

TPV Electronics (Fujian) Co., Ltd.  
Mr. Xinliang Wu  
RD-SE  
Rongqiao Economic and  
Technological Development Zone  
Fuqing City, Fujian Province  
P. R. China

Date : 28.11.2019  
Our ref. : WangAn SZ  
Your ref.: 168135384

**Ref : CB Certificate Japan**

Type of Equipment : LCD MONITOR  
Model Designation : See Certificate  
Certificate No. : JPTUV-102803  
Report No. : 50312195 001

Dear Mr. Xinliang Wu,

Thank you very much for your interest in our services.

Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body

Aegean Li



Enclosure

证书的详细资料请登陆[www.tuvdotcom.com](http://www.tuvdotcom.com)查阅,或拨打我司客服热线800 999 3668 / 400 883 1300咨询



Ref. Certif. No.

JPTUV-102803

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

LCD MONITOR

Name and address of the applicant  
Nom et adresse du demandeur

TPV Electronics (Fujian) Co., Ltd.  
Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, P. R. China

Name and address of the manufacturer  
Nom et adresse du fabricant

TPV Electronics (Fujian) Co., Ltd.  
Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, P. R. China

Name and address of the factory  
Nom et adresse de l'usine

See additional page(s)

Ratings and principal characteristics  
Valeurs nominales et caractéristiques principales

20VDC ; 4.5A; Class III

Trademark (if any)  
Marque de fabrique (si elle existe)

AOC

Type of Manufacturer's Testing Laboratories used  
Type de programme du laboratoire d'essais constructeur

N/A

Model / Type Ref.  
Ref. de type

Q27G2U , \*\*27G2\*\*\*\*\*  
(\* can be 0-9, A-Z, a-z, -, \, /, + or blank)

Additional information (if necessary may also be reported on page 2)  
Les informations complémentaires (si nécessaire, peuvent être indiqués sur la 2<sup>ème</sup> 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 62368-1:2014  
See Test Report for National Differences

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

50312195 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



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: 28.11.2019

Signature: Aegean Li

1. TPV Display Technology (Wuhan) Co., Ltd.  
Unique No. 11, Zhuankou Development District of Economic Technological Development Zone, Wuhan City 430056, P. R. China
2. TPV Electronics (Fujian) Co., Ltd.  
Shangzheng, Yuan Hong Road  
Fuqing City, Fujian Province  
P. R. China
3. L&T Display Technology (Fujian) Ltd.  
Optoelectronic Park, Rongqiao Economic and Technological Development Zone  
Fuqing, Fujian 350301, P. R. China
4. TPV Electronics (Fujian) Co., Ltd.  
Rongqiao Economic and Technological Development Zone  
Fuqing City, Fujian Province  
P. R. China
5. Trend Smart CE Mexico S de RL de CV  
Avenida Sor Juana Ines de la Cruz de 19602 Nueva Tijuana,  
22435 Tijuana Baja California  
MEXICO
6. TPV Display Technology (Beihai) Co., Ltd.  
China Electronic Beihai Industry Park, Northeast of the Crossing Between Taiwan Road and Jilin Road, Beihai City, Guangxi, P. R. China
7. TPV Technology (Qingdao) Co., Ltd.  
No.99 Huoju Road, High-tech Industrial Development Zone  
Qingdao City, Shandong Province, P. R. China
8. TPV Display Technology (China) Co., Ltd.  
No. 106 Jinghai 3 Rd., BDA  
Beijing City 100176  
P. R. China
9. TPV Electronics (Fujian) Co., Ltd.  
Optoelectronic Park,  
Rongqiao Economic and Technological Development Zone,  
Fuqing City, Fujian Province 350301, P. R. China

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

Report Ref. No.: 50312195 001



Date: 28.11.2019

Signature:

Aegean Li

10. Envision Indústria de Produtos Eletrônicos Ltda.  
Av. Torquato Tapajós, 2236,  
Flores - CEP 69058-830 - Manaus/AM  
Brazil
11. Pro Concept Manufacturer Co., Ltd  
88/1 Moo 12, Soi  
Phetkasem120, Phetkasem  
Road, Omnoi, Krathumbaen,  
Samutsakhon 74130, Thailand
12. Treeview Co., Ltd.  
106/29 Moo 8,  
Sukhumvit Road, T.Banglamung,  
A.Banglamung, Chonburi 20150  
Thailand
13. TPV Technology (Thailand) Co., Ltd.  
Tambon Tha Turn,  
Amphoe Si Maha Phot,  
Chang Wat Prachin Buri 25140  
Thailand

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

Report Ref. No.: 50312195 001



Date: 28.11.2019

Signature:

Aegean Li



Test Report issued under the responsibility of:



<b>TEST REPORT</b> <b>IEC 62368-1</b> <b>Audio/video, information and communication technology equipment</b> <b>Part 1: Safety requirements</b>	
Report Number .....	50312195 001
Date of issue .....	Nov.27.2019
Total number of pages .....	53
<b>Applicant's name</b> .....	<b>TPV Electronics (Fujian) Co., Ltd.</b>
Address .....	Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, P.R.China
<b>Test specification:</b>	
Standard .....	IEC 62368-1:2014 (Second Edition)
Test procedure .....	CB Scheme
Non-standard test method .....	N/A
<b>Test Report Form No.</b> .....	IEC62368_1B
Test Report Form(s) Originator .....	UL(US)
Master TRF .....	2014-03
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If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.	
<b>This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.</b>	
<b>General disclaimer:</b>	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.	
Test Item description .....	LCD MONITOR
Trade Mark .....	AOC
Manufacturer .....	<b>Same as applicant.</b>
Model/Type reference .....	Q27G2U , **27G2***** (* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)
Ratings .....	I/P: 20.0Vdc, 4.5A

<b>Testing procedure and testing location:</b>		
<input checked="" type="checkbox"/>	<b>CB Testing Laboratory:</b>	<b>TÜV Rheinland (Shenzhen) Co., Ltd.</b>
<b>Testing location/ address .....</b>		1F East & 2-4F, Cybio Technology Building No. 1, No. 16 Kejibei 2nd Road, High-Tech Industrial Park North, Nanshan District 518057, Shenzhen, China
<input type="checkbox"/>	<b>Associated CB Testing Laboratory:</b>	
<b>Testing location/ address .....</b>		
<b>Tested by (name + signature) .....</b>		Anderson Wang Senior Project Manager
<b>Approved by (name + signature) .....</b>		Steven Lin Technical Reviewer
<input type="checkbox"/>	<b>Testing procedure: TMP/CTF Stage 1:</b>	
<b>Testing location/ address .....</b>		
<b>Tested by (name + signature) .....</b>		
<b>Approved by (name + signature) .....</b>		
<input type="checkbox"/>	<b>Testing procedure: WMT/CTF Stage 2:</b>	
<b>Testing location/ address .....</b>		
<b>Tested by (name + signature) .....</b>		
<b>Witnessed by (name + signature) .....</b>		
<b>Approved by (name + signature) .....</b>		
<input type="checkbox"/>	<b>Testing procedure: SMT/CTF Stage 3 or 4:</b>	
<b>Testing location/ address .....</b>		
<b>Tested by (name + signature) .....</b>		
<b>Witnessed by (name + signature) .....</b>		
<b>Approved by (name + signature) .....</b>		
<b>Supervised by (name + signature) .....</b>		

**List of Attachments (including a total number of pages in each attachment):**

- Photo documentation (16 Pages)
- National Differences (34 Pages)

**Summary of testing:****Tests performed (name of test and test clause):**

The tests were carried out under the most unfavorable combination within the manufacturer's operating specifications of the following parameters:

- supply voltage 20.0Vdc
- operating temperature, Max. ambient temperature 40°C declared by the client
- operating mode: continuous
- operating load:

The equipment operated under full screen with three vertical bar signal according IEC60107-1 with max. brightness and contrast; with 1KHz sinusoidal signal and turned to maximum volume; each USB 3.0 port loaded with 5V/0.9A, each USB 3.0 with fast charging loaded with 5V/1.5A.

name of test	test clause number
Classification of electrical energy sources	5.2
Maximum operating temperature test (Heating test)	5.4.1.4, 6.3.2, 9.0, B.2.6
Electrical Power Source (PS) measurements for classification	6.2.2
Stability	8.6
Simulated abnormal operating and single fault conditions	B.3, B.4
Input test	Annex B.2.5
Test for permanence of markings	Annex F.3.10
Limited power source test (LPS)	Annex Q.1

**Testing location:**

All tests as described in Test Case and Measurement Sections were performed at the laboratory described on page 2.

**Summary of compliance with National Differences:****List of countries addressed**

EU Group Differences, EU Special National Conditions, CA, DK, US.

Explanation of used codes: CA = Canada, DK=Denmark, US=United States of America.

**The product fulfils the requirements of EN 62368-1:2014.**

**Copy of marking plate:**

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.



The above label represents labels for model names other than above covered by the model name.



