



全漢企業股份有限公司

安規證書

料號 :
Model Name : FSP060-RAAT3
版次 : 01
文件編號 : SFD-00001218
作者 : doration/田婷瑋(FSP)
Model No/Type : FSP060-RAAT3
SFA NO. : SFA17081094
Trade mark : -
安規種類 : KC/資訊類
發行日期 : 2017/10/17 14:45:36
備註 : 新增

5A64-B4D4-4B55-5C6E

방송통신기자재등의 적합등록 필증

Registration of Broadcasting and Communication Equipments

상호 또는 성명 Trade Name or Registrant	Zhonghan Electronics (Shenzhen) Co., Ltd.
기자재 명칭 Equipment Name	Switching Power Adapter
기본모델명 Basic Model Number	FSP060-RAAT3
파생모델명 Series Model Number	
등록번호 Registration No.	MSIP-REM-FSZ-FSP060-RAAT3
제조사/제조(조립)국가 Manufacturer/Country of Origin	Zhonghan Electronics (Shenzhen) Co., Ltd. / 중국
등록연월일 Date of Registration	2017-09-18
기타 Others	

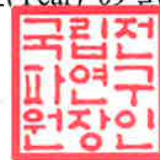
위 기자재는 「전파법」 제58조의2 제3항에 따라 등록되었음을 증명합니다.
It is verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act.

2017년(Year) 09월(Month) 18일(Date)

국립전파연구원장

Director General of National Radio Research Agency

※ 적합등록 방송통신기자재는 반드시 "적합성평가표시" 를 부착하여 유통하여야 합니다.
위반시 과태료 처분 및 등록이 취소될 수 있습니다.



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(Certificate No)

접수번호: 20170905 - 0032
(Receipt No)

1. 기본모델 · 파생모델의 내용(General Descriptions of Certified Products)

1.1 제품의 설명 (Product description)

인증제품의 개요는 다음과 같다.
(Information on certified basic model product is as follow)

구분(Section)	내 용 (Description)
용도 (Normal use)	The apparatus designed to be used for converting AC main voltage to DC low voltage.
내부구조 (Internal construction)	The apparatus consist of switching transformer, rectifying part etc.
외부구조 (External construction)	Providing with plastic enclosure having min. V-1 flammability and appliance inlet.
기타(Others)	CB Ref.No. JPTUV-077862-M1, Class I, I/P: AC 100-240 Vac, 50-60 Hz, 2.0 A, O/P: DC 24V, 2.5 A, 60 W max.

1.2 전기용품의 표시: 전기용품 및 생활용품 안전관리법 시행규칙 제19조(안전인증의 표시)에 따라 표시한다.

(Marking of KC Mark: Marking shall comply with the Article 19 of the Enforcement Rule of the Electrical Appliances and Consumer Products Safety Control Act.)

1.3 등록모델 (Registered Models)

구 분	모 델 명 및 정 격	기본모델과의 차이점
(Class)	(Model / Rating)	(Difference between basic model and series model)
기본모델 (Basic model)	FSP060-RAAT3	100-240 V~, 50-60 Hz, 2.0 A (O/P : 24 Vdc, 2.5 A, 60 W Max)

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2. 안전관리 부품 및 재질목록(List of Critical Components)

