www.bureauveritas-adt.com E-Mail: service.adt@tw.bureauveritas.com

FSP GROUP INC.

No. 22, Jianguo E. Rd., Taoyuan City, Taiwan, R.O.C .
TEL: +886 3 375 9888 FAX: +886 3 375 6966

CE Declaration of Conformity

Manufacturer:

Name: FSP Group Inc.
Address: No. 22, Jianguo E. Rd., Taoyuan City, Taiwan, R.O.C.

Declares that :

Product Name: Switching Power Adaptor

Model Number: FSP045-REBN2, FSP045-RABN2, FSP036-RBBN2

Complies with the following:

Standards	Directives
IEC 60950-1:2005+A1 EN 60950-1: 2006+A11+A1+A12	2006/95/EC(Low Voltage Directive)
EN 55022:2010 EN 55024:2010 IEC 61000-3-2:2005+ A1+A2 EN 61000-3-2:2006+ A1+A2 IEC 61000-3-3:2008 EN 61000-3-3:2008	2004/108/EC(EMC Directive)
(EC) No 278/2009 EN50563:2011	Commission Regulation 2009/125/EC (ErP Directive)
EN 50581: 2012	2011/65/EU: The use of certain hazardous substances in electrical and electronic equipment Directive 2011/65/EU (Recasts and supersedes 2002/95/EC)

Signature: Allen Cheng Date: 9. 18. 2013
Print Name: Allen Cheng Place: Taoyuan, Taiwan
Title: President

Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
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0001

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Längstens gültig bis**	*Latest expiration date (day/mo/yr)*
KY SFA13014152	ZTW1-CCH- 10041381 001	14.05.2018	

Genehmigungsinhaber *License Holder*
FSP Group Inc.
No. 22, Jianguo E. Road
Taoyuan 330
Taiwan

Fertigungsstätte *Manufacturing Plant*
ShenZhen HuiLi Electronics CO., LTD
Block C,
Building 4、6、7、8、9、10、11、
County 73, Xin'an, Bao'an,
Shenzhen, Guangdong
P.R. China

Prüfzeichen *Test Mark*

TÜVRheinland ZERTIFIZIERT
www.tuv.com
ID 1000000000

GS geprüfte Sicherheit

Geprüft nach *Tested acc. to*
EN 60950-1:2006+A11+A1+A12
ZEK 01.4-08/11.11

Zertifiziertes Produkt *Certified Product* **(Geräteidentifikation)** *(Product Identification)* — **Lizenzentgelte - Einheit** *License Fee - Unit*

Schaltnetzteil (Switching Power Adapter)

Bezeichnung (Type Designation)	: FSP036-RBBN2(FSP)	8
Nennspannung (Rated Voltage)	: AC 100-240V, 50-60Hz	
Nennstrom (Rated Current)	: 1.2A	
Ausgang (Output)	: DC 12V/3.0A	
Max. Betriebshöhe (Max. Operating Altitude)	: 5000m	
max. Umgebungstemperatur (max. Ambient Temperature)	: 40°C	
Schutzklasse (Protection Class)	: I	

Hinweis: Dieses Netzgerät ist geprüft und erfüllt die Anforderungen nach Abschnitt 2.5 als Stromquelle mit begrenzter Leistung. (Remark: The equipment is also tested and complies with sub-clause 2.5 as limited power source.)

8

ANLAGE (Appendix): 1

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

TÜV Rheinland LGA Products GmbH TÜVRheinland Zertifizierungsstelle

Dipl.-Ing. F. Stoelzel

Ausstellungsdatum *Date of Issue* : 15.05.2013 **(day/mo/yr)**

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Taoyuan 330
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Building 4、6、7、8、9、10、11、
County 73, Xin'an, Bao'an,
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P.R. China

Prüfzeichen *Test Mark*

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Geprüft nach *Tested acc. to*
EN 60950-1:2006+A11+A1+A12
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Zertifiziertes Produkt *Certified Product* **(Geräteidentifikation)** *(Product Identification)* — **Lizenzentgelte - Einheit** *License Fee - Unit*

Schaltnetzteil (Switching Power Adapter)

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Ergänzung
(Addition)

Bezeichnung (Type Designation)	: 1) FSP045-REBN2(FSP)	1
	2) FSP045-RABN2(FSP)	1
Nennspannung (Rated Voltage)	: AC 100-240V, 50-60Hz	
Nennstrom (Rated Current)	: 1.5A	
Ausgang (Output)	: 1) DC 19V/2.37A	
	2) DC 24V/1.875A	

Hinweis : Dieses Netzgerät ist geprüft und erfüllt die Anforderungen nach Abschnitt 2.5 als Stromquelle mit begrenzter Leistung. (Remark : The equipment is also tested and complies with sub-clause 2.5 as limited power source.)

2

ANLAGE (Appendix): 1

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.

Zertifizierungsstelle

TÜV Rheinland LGA Products GmbH TÜVRheinland Zertifizierungsstelle

Dipl.-Ing. F. Stoelzel

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Ausstellungsdatum *Date of Issue* : 15.03.2013 **(day/mo/yr)**

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KY SFA13014152	ZTW1-CCH- 10041381 001	14.05.2018	

Genehmigungsinhaber *License Holder*
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Prüfzeichen *Test Mark*

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ZEK 01.4-08/11.11

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

Lizenzentgelte - Einheit
License Fee - Unit

Schaltnetzteil (Switching Power Adapter)

wie Blatt (as page) 01

Ergänzung (Addition)

Fertigungsstätte : siehe oben
(Factory) (see above)

ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
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Zertifizierungsstelle

TÜV Rheinland LGA Products GmbH TÜVRheinland Zertifizierungsstelle

Dipl.-Ing. F. Stoelzel

Ausstellungsdatum *Date of Issue* : 15.05.2013 **(day/mo/yr)**

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全漢企業股份有限公司
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No. 22, Jianguo East Road., Taoyuan City, Taiwan, R.O.C.
TEL:+886-3-375-9888 Website : www.FSP-group.com
FAX:+886-3-375-6986 Email : sales@fsp-group.com.tw

FSP Green Product Declaration

We hereby guarantee that our power supply(part number listed below) are in compliant with RoHS directive "(2002/95/EC), WEEE directive (2002/96/EC)" and other national and international statutory requirements.

We hereby conform and report the material and amount of "Environment of hazardous substance" in the concern product and part as listed below :

Part name	FSP036-RBBN2/9NA0362311	
Item	Substance/Material	Contain ppm
1	Cadmium and compounds	<100ppm
2	Lead and compounds	<1000ppm The RoHS Exemption *:Not required
3	Mercury and compounds	<1000ppm
4	Chrome(VI) and compounds	<1000ppm
5	Polybrominated biphenyls (PBBs)	<1000ppm
6	Polybrominated diphenylethers (PBDEs)	<1000ppm
end		

Remark:

1. The RoHS Exemption*: such as Leaded glass used in electronic components ; Lead (Pb) in high melting temperature type solders; Lead (Pb) in electronic ceramic parts and Lead (Pb) in Steel Alloys (0.35% or 3500 PPM), Aluminum Alloys (0.4% or 4000PPM) or Copper Alloys (incl. bronzes, brasses, 4.0% or 40,000 PPM). 2. N.D=Not detected.

AUTHORIZED SIGNATURE:

FSP Technology Inc.

Date: 2014/12/9