TEST ITEM PARTICULARS:	
Classification of use by.....:	<input checked="" type="checkbox"/> Ordinary person <input type="checkbox"/> Instructed person <input type="checkbox"/> Skilled person <input checked="" type="checkbox"/> Children likely to be present
Supply Connection .....	<input type="checkbox"/> AC Mains <input type="checkbox"/> DC Mains <input checked="" type="checkbox"/> External Circuit - not Mains connected - <input checked="" type="checkbox"/> ES1 <input type="checkbox"/> ES2 <input type="checkbox"/> ES3
Supply % Tolerance .....	<input type="checkbox"/> +10%/-10% <input type="checkbox"/> +20%/-15% <input type="checkbox"/> + ___ %/ - ___ % <input checked="" type="checkbox"/> None
Supply Connection – Type .....	<input type="checkbox"/> pluggable equipment type A - <input type="checkbox"/> non-detachable supply cord <input checked="" type="checkbox"/> appliance coupler <input type="checkbox"/> direct plug-in <input type="checkbox"/> mating connector <input type="checkbox"/> pluggable equipment type B - <input type="checkbox"/> non-detachable supply cord <input type="checkbox"/> appliance coupler <input type="checkbox"/> permanent connection <input type="checkbox"/> mating connector <input checked="" type="checkbox"/> other: <u>not directly connected to the mains</u>
Considered current rating of protective device as part of building or equipment installation.....:	N/A; Installation location: <input type="checkbox"/> building; <input type="checkbox"/> equipment
Equipment mobility.....:	<input checked="" type="checkbox"/> movable <input type="checkbox"/> hand-held <input type="checkbox"/> transportable <input type="checkbox"/> stationary <input type="checkbox"/> for building-in <input type="checkbox"/> direct plug-in <input type="checkbox"/> rack-mounting <input type="checkbox"/> wall-mounted
Over voltage category (OVC) .....	<input type="checkbox"/> OVC I <input type="checkbox"/> OVC II <input type="checkbox"/> OVC III <input type="checkbox"/> OVC IV <input checked="" type="checkbox"/> other: <u>not directly connected to the mains</u>
Class of equipment .....	<input type="checkbox"/> Class I <input type="checkbox"/> Class II <input checked="" type="checkbox"/> Class III
Access location .....	<input type="checkbox"/> restricted access location <input checked="" type="checkbox"/> N/A
Pollution degree (PD) .....	<input type="checkbox"/> PD 1 <input checked="" type="checkbox"/> PD 2 <input type="checkbox"/> PD 3
Manufacturer's specified maximum operating ambient:	<u>40</u> °C
IP protection class .....	<input checked="" type="checkbox"/> IPX0 <input type="checkbox"/> IP___
Power Systems .....	<input type="checkbox"/> TN <input type="checkbox"/> TT <input type="checkbox"/> IT - ___ V <sub>L-L</sub>
Altitude during operation (m) .....	<input type="checkbox"/> 2000 m or less <input checked="" type="checkbox"/> <u>5000</u> m
Altitude of test laboratory (m) .....	<input checked="" type="checkbox"/> 2000 m or less <input type="checkbox"/> ___ m
Mass of equipment (kg) .....	<input checked="" type="checkbox"/> Whole unit: 5.43kg Base weight: 1.35kg.(hook surface) Whole unit: 5.03kg Base weight: 1.35kg.(hook surface)

<b>POSSIBLE TEST CASE VERDICTS:</b>	
- test case does not apply to the test object .....	N/A
- test object does meet the requirement .....	P (Pass)
- test object does not meet the requirement .....	F (Fail)
- test object not yet conducted .....	N/T
<b>TESTING:</b>	
Date of receipt of test item .....	12.Oct.2019
Date (s) of performance of tests .....	12.Oct.2019 - 19.Oct.2019
<b>GENERAL REMARKS:</b>	
<p>"(See Enclosure #)" refers to additional information appended to the report.  "(See appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input type="checkbox"/> comma / <input checked="" type="checkbox"/> point is used as the decimal separator.</p>	
<b>Manufacturer's Declaration per sub-clause 4.2.5 of IEC62368-1:</b>	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided .....	<input checked="" type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>Not applicable</b>
<b>When differences exist; they shall be identified in the General product information section.</b>	
<b>Name and address of factory (ies).....:</b>	
1 TPV Display Technology (Wuhan) Co., Ltd. Unique No. 11, Zhuankou Development District of Economic Technological Development Zone, Wuhan City 430056, P.R. China 2 TPV Electronics (Fujian) Co., Ltd. Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, P.R.China 3 L&T Display Technology (Fujian) Ltd. Optoelectronic Park, Rongqiao Economic and Technological, Development Zone, Fuqing, Fujian 350301, P.R. China 4 TPV Electronics (Fujian) Co., Ltd. Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, P.R. China 5 Trend Smart CE Mexico S de RL de CV Avenida Sor Juana Ines de la Cruz de 19602 Nueva Tijuana, 22435 Tijuans Baja California, MEXICO 6 TPV Display Technology (Beihai) Co., Ltd. China Electronic Beihai Industry Park, Northeast of the Crossing Between Taiwan Road and Jilin Road, Beihai City, Guangxi, P.R. China 7 TPV Technology (Qingdao) Co., Ltd. No.99 Huoju Road, High-tech Industrial Development Zone, Qingdao City, Shandong Province, P.R. China 8 TPV Display Technology (China) Co., Ltd. No.106 Jinghai 3 Rd., BDA, Beijing City 100176, P.R. China.	

9	TPV Electronics (Fujian) Co., Ltd. Optoelectronic Park, Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, P.R. China
10	Envision Indústria de Produtos Eletrônicos Ltda. Av. Torquato Tapajós, 2236, Flores - CEP 69058-830 - Manaus/AM Brasil
11	Pro Concept Manufacturer Co., Ltd. 88/1 Moo 12, Soi Phetkasem 120, Phetkasem Road, Omnoi, Krathumbaen, Samutsakhon 74130, Thailand
12	Treeview Co., Ltd. 106/29 Moo 8, Sukhumvit Road, T.Banglamung, A.Banglamung, Chonburi 20150 Thailand
13	TPV Technology (Thailand) Co., Ltd. Tambon Tha Turn, Amphoe Si Maha Phot, Chang Wat Prachin Buri 25140 Thailand

#### GENERAL PRODUCT INFORMATION:

##### Product Description –

The models are an LCD monitor intended for general office use with following features:

1. LCD Type A: 27 inch flat TFT LCD with LED backlight; LCD Type B: 27 inch curved TFT LCD with LED backlight;
2. External approved adapter used, which output complies with SELV;
3. DC converter board 715GA907, which has DC-jack port;
4. Built in main boards 715G9500, which has HDMI, DisplayPort, audio-out port;
5. Extend USB board type A: 715G9509 with USB 3.0 type B, USB 3.0 type A, USB 3.0 type A with fast charging function; Extend USB board type A: 715GA629 with USB 3.0 type B, USB 3.0 type A, USB 3.0 type A with fast charging function;
6. The internal metal chassis is considered as fire enclosure and mechanical enclosure, and the external plastic enclosure is regarded as electrical enclosure and mechanical enclosure, made of min. HB material;
7. Base stand, made of metal and min. HB plastic material;
8. Two speaker sets (optional use), each max. 16Ω, 2.5W;
9. Maximum declared ambient: 40°C.

Table 1: Construction details

--	DC converter board	Main board	USB board	Panel	Speaker
Construction 1	715GA907	715G9500	715G9509	Flat	N/A
Construction 2	715GA907	715G9500	715GA629	Curved	16Ω, 2.5W

##### Definition of variable(s):

Variable:	Range of variable:	Content:
*	0-9, A-Z, a-z, -, \, /, + or blank	For marketing purpose only, no technical difference.

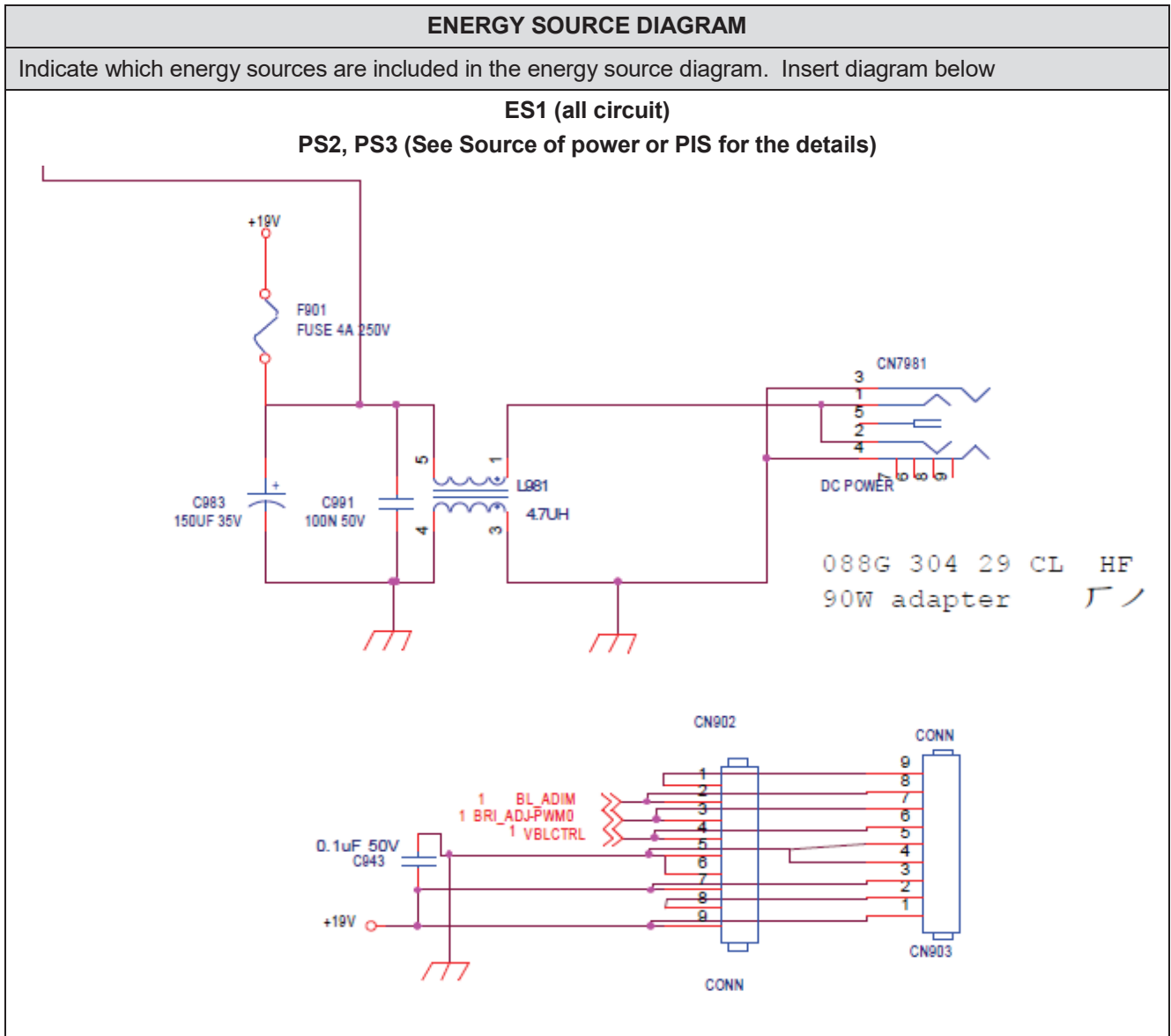
##### Model Differences –

Model Q27G2U is specified model of model \*\*27G2\*\*\*\*\* listed by client's request.