부품명(회로기호) Components(Part no.)	제조사(상표명) Manufacturer (Brand)	모델명(형식) Model (Type)	정격 또는 특성 (Technical Data)	인증규격 (Certification)
Appliance Inlet	Tecc-Unions Technology Corp.	TU-301-A, TU-301-AP, TU-301-S, TU-301-SP	10A, 250Vac, 70° C	IEC
Appliance Inlet (Alt.)	Solteam Electronics Co., Ltd.	ST-01	10A, 250Vac, 70° C	IEC
Appliance Inlet (Alt.)	Rong Feng Industrial Co., Ltd.	SS-120	10A, 250Vac, 70° C	IEC
Appliance Inlet (Alt.)	Rich Bay Co., Ltd.	R-301SN	10A, 250Vac, 70° C	IEC
Appliance Inlet (Alt.)	Canal Electronic Co., Ltd.	KS-201, KS-202, KS-303, KS-406	10A, 250Vac, 70° C	IEC
Appliance Inlet (Alt.)	Zhe Jiang Bei Er Jia Electronic Co.,Ltd.	ST-A01-001L, ST-A01-002L, ST-A01-003J, ST-A01-003K	10A, 250Vac, 70° C	IEC
Fuse (F1)	Littelfuse, Inc. Wickmann-Werke	392, 382	T6, 3AL, 250Vac	IEC
Fuse (F1) (Alt.)	Cooper Bussmann L C	SS-5, SR-5	T6, 3AL, 250Vac	IEC
Fuse (F1) (Alt.)	Ever Island Electric Co., Ltd. & Walter Electric Co., Ltd.	2010 series, 2000 series	T6, 3AL, 250Vac	IEC
Fuse (F1) (Alt.)	BEL Fuse Ltd.	RST-series, MRT	T6, 3AL, 250Vac	IEC
Fuse (F1) (Alt.)	Conquer Electronics Co., Ltd.	MST-series, MET series	T6, 3AL, 250Vac	IEC
Varistor (VAR1) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVA10471-D, TVA10471-V	300Vac, 385Vdc(Flame class of body coatingcomplied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVA10561-D, TVA10561-V	350Vac, 450Vdc(Flame class of body coatingcomplied with V-0)	VDE

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Varistor (VAR1) (Alt.) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10621-0, TVR10621-V	395Vac, 510Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10681-0, TVR10681-V	420Vac, 560Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR10751-0, TVR10751-V	465Vac, 615Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR14471, TVR14471-0	300Vac, 385Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR14621, TVR14621-0	395Vac, 510Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR14681, TVR14681-0	420Vac, 560Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Thinking Electronic Industrial Co., Ltd.	TVR14751, TVR14751-0	465Vac, 615Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Guangxi New Future Information Industry Co., Ltd.	10047K, 14047K, 20047K	300Vac, 385Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Guangxi New Future Information Industry Co., Ltd.	10051K, 14051K, 20051K	320Vac, 415Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Guangxi New Future Information Industry Co., Ltd.	10056K, 14056K, 20056K	350Vac, 460Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Guangxi New Future Information Industry Co., Ltd.	10062K, 14062K, 20062K	385Vac, 505Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Guangxi New Future Information Industry Co., Ltd.	10068K, 14068K, 20K68K	420Vac, 560Vdc(Flame class of body coatingcomp l ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	Guangxi New Future Information Industry Co., Ltd.	14075K	460Vac, 615Vdc(Flame class of body coatingcomp l ied with V-0)	VDE

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Varistor (VAR1) (Alt.) (Optional)	EPCOS OHG	S10K300, S10K300E2, S10K300E2K1, S14K300, S14K300E2, S14K300E2K1	300Vac, 385Vdc(Flame class of body coatingcompl ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	EPCOS OHG	S10K320, S10K320E2, S10K320E2K1, S14K320, S14K320E2, S14K320E2K1	320Vac, 420Vdc(Flame class of body coatingcompl ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	EPCOS OHG	S10K350E2K1, S14K350E2K1	350Vac, 460Vdc(Flame class of body coatingcompl ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	EPCOS OHG	S10K385, S10K385E2, S10K385E2K1, S14K385, S14K385E2, S14K385E2K1	385Vac, 505Vdc(Flame class of body coatingcompl ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	EPCOS OHG	S10K420, S10K420E2, S10K420E2K1, S14K420, S14K420E2, S14K420E2K1	420Vac, 560Vdc(Flame class of body coatingcompl ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	EPCOS OHG	S10K440, S14K440	440Vac, 585Vdc(Flame class of body coatingcompl ied with V-0)	VDE
Varistor (VAR1) (Alt.) (Optional)	EPCOS OHG	S10K460, S10K460E2, S10K460E2K1, S14K460, S14K460E2, S14K460E2K1	460Vac, 615Vdc(Flame class of body coatingcompl ied with V-0)	VDE
Line Choke (LF1)	FSP / SPI	8LM03935	130° C	-
X-Cap. (CX1) (X1 or X2)	Carli Electronics Co., Ltd.	MPX	Max. 0.47 μF.min. 250Vac	IEC
X-Cap. (CX1) (X1 or X2) (Alt.)	Chiefton Electronics Co.,Ltd.	CKX	Max. 0.47 μF.min. 250Vac	IEC
X-Cap. (CX1) (X1 or X2) (Alt.)	Hua Jung components Co.,Ltd.	MKP	Max. 0.47 μF.min. 250Vac	IEC
X-Cap. (CX1) (X1 or X2) (Alt.)	Iskra, d d	KNB1530	Max. 0.47 μF.min. 250Vac	IEC