##### Additional application considerations –

N/A

<b>ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE:</b>	
(Note 1: Identify the following six (6) energy source forms based on the origin of the energy.) (Note 2: The identified classification e.g., ES2, TS1, should be with respect to its ability to cause pain or injury on the body or its ability to ignite a combustible material. Any energy source can be declared Class 3 as a worse case classification e.g. PS3, ES3.)	
<b>Electrically-caused injury (Clause 5):</b> (Note: Identify type of source, list sub-assembly or circuit designation and corresponding energy source classification) Example: +5 V dc input <span style="float: right;">ES1</span>	
<b>Source of electrical energy</b>	<b>Corresponding classification (ES)</b>
DC input port of main board	ES1
Data port of main board	ES1
<b>Electrically-caused fire (Clause 6):</b> (Note: List sub-assembly or circuit designation and corresponding energy source classification) Example: Battery pack (maximum 85 watts): <span style="float: right;">PS2</span>	
<b>Source of power or PIS</b>	<b>Corresponding classification (PS)</b>
DC input port of main board	PS3
All circuit after fuses on main board	PS2
Data port of all main boards	PS2
<b>Injury caused by hazardous substances (Clause 7)</b> (Note: Specify hazardous chemicals, whether produces ozone or other chemical construction not addressed as part of the component evaluation.) Example: Liquid in filled component <span style="float: right;">Glycol</span>	
<b>Source of hazardous substances</b>	<b>Corresponding chemical</b>
N/A	N/A
<b>Mechanically-caused injury (Clause 8)</b> (Note: List moving part(s), fan, special installations, etc. & corresponding MS classification based on Table 35.) Example: Wall mount unit <span style="float: right;">MS2</span>	
<b>Source of kinetic/mechanical energy</b>	<b>Corresponding classification (MS)</b>
Sharp edges and corners	MS1
Equipment mass	MS1
<b>Thermal burn injury (Clause 9)</b> (Note: Identify the surface or support, and corresponding energy source classification based on type of part, location, operating temperature and contact time in Table 38.) Example: Hand-held scanner – thermoplastic enclosure <span style="float: right;">TS1</span>	
<b>Source of thermal energy</b>	<b>Corresponding classification (TS)</b>
Accessible parts	TS1
<b>Radiation (Clause 10)</b> (Note: List the types of radiation present in the product and the corresponding energy source classification.) Example: DVD – Class 1 Laser Product <span style="float: right;">RS1</span>	
<b>Type of radiation</b>	<b>Corresponding classification (RS)</b>
Indicating lights	RS1
Backlight of LCD panel	RS1



OVERVIEW OF EMPLOYED SAFEGUARDS				
Clause	Possible Hazard			
5.1	Electrically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (ES3: Primary Filter circuit)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
Ordinary	ES1: Data port of main board	N/A	N/A	N/A
6.1	Electrically-caused fire			
Material part (e.g. mouse enclosure)	Energy Source (PS2: 100 Watt circuit)	Safeguards		
		Basic	Supplementary	Reinforced
DC inlet on main DC converter board	PS3	Ignition not occur	V-1 min. of material	--
Combustible materials of all PCB	PS2	Ignition not occur	Mounted on V-1 min. PCB	--

7.1		Injury caused by hazardous substances		
Body Part (e.g., skilled)	Energy Source (hazardous material)	Safeguards		
		Basic	Supplementary	Reinforced
N/A	N/A	N/A	N/A	N/A
8.1		Mechanically-caused injury		
Body Part (e.g. Ordinary)	Energy Source (MS3:High Pressure Lamp)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
Ordinary	MS1: Sharp edges and corners	N/A	N/A	N/A
Ordinary	MS2: Equipment mass	--	--	Compliance with test 8.6
9.1		Thermal Burn		
Body Part (e.g., Ordinary)	Energy Source (TS2)	Safeguards		
		Basic	Supplementary	Reinforced
Ordinary	TS1: Accessible parts	N/A	N/A	N/A
10.1		Radiation		
Body Part (e.g., Ordinary)	Energy Source (Output from audio port)	Safeguards		
		Basic	Supplementary	Reinforced
Ordinary	RS1: Indicating lights	N/A	N/A	N/A
Ordinary	RS1: backlight of LCD panel	N/A	N/A	N/A
Supplementary information:				
(1) See attached energy source diagram for additional details.				
(2) "N" – Normal Condition; "A" – Abnormal Condition; "S" Single Fault				

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
<b>4</b>	<b>GENERAL REQUIREMENTS</b>		P
4.1.1	Acceptance of materials, components and subassemblies	See appended table 4.1.2.	P
4.1.2	Use of components	Components which are certified to IEC and/or national standards are used correctly within their ratings. Components not covered by IEC standards are tested under the conditions present in the equipment.	P
4.1.3	Equipment design and construction	No accessible part which could cause injury.	P
4.1.15	Markings and instructions .....	(See Annex F)	P
4.4.4	Safeguard robustness	EUT supplied by approved AC/DC adapter considered as ES1, no hazardous live parts inside.	N/A
4.4.4.2	Steady force tests .....	See above	N/A
4.4.4.3	Drop tests .....		N/A
4.4.4.4	Impact tests .....	See above	N/A
4.4.4.5	Internal accessible safeguard enclosure and barrier tests .....	See above	N/A
4.4.4.6	Glass Impact tests .....	Laminated glass used.	N/A
4.4.4.7	Thermoplastic material tests .....		N/A
4.4.4.8	Air comprising a safeguard .....		N/A
4.4.4.9	Accessibility and safeguard effectiveness		N/A
4.5	Explosion	No explosion occurs during normal/abnormal operation and single fault conditions.	P
4.6	Fixing of conductors		N/A
4.6.1	Fix conductors not to defeat a safeguard		N/A
4.6.2	10 N force test applied to .....		N/A
4.7	Equipment for direct insertion into mains socket - outlets		N/A
4.7.2	Mains plug part complies with the relevant standard .....		N/A
4.7.3	Torque (Nm) .....		N/A
4.8	Products containing coin/button cell batteries	No lithium coin/button batteries used.	N/A
4.8.2	Instructional safeguard		N/A
4.8.3	Battery Compartment Construction		N/A
	Means to reduce the possibility of children removing the battery .....		—

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
4.8.4	Battery Compartment Mechanical Tests .....		N/A
4.8.5	Battery Accessibility		N/A
4.9	Likelihood of fire or shock due to entry of conductive object .....	All circuits within test unit are ES1	N/A

<b>5</b>	<b>ELECTRICALLY-CAUSED INJURY</b>		P
5.2.1	Electrical energy source classifications .....	EUT supplied by approved AC/DC adapter considered as ES1, no hazardous live parts inside.	P
5.2.2	ES1, ES2 and ES3 limits	See below.	P
5.2.2.2	Steady-state voltage and current .....	(See appended table 5.2)	P
5.2.2.3	Capacitance limits .....		N/A
5.2.2.4	Single pulse limits .....		N/A
5.2.2.5	Limits for repetitive pulses .....		N/A
5.2.2.6	Ringing signals .....		N/A
5.2.2.7	Audio signals .....		N/A
5.3	Protection against electrical energy sources	ES1.	N/A
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	See "OVERVIEW OF EMPLOYED SAFEGUARDS" table.	P
5.3.2.1	Accessibility to electrical energy sources and safeguards	ES1.	N/A
5.3.2.2	Contact requirements	ES1.	N/A
	a) Test with test probe from Annex V .....		N/A
	b) Electric strength test potential (V) .....		N/A
	c) Air gap (mm) .....		N/A
5.3.2.4	Terminals for connecting stripped wire	No such terminals.	N/A
5.4	Insulation materials and requirements		N/A
5.4.1.2	Properties of insulating material		N/A
5.4.1.3	Humidity conditioning .....		N/A
5.4.1.4	Maximum operating temperature for insulating materials .....		N/A
5.4.1.5	Pollution degree .....	Pollution degree 2.	—
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound		N/A
5.4.1.5.3	Thermal cycling		N/A
5.4.1.6	Insulation in transformers with varying dimensions		N/A
5.4.1.7	Insulation in circuits generating starting pulses		N/A
5.4.1.8	Determination of working voltage		N/A
5.4.1.9	Insulating surfaces		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted		N/A
5.4.1.10.2	Vicat softening temperature .....		N/A
5.4.1.10.3	Ball pressure .....		N/A
5.4.2	Clearances		N/A
5.4.2.2	Determining clearance using peak working voltage		N/A
5.4.2.3	Determining clearance using required withstand voltage .....		N/A
	a) a.c. mains transient voltage .....		—
	b) d.c. mains transient voltage .....		—
	c) external circuit transient voltage .....		—
	d) transient voltage determined by measurement ... :		—
5.4.2.4	Determining the adequacy of a clearance using an electric strength test		N/A
5.4.2.5	Multiplication factors for clearances and test voltages .....		N/A
5.4.3	Creepage distances .....		N/A
5.4.3.1	General		N/A
5.4.3.3	Material Group .....		—
5.4.4	Solid insulation		N/A
5.4.4.2	Minimum distance through insulation .....		N/A
5.4.4.3	Insulation compound forming solid insulation		N/A
5.4.4.4	Solid insulation in semiconductor devices		N/A
5.4.4.5	Cemented joints		N/A
5.4.4.6	Thin sheet material		N/A
5.4.4.6.1	General requirements		N/A
5.4.4.6.2	Separable thin sheet material		N/A
	Number of layers (pcs) .....		N/A
5.4.4.6.3	Non-separable thin sheet material		N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material .....		N/A
5.4.4.6.5	Mandrel test		N/A
5.4.4.7	Solid insulation in wound components		N/A
5.4.4.9	Solid insulation at frequencies >30 kHz .....		N/A
5.4.5	Antenna terminal insulation		N/A
5.4.5.1	General		N/A
5.4.5.2	Voltage surge test		N/A
	Insulation resistance (M ).....		—

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Clause	Requirement + Test	Result - Remark	Verdict
5.4.6	Insulation of internal wire as part of supplementary safeguard .....		N/A
5.4.7	Tests for semiconductor components and for cemented joints		N/A
5.4.8	Humidity conditioning		N/A
	Relative humidity (%).....		—
	Temperature (°C) .....		—
	Duration (h) .....		—
5.4.9	Electric strength test .....		N/A
5.4.9.1	Test procedure for a solid insulation type test		N/A
5.4.9.2	Test procedure for routine tests		N/A
5.4.10	Protection against transient voltages between external circuit		N/A
5.4.10.1	Parts and circuits separated from external circuits		N/A
5.4.10.2	Test methods		N/A
5.4.10.2.1	General		N/A
5.4.10.2.2	Impulse test .....		N/A
5.4.10.2.3	Steady-state test.....		N/A
5.4.11	Insulation between external circuits and earthed circuitry .....		N/A
5.4.11.1	Exceptions to separation between external circuits and earth		N/A
5.4.11.2	Requirements		N/A
	Rated operating voltage $U_{op}$ (V).....		—
	Nominal voltage $U_{peak}$ (V).....		—
	Max increase due to variation $U_{sp}$ .....		—
	Max increase due to ageing $U_{sa}$ .....		—
	$U_{op} = U_{peak} + \Delta U_{sp} + \Delta U_{sa}$ .....		—
5.5	Components as safeguards		N/A
5.5.1	General		N/A
5.5.2	Capacitors and RC units		N/A
5.5.2.1	General requirement		N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector.....		N/A
5.5.3	Transformers		N/A
5.5.4	Optocouplers		N/A
5.5.5	Relays		N/A
5.5.6	Resistors		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.5.7	SPD's		N/A
5.5.7.1	Use of an SPD connected to reliable earthing		N/A
5.5.7.2	Use of an SPD between mains and protective earth		N/A
5.5.8	Insulation between the mains and external circuit consisting of a coaxial cable.....:		N/A
5.6	Protective conductor		N/A
5.6.2	Requirement for protective conductors		N/A
5.6.2.1	General requirements		N/A
5.6.2.2	Colour of insulation		N/A
5.6.3	Requirement for protective earthing conductors		N/A
	Protective earthing conductor size (mm <sup>2</sup> ) .....		—
5.6.4	Requirement for protective bonding conductors		N/A
5.6.4.1	Protective bonding conductors		N/A
	Protective bonding conductor size (mm <sup>2</sup> ). .....		—
	Protective current rating (A) .....		—
5.6.4.3	Current limiting and overcurrent protective devices		N/A
5.6.5	Terminals for protective conductors		N/A
5.6.5.1	Requirement		N/A
	Conductor size (mm <sup>2</sup> ), nominal thread diameter (mm). .....		N/A
5.6.5.2	Corrosion		N/A
5.6.6	Resistance of the protective system		N/A
5.6.6.1	Requirements		N/A
5.6.6.2	Test Method Resistance ( ) .....		N/A
5.6.7	Reliable earthing		N/A
5.7	Prospective touch voltage, touch current and protective conductor current		N/A
5.7.2	Measuring devices and networks		N/A
5.7.2.1	Measurement of touch current .....		N/A
5.7.2.2	Measurement of prospective touch voltage		N/A
5.7.3	Equipment set-up, supply connections and earth connections		N/A
	System of interconnected equipment (separate connections/single connection) .....	Single equipment.	—
	Multiple connections to mains (one connection at a time/simultaneous connections) .....	Single connection.	—
5.7.4	Earthed conductive accessible parts .....		N/A
5.7.5	Protective conductor current	Protective conductor current does not exceed the ES2 limits.	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Supply Voltage (V).....:		—
	Measured current (mA).....:		—
	Instructional Safeguard.....:		N/A
5.7.6	Prospective touch voltage and touch current due to external circuits		N/A
5.7.6.1	Touch current from coaxial cables		N/A
5.7.6.2	Prospective touch voltage and touch current from external circuits		N/A
5.7.7	Summation of touch currents from external circuits		N/A
	a) Equipment with earthed external circuits Measured current (mA).....:		N/A
	b) Equipment whose external circuits are not referenced to earth. Measured current (mA).....:		N/A

<b>6</b>	<b>ELECTRICALLY- CAUSED FIRE</b>		P
6.2	Classification of power sources (PS) and potential ignition sources (PIS)		P
6.2.2	Power source circuit classifications	EUT supplied by approved AC/DC adapter as PS3, and fuses after DC inlet on main board to limit all input to comply with L.P.S, so all circuits after fuses considered as PS2.	P
6.2.2.1	General		N/A
6.2.2.2	Power measurement for worst-case load fault ... :		N/A
6.2.2.3	Power measurement for worst-case power source fault .....		N/A
6.2.2.4	PS1 .....		N/A
6.2.2.5	PS2 .....	See above.	P
6.2.2.6	PS3 .....	See above.	P
6.2.3	Classification of potential ignition sources		P
6.2.3.1	Arcing PIS .....	EUT supplied by approved AC/DC adapter complied with SELV.	N/A
6.2.3.2	Resistive PIS .....	All components located within the equipment are considered as resistive PIS.	P
6.3	Safeguards against fire under normal operating and abnormal operating conditions		P
6.3.1 (a)	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials .....	(See appended table 5.4.1.5, 6.3.2, 9.0, B.2.6)	P
6.3.1 (b)	Combustible materials outside fire enclosure		N/A
6.4	Safeguards against fire under single fault conditions		P
6.4.1	Safeguard Method	All circuits after fuses are PS2.	P

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Clause	Requirement + Test	Result - Remark	Verdict
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		N/A
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits	See sub-clause 6.4.5.2.	P
6.4.3.1	General		N/A
6.4.3.2	Supplementary Safeguards		N/A
	Special conditions if conductors on printed boards are opened or peeled		N/A
6.4.3.3	Single Fault Conditions .....		N/A
	Special conditions for temperature limited by fuse		N/A
6.4.4	Control of fire spread in PS1 circuits		N/A
6.4.5	Control of fire spread in PS2 circuits	See below.	P
6.4.5.2	Supplementary safeguards .....	All components in a PS2 are mounted on V-1 class material of printed boards and comply with the requirements of the relevant IEC components standard.	P
6.4.6	Control of fire spread in PS3 circuit	DC inlet is made of Min. V-1 material.	P
6.4.7	Separation of combustible materials from a PIS		N/A
6.4.7.1	General .....		N/A
6.4.7.2	Separation by distance		N/A
6.4.7.3	Separation by a fire barrier		N/A
6.4.8	Fire enclosures and fire barriers		N/A
6.4.8.1	Fire enclosure and fire barrier material properties		N/A
6.4.8.2.1	Requirements for a fire barrier		N/A
6.4.8.2.2	Requirements for a fire enclosure		N/A
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier		N/A
6.4.8.3.1	Fire enclosure and fire barrier openings		N/A
6.4.8.3.2	Fire barrier dimensions		N/A
6.4.8.3.3	Top Openings in Fire Enclosure: dimensions (mm) .....		N/A
	Needle Flame test		N/A
6.4.8.3.4	Bottom Openings in Fire Enclosure, condition met a), b) and/or c) dimensions (mm) .....		N/A
	Flammability tests for the bottom of a fire enclosure .....		N/A
6.4.8.3.5	Integrity of the fire enclosure, condition met: a), b) or c) .....		N/A
6.4.8.4	Separation of PIS from fire enclosure and fire barrier distance (mm) or flammability rating .....		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
6.5	Internal and external wiring		P
6.5.1	Requirements	Internal or external wiring materials are compliant with IEC 60950-1 according to Sub-clause 4.1.1. Furthermore, the test method described in IEC 60695-11-21 is considered equivalent to that test wiring materials for VW-1. All internal wiring are using VW-1 material.	P
6.5.2	Cross-sectional area (mm <sup>2</sup> ) .....	See above.	—
6.5.3	Requirements for interconnection to building wiring .....		N/A
6.6	Safeguards against fire due to connection to additional equipment	No such component.	N/A
	External port limited to PS2 or complies with Clause Q.1	No such component.	N/A

<b>7</b>	<b>INJURY CAUSED BY HAZARDOUS SUBSTANCES</b>		N/A
7.2	Reduction of exposure to hazardous substances		N/A
7.3	Ozone exposure		N/A
7.4	Use of personal safeguards (PPE)		N/A
	Personal safeguards and instructions .....		—
7.5	Use of instructional safeguards and instructions		N/A
	Instructional safeguard (ISO 7010).....		—
7.6	Batteries.....		N/A