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X-Cap. (CX1) (X1 or X2) (Alt.)	Iskra, d d	KNB1560, KNB1563, KNB1562	Max. 0.47 μF, min. 250Vac	IEC
X-Cap. (CX1) (X1 or X2) (Alt.)	Okaya Electric Industries Co., Ltd.	LE(-*)	Max. 0.47 μF, min. 250Vac	IEC
X-Cap. (CX1) (X1 or X2) (Alt.)	Okaya Electric Industries Co., Ltd.	RE-Series	Max. 0.47 μF, min. 250Vac	IEC
X-Cap. (CX1) (X1 or X2) (Alt.)	Ultra Tech Xiphi Enterprise Co., Ltd.	H0X	Max. 0.47 μF, min. 250Vac	IEC
X-Cap. (CX1) (X1 or X2) (Alt.)	Zhuohai Sung Ho Electronics Co., Ltd.	GMPP	Max. 0.47 μF, min. 250Vac	IEC
X-Cap. (CX1) (X1 or X2) (Alt.)	Okaya Electric Industries Co., Ltd.	PA	Max. 0.47 μF, min. 250Vac	IEC
X-Cap. (CX1) (X1 or X2) (Alt.)	Arcoionics	R.46, R.49	Max. 0.47 μF, min. 250Vac	IEC
Discharge IC (U1)	Leadtrend Technology Corporation.	LD5760H	Tested for 100-250Vac, tested for 47-63Hz; Capacitance:0.1μF-2.0μF; Resistor: 9.4kΩ-102kΩ	-
Discharge IC (U1)	Leadtrend Technology Corporation.	LD5760A	Tested for 100-250Vac, tested for 47-63Hz; Capacitance:0.1μF-2.0μF; Resistor: 9.4kΩ-102kΩ	-
Discharge IC (U1)	Leadtrend Technology Corporation.	LD5761B	Tested for 100-250Vac, tested for 47-63Hz; Capacitance:0.1μF-2.0μF; Resistor: 9.4kΩ-102kΩ	-
Line Choke (LF2)	FSP / SPI	8LM01715	130° C	-
Y-Caps. (CY1, CY2) (Y1 or Y2 type)	Murata Mfg Co., Ltd.	KX, KY, KH	1000pF max., 250V min.	IEC
Y-Caps. (CY1, CY2) (Y1 or Y2 type)	Success Electronics Co., Ltd.	SB, SE, SF	1000pF max., 250V min.	IEC
Y-Caps. (CY1, CY2) (Y1 or Y2 type)	TDK Corporation	CD, CS, CD(miniature series), CS(miniature series)	1000pF max., 250V min.	IEC
Y-Caps. (CY1, CY2) (Y1 or Y2 type)	Walsin Technology Corp.	AH, AC	1000pF max., 250V min.	IEC