<b>8</b>	<b>MECHANICALLY-CAUSED INJURY</b>		P
8.1	General		P
8.2	Mechanical energy source classifications	See ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE.	P
8.3	Safeguards against mechanical energy sources	See "OVERVIEW OF EMPLOYED SAFEGUARDS" table.	P
8.4	Safeguards against parts with sharp edges and corners	No sharp edges and corners in accessible area.	P
8.4.1	Safeguards		N/A
8.5	Safeguards against moving parts		N/A
8.5.1	MS2 or MS3 part required to be accessible for the function of the equipment		N/A
8.5.2	Instructional Safeguard .....		—

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Clause	Requirement + Test	Result - Remark	Verdict
8.5.4	Special categories of equipment comprising moving parts		N/A
8.5.4.1	Large data storage equipment		N/A
8.5.4.2	Equipment having electromechanical device for destruction of media		N/A
8.5.4.2.1	Safeguards and Safety Interlocks .....		N/A
8.5.4.2.2	Instructional safeguards against moving parts		N/A
	Instructional Safeguard .....		—
8.5.4.2.3	Disconnection from the supply		N/A
8.5.4.2.4	Probe type and force (N) .....		N/A
8.5.5	High Pressure Lamps		N/A
8.5.5.1	Energy Source Classification		N/A
8.5.5.2	High Pressure Lamp Explosion Test .....		N/A
8.6	Stability	No stability requirements for MS1 equipment.	N/A
8.6.1	Product classification		N/A
	Instructional Safeguard .....		—
8.6.2	Static stability		N/A
8.6.2.2	Static stability test		N/A
	Applied Force .....		—
8.6.2.3	Downward Force Test		N/A
8.6.3	Relocation stability test		N/A
	Unit configuration during 10° tilt .....		—
8.6.4	Glass slide test		N/A
8.6.5	Horizontal force test (Applied Force) .....		N/A
	Position of feet or movable parts .....		—
8.7	Equipment mounted to wall or ceiling		N/A
8.7.1	Mounting Means (Length of screws (mm) and mounting surface) .....		N/A
8.7.2	Direction and applied force .....		N/A
8.8	Handles strength	No handles.	N/A
8.8.1	Classification		N/A
8.8.2	Applied Force .....		N/A
8.9	Wheels or casters attachment requirements		N/A
8.9.1	Classification		N/A
8.9.2	Applied force .....		—
8.10	Carts, stands and similar carriers		N/A
8.10.1	General		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.10.2	Marking and instructions		N/A
	Instructional Safeguard .....		—
8.10.3	Cart, stand or carrier loading test and compliance		N/A
	Applied force .....		—
8.10.4	Cart, stand or carrier impact test		N/A
8.10.5	Mechanical stability		N/A
	Applied horizontal force (N) .....		—
8.10.6	Thermoplastic temperature stability (°C).....		N/A
8.11	Mounting means for rack mounted equipment		N/A
8.11.1	General		N/A
8.11.2	Product Classification		N/A
8.11.3	Mechanical strength test, variable <i>N</i> .....		N/A
8.11.4	Mechanical strength test 250N, including end stops		N/A
8.12	Telescoping or rod antennas .....		N/A
	Button/Ball diameter (mm) .....		—

<b>9</b>	<b>THERMAL BURN INJURY</b>		
9.2	Thermal energy source classifications	See ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE.	P
9.3	Safeguard against thermal energy sources	No safeguards are required for TS1.	N/A
9.4	Requirements for safeguards		N/A
9.4.1	Equipment safeguard		N/A
9.4.2	Instructional safeguard .....		N/A

<b>10</b>	<b>RADIATION</b>		P
10.2	Radiation energy source classification	See below.	P
10.2.1	General classification	The following parts are considered as RS1 without tests: - Indicating lights; - backlight of LCD panel	P
10.3	Protection against laser radiation		N/A
	Laser radiation that exists equipment:		—
	Normal, abnormal, single-fault.....		N/A
	Instructional safeguard .....		—
	Tool .....		—
10.4	Protection against visible, infrared, and UV radiation		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
10.4.1	General		N/A
10.4.1.a)	RS3 for Ordinary and instructed persons .....		N/A
10.4.1.b)	RS3 accessible to a skilled person .....		N/A
	Personal safeguard (PPE) instructional safeguard .....		—
10.4.1.c)	Equipment visible, IR, UV does not exceed RS1 .:		N/A
10.4.1.d)	Normal, abnormal, single-fault conditions .....		N/A
10.4.1.e)	Enclosure material employed as safeguard is opaque .....		N/A
10.4.1.f)	UV attenuation .....		N/A
10.4.1.g)	Materials resistant to degradation UV .....		N/A
10.4.1.h)	Enclosure containment of optical radiation .....		N/A
10.4.1.i)	Exempt Group under normal operating conditions .....		N/A
10.4.2	Instructional safeguard .....		N/A
10.5	Protection against x-radiation		N/A
10.5.1	X- radiation energy source that exists equipment :		N/A
	Normal, abnormal, single fault conditions		N/A
	Equipment safeguards .....		N/A
	Instructional safeguard for skilled person .....		N/A
10.5.3	Most unfavourable supply voltage to give maximum radiation .....		—
	Abnormal and single-fault condition .....		N/A
	Maximum radiation (pA/kg) .....		N/A
10.6	Protection against acoustic energy sources		N/A
10.6.1	General		N/A
10.6.2	Classification		N/A
	Acoustic output, dB(A) .....		N/A
	Output voltage, unweighted r.m.s. ....		N/A
10.6.4	Protection of persons		N/A
	Instructional safeguards .....		N/A
	Equipment safeguard prevent ordinary person to RS2 .....		—
	Means to actively inform user of increase sound pressure .....		—
	Equipment safeguard prevent ordinary person to RS2 .....		—
10.6.5	Requirements for listening devices (headphones, earphones, etc.)		N/A
10.6.5.1	Corded passive listening devices with analog		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	input		
	Input voltage with 94 dB(A) $L_{Aeq}$ acoustic pressure output..... :		—
10.6.5.2	Corded listening devices with digital input		N/A
	Maximum dB(A)..... :		—
10.6.5.3	Cordless listening device		N/A
	Maximum dB(A)..... :		—
<b>B</b>	<b>NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS</b>		P
B.2	Normal Operating Conditions	See below	P
B.2.1	General requirements..... :	(See Test Item Particulars and appended test tables)	P
	Audio Amplifiers and equipment with audio amplifiers..... :	No such component.	N/A
B.2.3	Supply voltage and tolerances		N/A
B.2.5	Input test..... :	(See appended table B.2.5)	P
B.3	Simulated abnormal operating conditions		P
B.3.1	General requirements..... :		N/A
B.3.2	Covering of ventilation openings		N/A
B.3.3	D.C. mains polarity test		N/A
B.3.4	Setting of voltage selector..... :		N/A
B.3.5	Maximum load at output terminals..... :		N/A
B.3.6	Reverse battery polarity		N/A
B.3.7	Abnormal operating conditions as specified in Clause E.2.		N/A
B.3.8	Safeguards functional during and after abnormal operating conditions		N/A
B.4	Simulated single fault conditions		P
B.4.2	Temperature controlling device open or short-circuited..... :	No such devices.	N/A
B.4.3	Motor tests		N/A
B.4.3.1	Motor blocked or rotor locked increasing the internal ambient temperature..... :		N/A
B.4.4	Short circuit of functional insulation	(See appended table B.4)	P
B.4.4.1	Short circuit of clearances for functional insulation	(See appended table B.4)	P
B.4.4.2	Short circuit of creepage distances for functional insulation	(See appended table B.4)	P
B.4.4.3	Short circuit of functional insulation on coated printed boards		N/A
B.4.5	Short circuit and interruption of electrodes in tubes and semiconductors	(See appended table B.4)	P

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Clause	Requirement + Test	Result - Remark	Verdict
B.4.6	Short circuit or disconnect of passive components		P
B.4.7	Continuous operation of components		N/A
B.4.8	Class 1 and Class 2 energy sources within limits during and after single fault conditions		P
B.4.9	Battery charging under single fault conditions..... :		N/A
<b>C</b>	<b>UV RADIATION</b>		N/A
C.1	Protection of materials in equipment from UV radiation		N/A
C.1.2	Requirements		N/A
C.1.3	Test method		N/A
C.2	UV light conditioning test		N/A
C.2.1	Test apparatus		N/A
C.2.2	Mounting of test samples		N/A
C.2.3	Carbon-arc light-exposure apparatus		N/A
C.2.4	Xenon-arc light exposure apparatus		N/A
<b>D</b>	<b>TEST GENERATORS</b>		N/A
D.1	Impulse test generators		N/A
D.2	Antenna interface test generator		N/A
D.3	Electronic pulse generator		N/A
<b>E</b>	<b>TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS</b>		N/A
E.1	Audio amplifier normal operating conditions	No such equipment.	N/A
	Audio signal voltage (V)..... :		—
	Rated load impedance ( $\Omega$ ) ..... :		—
E.2	Audio amplifier abnormal operating conditions		N/A
<b>F</b>	<b>EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS</b>		P
F.1	General requirements	See below.	P
	Instructions – Language ..... :	English. Versions in other languages will be provided when national certificate approval.	—
F.2	Letter symbols and graphical symbols		P
F.2.1	Letter symbols according to IEC60027-1		P
F.2.2	Graphic symbols IEC, ISO or manufacturer specific		P
F.3	Equipment markings		P
F.3.1	Equipment marking locations	The equipment marking is provided and is readily visible in operator access area.	P
F.3.2	Equipment identification markings	See below.	P
F.3.2.1	Manufacturer identification ..... :	See copy of marking plate.	—

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Clause	Requirement + Test	Result - Remark	Verdict
F.3.2.2	Model identification .....	See copy of marking plate.	—
F.3.3	Equipment rating markings	See below.	P
F.3.3.1	Equipment with direct connection to mains		N/A
F.3.3.2	Equipment without direct connection to mains	See below.	P
F.3.3.3	Nature of supply voltage.....	See copy of marking plate.	—
F.3.3.4	Rated voltage .....	See copy of marking plate.	—
F.3.3.4	Rated frequency .....	See copy of marking plate.	—
F.3.3.6	Rated current or rated power.....	See copy of marking plate.	—
F.3.3.7	Equipment with multiple supply connections		N/A
F.3.4	Voltage setting device		N/A
F.3.5	Terminals and operating devices	See below.	N/A
F.3.5.1	Mains appliance outlet and socket-outlet markings .....		N/A
F.3.5.2	Switch position identification marking.....		N/A
F.3.5.3	Replacement fuse identification and rating markings .....	Supplied by approved AC/DC adapter.	N/A
F.3.5.4	Replacement battery identification marking .....		N/A
F.3.5.5	Terminal marking location		N/A
F.3.6	Equipment markings related to equipment classification		N/A
F.3.6.1	Class I Equipment	Class III equipment.	N/A
F.3.6.1.1	Protective earthing conductor terminal		N/A
F.3.6.1.2	Neutral conductor terminal		N/A
F.3.6.1.3	Protective bonding conductor terminals		N/A
F.3.6.2	Class II equipment (IEC60417-5172)	Class III equipment.	N/A
F.3.6.2.1	Class II equipment with or without functional earth		N/A
F.3.6.2.2	Class II equipment with functional earth terminal marking		N/A
F.3.7	Equipment IP rating marking .....		—
F.3.8	External power supply output marking		N/A
F.3.9	Durability, legibility and permanence of marking	See below.	P
F.3.10	Test for permanence of markings	Marking is durable and legible. The marking plate has no curling and is not able to be removed easily.	P
F.4	Instructions		P
	a) Equipment for use in locations where children not likely to be present - marking		N/A
	b) Instructions given for installation or initial use	Provided in user's manual.	P

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Clause	Requirement + Test	Result - Remark	Verdict
	c) Equipment intended to be fastened in place		N/A
	d) Equipment intended for use only in restricted access area		N/A
	e) Audio equipment terminals classified as ES3 and other equipment with terminals marked in accordance F.3.6.1		N/A
	f) Protective earthing employed as safeguard		N/A
	g) Protective earthing conductor current exceeding ES 2 limits	Not exceed the ES2 limits.	N/A
	h) Symbols used on equipment	Graphical symbols not used as an instructional safeguard.	N/A
	i) Permanently connected equipment not provided with all-pole mains switch		N/A
j)	j) Replaceable components or modules providing safeguard function		N/A
F.5	Instructional safeguards	No instructional safeguard required.	N/A
	Where "instructional safeguard" is referenced in the test report it specifies the required elements, location of marking and/or instruction		N/A
<b>G</b>	<b>COMPONENTS</b>	<i>Supplied by approved AC/DC adapter.</i>	N/A
<b>G.1</b>	<b>Switches</b>		N/A
G.1.1	General requirements		N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
<b>G.2</b>	<b>Relays</b>		N/A
G.2.1	General requirements		N/A
G.2.2	Overload test		N/A
G.2.3	Relay controlling connectors supply power		N/A
G.2.4	Mains relay, modified as stated in G.2		N/A
<b>G.3</b>	<b>Protection Devices</b>		N/A
G.3.1	Thermal cut-offs		N/A
G.3.1.1a) &b)	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)		N/A
G.3.1.1c)	Thermal cut-outs tested as part of the equipment as indicated in c)		N/A
G.3.1.2	Thermal cut-off connections maintained and secure		N/A
G.3.2	Thermal links		N/A
G.3.2.1a)	Thermal links separately tested with IEC 60691		N/A
G.3.2.1b)	Thermal links tested as part of the equipment		N/A
	Aging hours (H) .....		—
	Single Fault Condition .....		—