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Bridge Cap. (CV3) (Y1 type only)	Walsin Technology Corp.	AH	Max. 1000pF, min. 250Vac	IEC
Bridge Cap. (CV3) (Y1 type only)	TDK Corporation	CD	Max. 1000pF, min. 250Vac	IEC
Bridge Cap. (CV3) (Y1 type only)	Murata Mfg. Co., Ltd.	KX	Max. 1000pF, min. 250Vac	IEC
Bridge Cap. (CV3) (Y1 type only)	Success Electronics Co., Ltd.	SB, SE, SF	Max. 1000pF, min. 250Vac	IEC
Optical Isolators (PC1, PC2, PC3)	Lite-On Technology Corp	LTV-817	DI=0.6mm	VDE
Optical Isolators (PC1, PC2, PC3)	Renesas Electronics Corporation.	PS2561DL-1-1	DI=0.4mm	VDE
Optical Isolators (PC1, PC2, PC3)	Renesas Electronics Corporation.	PS2561BL-1-1	DI=0.4mm	VDE
Optical Isolators (PC1, PC2, PC3)	Everlight Electronics Co., Ltd.	EL817.	DI=0.5mm	VDE
Optical Isolators (PC1, PC2, PC3)	Cosmo Electronics Corp.	K1010	DI=0.5mm	VDE
Optical Isolators (PC1, PC2, PC3)	Sharp Corp. Electronic Components and Devices Group.	PC123	DI=0.4mm	VDE
Optical Isolators (PC1, PC2, PC3)	Vishay Semiconductor GmbH	TCET11146	DI=0.5mm	VDE
Optical Isolators (PC1, PC2, PC3)	Lite-On Technology Corp.	LTV-1008	DI=0.4mm	VDE
Optical Isolators (PC1, PC2, PC3)	Everlight Electronics Co., Ltd.	EL1018	DI=0.4mm	VDE
Transformer (T1)	FSP / SPI	8T1017Z1	Class B	-
Triple Insulation Wire Used in T1	Great Leoflon Industrial Co., Ltd.	TRW(B)	130° C	VDE
Top Plastic Enclosure	Sabic Innovative Plastics US L L C	945	V-1 or better, min. 2.0mm thick., 120° C	UL

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Top Plastic Enclosure (Alt.)	Lotte Advanced Materials Co., Ltd.	HN-1064(+)	V-1 or better, min. 2.0mm, 130° C	UL
Bottom Plastic Enclosure	Sabic Innovative Plastics US L L C	945	V-0 or better, min. 1.5mm thick., 120° C	UL
Bottom Plastic Enclosure (Alt.)	Lotte Advanced Materials Co., Ltd.	HN-1064(+)	V-1 or better, min. 1.5mm, 130° C	UL
Bridge diode (BD1)		Interchangeable	Min. 6A, min. 600V	-
Electrolytic Cap. (EC1)		Interchangeable	150-330 μ F, min. 400V, min. 105° C	-
MOSFET (Q1)		Interchangeable	Min. 10.6A, min. 650V	-
Current Resistor (R24)		Interchangeable	Min. 0.07 Ω , min. 2W	-
PCB		Interchangeable	V-1, 130° C min.	UL
Diodes (D1, D2)		Interchangeable	Min. 0.5A, min. 600V	-
Resistor (R1)		Interchangeable	9.4k Ω - 102k Ω , 1/4W	-

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3. 전기용품안전인증의 변경현황(Status of Certificate Revisions)

일자(Date)	발급현황 (Status of Issues)
	변경내용 (Modification of Contents)
2017/09/20	기본모델 (Basic Model)

4. 기타(Carefully Informed Note)

- 1) 안전관리부품 및 재질목록에 기재된 사항은 안전에 직접적인 영향을 주는 부분이므로 내용을 변경 또는 복수등재를 원하는 경우 안전인증변경신청 또는 안전확인변경신고를 하여야 합니다. 안전인증변경신청 또는 안전확인변경신고를 하지 않고 임의로 변경하는 경우에는 전기용품 및 생활용품 안전관리법에 따라 행정조치 될 수 있습니다.
The certificate holder should apply for a revision of the certificate if the registered critical components are to be changed, modified or alternated. Should the contents of Certificate are altered without the application for the modification, the administrative measures can occur according to the Electrical Appliances and Consumer Products Safety Control Act.
- 2) 정기검사(시료채취포함)를 거부, 방해 또는 기피하는 경우에는 전기용품 및 생활용품 안전관리법 제11조에 따라 안전인증이 취소될 수 있습니다.
If Follow-up Factory Inspection, including sampling representative model by 11 categories of the certified product at factory-site for re-testing, should not has been arranged by Certificate holder, Safety Certification(KC Mark) may be withdrawn according to the Article 11 of the Electrical Appliances and Consumer Products Safety Control Act.
- 3) 공장주소(전화번호포함), 대표자, 상호 및 부품변경, 신고인정보 등 안전인증 또는 안전확인신고의 내용이 변경되었을 때, 안전인증변경신청 또는 안전확인변경신고를 하지 않을 경우에는 전기용품 및 생활용품 안전관리법에 따라 행정조치 될 수 있습니다.
Should a factory address, president name, manufacturer name and critical component are altered without the application for the modification, the administrative measures can occur according to the Electrical Appliances and Customer Products Safety Control Act.
- 4) 조건부 인증사항 (Conditional certification items):