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Clause	Requirement + Test	Result - Remark	Verdict
	Test Voltage (V) and Insulation Resistance ( $\Omega$ ) . :		—
G.3.3	PTC Thermistors		N/A
G.3.4	Overcurrent protection devices		N/A
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.5		N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A
G.3.5.2	Single faults conditions ..... :		N/A
<b>G.4</b>	<b>Connectors</b>		N/A
G.4.1	Spacings		N/A
G.4.2	Mains connector configuration ..... :		N/A
G.4.3	Plug is shaped that insertion into mains socket-outlets or appliance coupler is unlikely		N/A
<b>G.5</b>	<b>Wound Components</b>		N/A
G.5.1	Wire insulation in wound components .....		N/A
G.5.1.2 a)	Two wires in contact inside wound component, angle between 45° and 90°		N/A
G.5.1.2 b)	Construction subject to routine testing		N/A
G.5.2	Endurance test on wound components		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
	Time (s)..... :		—
	Temperature (°C)..... :		—
G.5.2.3	Wound Components supplied by mains		N/A
<b>G.5.3</b>	<b>Transformers</b>		N/A
G.5.3.1	Requirements applied (IEC61204-7, IEC61558-1/-2, and/or IEC62368-1) .....	No such component.	N/A
	Position .....		—
	Method of protection .....		—
G.5.3.2	Insulation		N/A
	Protection from displacement of windings..... :		—
G.5.3.3	Overload test .....		N/A
G.5.3.3.1	Test conditions		N/A
G.5.3.3.2	Winding Temperatures testing in the unit		N/A
G.5.3.3.3	Winding Temperatures - Alternative test method		N/A
<b>G.5.4</b>	<b>Motors</b>		N/A
G.5.4.1	General requirements		N/A
	Position .....		—
G.5.4.2	Test conditions		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.5.4.3	Running overload test		N/A
G.5.4.4	Locked-rotor overload test		N/A
	Test duration (days) .....		—
G.5.4.5	Running overload test for d.c. motors in secondary circuits		N/A
G.5.4.5.2	Tested in the unit		N/A
	Electric strength test (V) .....		—
G.5.4.5.3	Tested on the Bench - Alternative test method; test time (h) .....		N/A
	Electric strength test (V) .....		—
G.5.4.6	Locked-rotor overload test for d.c. motors in secondary circuits		N/A
G.5.4.6.2	Tested in the unit		N/A
	Maximum Temperature .....		N/A
	Electric strength test (V) .....		N/A
G.5.4.6.3	Tested on the bench - Alternative test method; test time (h).....		N/A
	Electric strength test (V) .....		N/A
G.5.4.7	Motors with capacitors		N/A
G.5.4.8	Three-phase motors		N/A
G.5.4.9	Series motors		N/A
	Operating voltage .....		—
<b>G.6</b>	<b>Wire Insulation</b>		N/A
G.6.1	General		N/A
G.6.2	Solvent-based enamel wiring insulation		N/A
<b>G.7</b>	<b>Mains supply cords</b>		N/A
G.7.1	General requirements	No mains supply cord provided.	N/A
	Type.....		—
	Rated current (A).....		—
	Cross-sectional area (mm <sup>2</sup> ), (AWG).....		—
G.7.2	Compliance and test method		N/A
G.7.3	Cord anchorages and strain relief for non-detachable power supply cords		N/A
G.7.3.2	Cord strain relief		N/A
G.7.3.2.1	Requirements		N/A
	Strain relief test force (N).....		—
G.7.3.2.2	Strain relief mechanism failure		N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm).....		—
G.7.3.2.4	Strain relief comprised of polymeric material		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.7.4	Cord Entry..... :		N/A
G.7.5	Non-detachable cord bend protection		N/A
G.7.5.1	Requirements		N/A
G.7.5.2	Mass (g) ..... :		—
	Diameter (m)..... :		—
	Temperature (°C)..... :		—
G.7.6	Supply wiring space		N/A
G.7.6.2	Stranded wire		N/A
G.7.6.2.1	Test with 8 mm strand		N/A
<b>G.8</b>	<b>Varistors</b>		N/A
G.8.1	General requirements		N/A
G.8.2	Safeguard against shock		N/A
G.8.3	Safeguard against fire		N/A
G.8.3.2	Varistor overload test..... :		N/A
G.8.3.3	Temporary overvoltage..... :		N/A
<b>G.9</b>	<b>Integrated Circuit (IC) Current Limiters</b>		N/A
G.9.1 a)	Manufacturer defines limit at max. 5A.		N/A
G.9.1 b)	Limiters do not have manual operator or reset		N/A
G.9.1 c)	Supply source does not exceed 250 VA ..... :		—
G.9.1 d)	IC limiter output current (max. 5A) ..... :		—
G.9.1 e)	Manufacturers' defined drift ..... :		—
G.9.2	Test Program 1		N/A
G.9.3	Test Program 2		N/A
G.9.4	Test Program 3		N/A
<b>G.10</b>	<b>Resistors</b>		N/A
G.10.1	General requirements		N/A
G.10.2	Resistor test		N/A
G.10.3	Test for resistors serving as safeguards between the mains and an external circuit consisting of a coaxial cable		N/A
G.10.3.1	General requirements		N/A
G.10.3.2	Voltage surge test		N/A
G.10.3.3	Impulse test		N/A
<b>G.11</b>	<b>Capacitor and RC units</b>		N/A
G.11.1	General requirements		N/A
G.11.2	Conditioning of capacitors and RC units		N/A
G.11.3	Rules for selecting capacitors		N/A
<b>G.12</b>	<b>Optocouplers</b>		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	Optocouplers comply with IEC 60747-5-5:2007 Spacing or Electric Strength Test (specify option and test results) .....	No such component.	N/A
	Type test voltage Vini .....		—
	Routine test voltage, Vini,b .....		—
<b>G.13</b>	<b>Printed boards</b>		N/A
G.13.1	General requirements		N/A
G.13.2	Uncoated printed boards		N/A
G.13.3	Coated printed boards		N/A
G.13.4	Insulation between conductors on the same inner surface		N/A
	Compliance with cemented joint requirements (Specify construction) .....		—
G.13.5	Insulation between conductors on different surfaces		N/A
	Distance through insulation .....		N/A
	Number of insulation layers (pcs) .....		—
G.13.6	Tests on coated printed boards		N/A
G.13.6.1	Sample preparation and preliminary inspection		N/A
G.13.6.2a)	Thermal conditioning		N/A
G.13.6.2b)	Electric strength test		N/A
G.13.6.2c)	Abrasion resistance test		N/A
<b>G.14</b>	<b>Coating on components terminals</b>		N/A
G.14.1	Requirements .....		N/A
<b>G.15</b>	<b>Liquid filled components</b>		N/A
G.15.1	General requirements		N/A
G.15.2	Requirements		N/A
G.15.3	Compliance and test methods		N/A
G.15.3.1	Hydrostatic pressure test		N/A
G.15.3.2	Creep resistance test		N/A
G.15.3.3	Tubing and fittings compatibility test		N/A
G.15.3.4	Vibration test		N/A
G.15.3.5	Thermal cycling test		N/A
G.15.3.6	Force test		N/A
G.15.4	Compliance		N/A
<b>G.16</b>	<b>IC including capacitor discharge function (ICX)</b>		N/A
a)	Humidity treatment in accordance with sc5.4.8 – 120 hours		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
b)	Impulse test using circuit 2 with $U_c =$ to transient voltage .....		N/A
C1)	Application of ac voltage at 110% of rated voltage for 2.5 minutes		N/A
C2)	Test voltage .....		—
D1)	10,000 cycles on and off using capacitor with smallest capacitance resistor with largest resistance specified by manufacturer		N/A
D2)	Capacitance .....		—
D3)	Resistance .....		—
<b>H</b>	<b>CRITERIA FOR TELEPHONE RINGING SIGNALS</b>		N/A
H.1	General		N/A
H.2	Method A		N/A
H.3	Method B		N/A
H.3.1	Ringing signal		N/A
H.3.1.1	Frequency (Hz) .....		—
H.3.1.2	Voltage (V) .....		—
H.3.1.3	Cadence; time (s) and voltage (V) .....		—
H.3.1.4	Single fault current (mA):.....		—
H.3.2	Tripping device and monitoring voltage.....		N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage complied with		N/A
H.3.2.2	Tripping device		N/A
H.3.2.3	Monitoring voltage (V) .....		—
<b>J</b>	<b>INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION</b>		N/A
	General requirements		N/A
<b>K</b>	<b>SAFETY INTERLOCKS</b>		N/A
K.1	General requirements		N/A
K.2	Components of safety interlock safeguard mechanism .....		N/A
K.3	Inadvertent change of operating mode		N/A
K.4	Interlock safeguard override		N/A
K.5	Fail-safe		N/A
	Compliance .....		N/A
K.6	Mechanically operated safety interlocks		N/A
K.6.1	Endurance requirement		N/A
K.6.2	Compliance and Test method .....		N/A
K.7	Interlock circuit isolation		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
K.7.1	Separation distance for contact gaps & interlock circuit elements (type and circuit location) .....		N/A
K.7.2	Overload test, Current (A) .....		N/A
K.7.3	Endurance test		N/A
K.7.4	Electric strength test .....		N/A
<b>L</b>	<b>DISCONNECT DEVICES</b>		N/A
L.1	General requirements		N/A
L.2	Permanently connected equipment		N/A
L.3	Parts that remain energized		N/A
L.4	Single phase equipment		N/A
L.5	Three-phase equipment		N/A
L.6	Switches as disconnect devices		N/A
L.7	Plugs as disconnect devices		N/A
L.8	Multiple power sources		N/A
<b>M</b>	<b>EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS</b>		N/A
M.1	General requirements		N/A
M.2	Safety of batteries and their cells		N/A
M.2.1	Requirements		N/A
M.2.2	Compliance and test method (identify method) ...:		N/A
M.3	Protection circuits		N/A
M.3.1	Requirements		N/A
M.3.2	Tests		N/A
	- Overcharging of a rechargeable battery		N/A
	- Unintentional charging of a non-rechargeable battery		N/A
	- Reverse charging of a rechargeable battery		N/A
	- Excessive discharging rate for any battery		N/A
M.3.3	Compliance .....		N/A
M.4	Additional safeguards for equipment containing secondary lithium battery		N/A
M.4.1	General		N/A
M.4.2	Charging safeguards		N/A
M.4.2.1	Charging operating limits		N/A
M.4.2.2a)	Charging voltage, current and temperature .....		—
M.4.2.2 b)	Single faults in charging circuitry.....		—
M.4.3	Fire Enclosure		N/A
M.4.4	Endurance of equipment containing a secondary lithium battery		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
M.4.4.2	Preparation		N/A
M.4.4.3	Drop and charge/discharge function tests		N/A
	Drop		N/A
	Charge		N/A
	Discharge		N/A
M.4.4.4	Charge-discharge cycle test		N/A
M.4.4.5	Result of charge-discharge cycle test		N/A
M.5	Risk of burn due to short circuit during carrying		N/A
M.5.1	Requirement		N/A
M.5.2	Compliance and Test Method (Test of P.2.3)		N/A
M.6	Prevention of short circuits and protection from other effects of electric current		N/A
M.6.1	Short circuits		N/A
M.6.1.1	General requirements		N/A
M.6.1.2	Test method to simulate an internal fault		N/A
M.6.1.3	Compliance (Specify M.6.1.2 or alternative method) .....		N/A
M.6.2	Leakage current (mA) .....		N/A
M.7	Risk of explosion from lead acid and NiCd batteries		N/A
M.7.1	Ventilation preventing explosive gas concentration		N/A
M.7.2	Compliance and test method		N/A
M.8	Protection against internal ignition from external spark sources of lead acid batteries		N/A
M.8.1	General requirements		N/A
M.8.2	Test method		N/A
M.8.2.1	General requirements		N/A
M.8.2.2	Estimation of hypothetical volume $V_z$ (m <sup>3</sup> /s).....		—
M.8.2.3	Correction factors .....		—
M.8.2.4	Calculation of distance $d$ (mm) .....		—
M.9	Preventing electrolyte spillage		N/A
M.9.1	Protection from electrolyte spillage		N/A
M.9.2	Tray for preventing electrolyte spillage		N/A
M.10	Instructions to prevent reasonably foreseeable misuse (Determination of compliance: inspection, data review; or abnormal testing) .....		N/A
<b>N</b>	<b>ELECTROCHEMICAL POTENTIALS</b>		<b>P</b>
	Metal(s) used.....	Complied.	—

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Clause	Requirement + Test	Result - Remark	Verdict
<b>O</b>	<b>MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES</b>		N/A
	Figures O.1 to O.20 of this Annex applied .....	Class III equipment.	—
<b>P</b>	<b>SAFEGUARDS AGAINST ENTRY OF FOREIGN OBJECTS AND SPILLAGE OF INTERNAL LIQUIDS</b>		N/A
P.1	General requirements		N/A
P.2.2	Safeguards against entry of foreign object		N/A
	Location and Dimensions (mm) .....		—
P.2.3	Safeguard against the consequences of entry of foreign object		N/A
P.2.3.1	Safeguards against the entry of a foreign object		N/A
	Openings in transportable equipment		N/A
	Transportable equipment with metalized plastic parts.....		N/A
P.2.3.2	Openings in transportable equipment in relation to metallized parts of a barrier or enclosure (identification of supplementary safeguard) .....		N/A
P.3	Safeguards against spillage of internal liquids		N/A
P.3.1	General requirements		N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Safeguards effectiveness		N/A
P.4	Metallized coatings and adhesive securing parts		N/A
P.4.2 a)	Conditioning testing		N/A
	Tc (°C) .....		—
	Tr (°C).....		—
	Ta (°C).....		—
P.4.2 b)	Abrasion testing .....		N/A
P.4.2 c)	Mechanical strength testing .....		N/A
<b>Q</b>	<b>CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING</b>		N/A
Q.1	Limited power sources	Supplied by approved AC/DC adapter complied with L.P.S.	N/A
Q.1.1 a)	Inherently limited output		N/A
Q.1.1 b)	Impedance limited output		N/A
	- Regulating network limited output under normal operating and simulated single fault condition		N/A
Q.1.1 c)	Overcurrent protective device limited output		N/A
Q.1.1 d)	IC current limiter complying with G.9		N/A
Q.1.2	Compliance and test method		N/A
Q.2	Test for external circuits – paired conductor cable		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Maximum output current (A) .....		—
	Current limiting method .....		—
<b>R</b>	<b>LIMITED SHORT CIRCUIT TEST</b>		<b>N/A</b>
R.1	General requirements	Class III equipment.	N/A
R.2	Determination of the overcurrent protective device and circuit		N/A
R.3	Test method Supply voltage (V) and short-circuit current (A). .....		N/A
<b>S</b>	<b>TESTS FOR RESISTANCE TO HEAT AND FIRE</b>		<b>N/A</b>
S.1	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W		N/A
	Samples, material.....		—
	Wall thickness (mm) .....		—
	Conditioning (°C) .....		—
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	- Material not consumed completely		N/A
	- Material extinguishes within 30s		N/A
	- No burning of layer or wrapping tissue		N/A
S.2	Flammability test for fire enclosure and fire barrier integrity		N/A
	Samples, material.....		—
	Wall thickness (mm) .....		—
	Conditioning (°C) .....		—
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	Test specimen does not show any additional hole		N/A
S.3	Flammability test for the bottom of a fire enclosure		N/A
	Samples, material.....		—
	Wall thickness (mm) .....		—
	Cheesecloth did not ignite		N/A
S.4	Flammability classification of materials		N/A
S.5	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W		N/A
	Samples, material.....		—
	Wall thickness (mm) .....		—
	Conditioning (test condition), (°C) .....		—