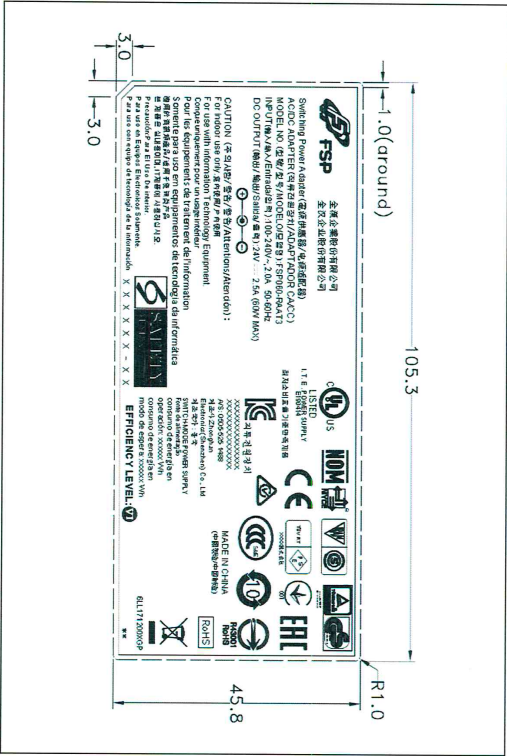


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No.1 Label



No.2 Picture1

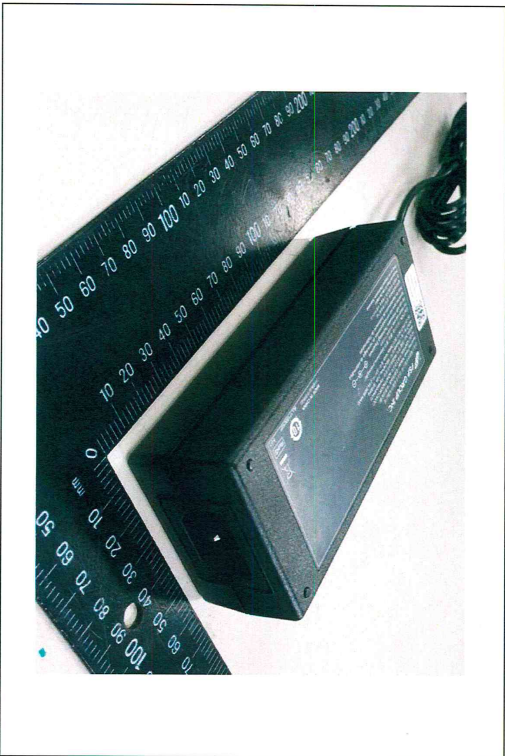


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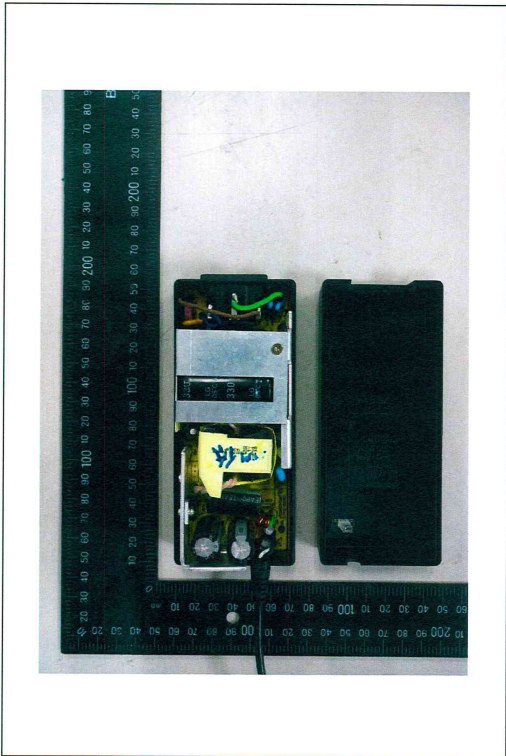
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접수번호: 20170905-0032

No.3 Picture2



No.4 Picture3

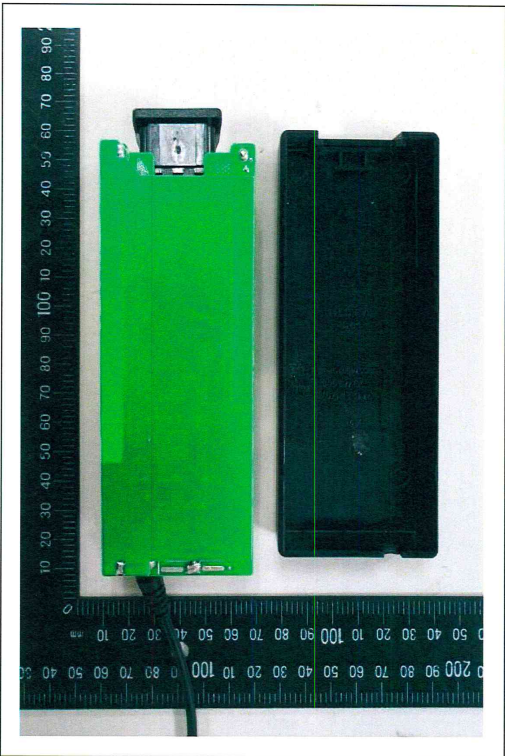


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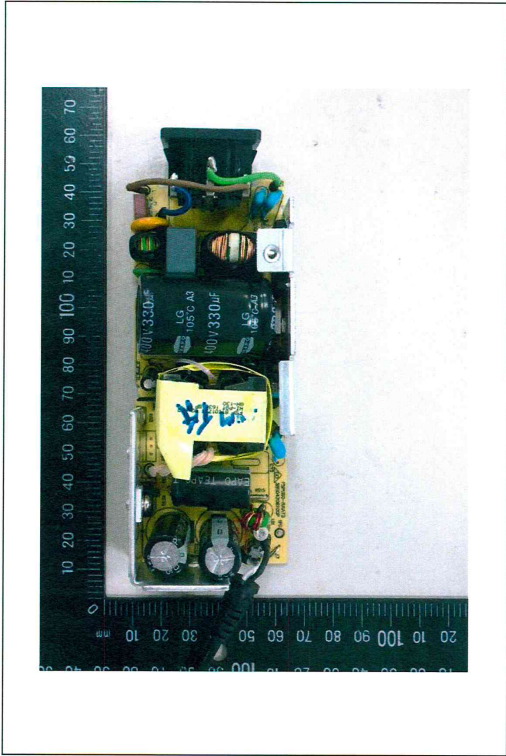
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접수번호 : 20170905-0032

No.5 Picture4



No.6 Picture5

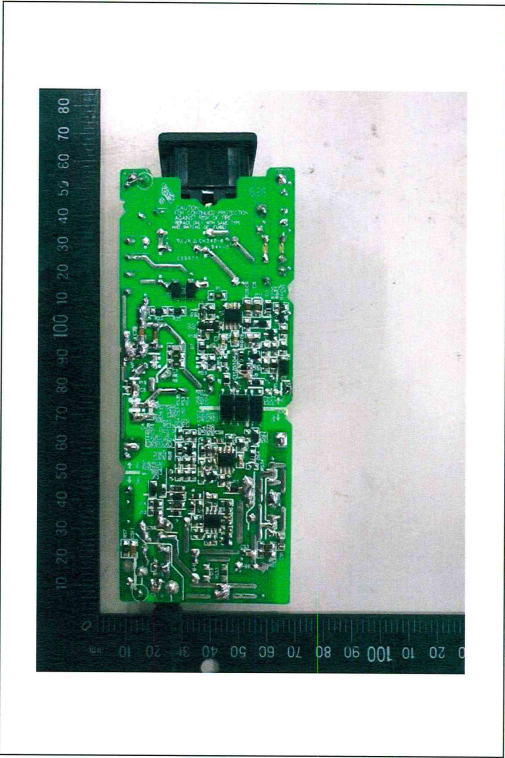


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No.7 Picture6



No.8 Picture7