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Clause	Requirement + Test	Result - Remark	Verdict
	Test flame according to IEC 60695-11-20 with conditions as set out		N/A
	After every test specimen was not consumed completely		N/A
	After fifth flame application, flame extinguished within 1 min		N/A
<b>T</b>	<b>MECHANICAL STRENGTH TESTS</b>		<b>N/A</b>
T.1	General requirements		N/A
T.2	Steady force test, 10 N .....		N/A
T.3	Steady force test, 30 N .....		N/A
T.4	Steady force test, 100 N .....		N/A
T.5	Steady force test, 250 N .....		N/A
T.6	Enclosure impact test		N/A
	Fall test		N/A
	Swing test		N/A
T.7	Drop test .....		N/A
T.8	Stress relief test.....		N/A
T.9	Impact Test (glass)		N/A
T.9.1	General requirements		N/A
T.9.2	Impact test and compliance		N/A
	Impact energy (J) .....		—
	Height (m).....		—
T.10	Glass fragmentation test.....		N/A
T.11	Test for telescoping or rod antennas		N/A
	Torque value (Nm) .....		—
<b>U</b>	<b>MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFFECTS OF IMPLOSION</b>		<b>N/A</b>
U.1	General requirements		N/A
U.2	Compliance and test method for non-intrinsically protected CRTs		N/A
U.3	Protective Screen.....		N/A
<b>V</b>	<b>DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)</b>		<b>N/A</b>
V.1	Accessible parts of equipment		N/A
V.2	Accessible part criterion		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
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4.1.2	TABLE: List of critical components					P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>	
LCD Panel with LED backlight	TPV	TPM270*** (*can be 0-9, A-Z or blank for marketing purpose).	27.0 inch TFT LCD, Flat or curved (power consumption: 24.70W; LED array voltage: 42.0V)	--	Tested in equipment	
Alt.)	PANDA	LM270**** (* can be 0-9, A-Z or blank for marketing purpose)	27.0 inch TFT LCD, Flat or curved (power consumption: 35.94W; LED array voltage: 54.4V)	--	Tested in equipment	
Metal enclosure	Interchangeable	Interchangeable	Min. 0.5mm thickness	--	--	
Plastic enclosure	Lotte Advanced Materials Co Ltd	VH-0810(+); VH-0890(+); NH-1017(p); VE-0812(+); NH-1000T(+)(&); BF-0677(+); BF-0675(+); BF-0670(+); GC-0700(+); GC-0750(+); HS-7000(+); SD-0150(+); NE-1030(+); HR-1360(+); HG-0760(+); LX-0951(+); LX-0957(+) VE-1890(+) TP-1100(+) NH-1017T NH-1017(+) NH-1000T+ BF-0670F	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E115797 and tested with appliance	



IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	Chi Mei	PA-757(+); PH-88HT(+)	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E56070 and tested with appliance
Alt.	LG	AF312T1; GN-5001TF(#); LUPOY GN- 5001RF(T); LUPOY GN- 5008HF(#); HF350(#); HF380(#); SE885(#); SE750(#); XG568(#); XG569(#); HF388(#); LUPOY GP-1000; LUPOY GP- 1000(m)(#); LUPOY GP- 1000(#) AF-342T GN-5001TF GN-5001RF GP-1000L	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E67171 and tested with appliance
Alt.	Grand	D-150 D-1000A	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E88637 and tested with appliance

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	KingFa	4418; HF-606; HF-626; FRABS-518; JH960 6(M); FRHIPS-960; 5197; HIPS-5197; HIPS-4418; HIPS-3399; HIPS-CM(ee); HIPS-HG(ee); HIPS-510 (o); HIPS-550; CK-61(M) (##); RS-(hh)0; HP-120\6; ABS-600; ABS-122; GAR-322; GAR-332; GAR-220; H12; G360; GAR-011; CK-55(M) (##); CK-58(M) (##); GAR-011C; GAR-011(ww); CK-100 FRABS-518 RD-900 RS-900 GAR-011(L85) GAR-011(L65) GAR-011(HG6) RS-300 RS-400	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E171666 and tested with appliance
Alt.	TEIJIN	TN-7500(c); MN-3600H(#)	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E98529 and tested with appliance

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	Haier	HRABS-RS; HRABS-HG; CR-3002	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E230779 and tested with appliance
Alt.	STYROLUTION	495F GR2, 495F KG2, 495F GR21, 495F KG21, PC2065	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E108538 and tested with appliance
Alt.	STYRON	STYRON A-TECH 1400	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E162447 and tested with appliance
Alt.	TOTAL PETROCHEMIC ALS SOUTH EAST ASIA PTE LTD	3441; 260-XX	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E314268 and tested with appliance
Alt.	DOOSAN CORPORATION ELECTRO- MATERIALS BG	DS-1107A; DS-1202G; DS-7106	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E103670 and tested with appliance
Alt.	ORINKO (HEFEI) ADVANCED PLASTIC CO LTD	HIPS-2000; ABS-3070H	HB or better, thickness 1.6mm	UL 94 IEC 60695-11-10	UL E328304 and tested with appliance
Alt.	Basf	GP-35, GP-22	94HB	UL94	E41871
Alt.	WISTRON	GA35	94HB	UL94	E359575
Alt.	HINGLONG	HL-ABS- PCR35/65/85	94HB	UL94	E345434
Alt.	WOTE	2100	94HB	UL94	E310240
Alt.	GUO HENG	YOUHO(1302)(B), YOUHO(1303)(B) YOUHO(1312)(B),	94HB	UL94	E471190
Alt.	SABIC	C6600	94HB	UL94	E207780
Alt.	Chilin	PA-756S	94HB	UL94	E56070
Alt.	Bayer	FR2000, FR3005	94V-0	UL94	E41613

IEC 62368-1					
Clause	Requirement + Test		Result - Remark		Verdict
Alt.	UNIC	UR-3006+, UR-200+ (+: A to Z) UR-200+ (+: A to Z) YOUHO(#####)(Y)	94HB	UL94	E135175
Alt.	PONTEX	AFE5000N, AFE5100N, 9004BK	94HB	UL94	E205938
Alt.	CHI LIN	GA1535	94HB	UL94	E177071
Alt.	COVESTRO DEUTSCHLAN D AG	GF9011 MF	94V-0	UL94	E41613
Alt.	LOTTE ADVANCED MATERIALS CO LTD	HR-1360(+)	94V-HP	UL94	E115797
Alt.	Interchangeable	Interchangeable	HB or better, thickness 1.6mm	UL 94:1996+ Rev. 2010	UL
Fuse (F901,F801on converter board for L.P.S)	SAVE FUSETECH INC	SR-5 Series	T4AL, 250Vac	IEC/EN 60127-1 IEC/EN 60127-3	VDE 122052 UL E306920
Alt.	Littelfuse, Inc. Wickmann	382,392 Series	T4AL, 250Vac	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40018249 UL E67006
Alt.	Littelfuse, Inc. Wickmann	215 series	T4AL, 250Vac	IEC/EN 60127-1 IEC/EN 60127-3	VDE 126983 UL 67006
Alt.	SAVE FUSETECH INC	SS-5 Series	T4AL, 250Vac	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40015513 UL E306920
Alt.	Conquer	MET	T4AL, 250Vac	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40017157 UL E82636
Alt.	Conquer	MST	T4AL, 250Vac	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40017118 UL E82636
Alt.	Ever Island Electric Co., Ltd. and Walter Electric	2010 Serie(s)	T4AL, 250Vac	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40018781 UL E220181

IEC 62368-1					
Clause	Requirement + Test			Result - Remark	Verdict
Alt.	Ever Island Electric Co., Ltd. and Walter Electric	2000T Series	T4AL, 250Vac	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40018790 UL E220181
Alt.	Ever Island Electric Co., Ltd. and Walter Electric	2010T Series	T4AL, 250Vac	IEC/EN 60127-1 IEC/EN 60127-3	VDE 40018790 UL E220181
Adapter	TPV	ADPC2090	IP: 100-240V~, 50-60Hz, 1.3A. OP: 20Vdc, 4.5A, 40°C, Class I, altitude operating: 5000 m	IEC 60950-1: 2005+A1+A2	CB by TUV (certificate no. JPTUV-089354)
Base stand	Samsung SDI	SD-0150(+)	HB or better	UL 94 IEC 60695-11-10	UL E115797 and tested with appliance
Alt.	Interchangeable	Interchangeable	HB or better	UL 94:1996+ Rev. 2010	UL
PCB	Interchangeable	Interchangeable	V-1 or better Min. 105°C, min. 1.34 mm thickness	UL 796:2010	UL
Supplementary information: 1) Provided evidence ensures the agreed level of compliance. See OD-CB2039. 2) Description line content is optional. Main line description needs to clearly detail the component used for testing					

<b>4.8.4, 4.8.5</b>	<b>TABLE: Lithium coin/button cell batteries mechanical tests</b>			N/A
<b>(The following mechanical tests are conducted in the sequence noted.)</b>				
<b>4.8.4.2</b>	<b>TABLE: Stress Relief test</b>			—
	<b>Part</b>	<b>Material</b>	<b>Oven Temperature (°C)</b>	<b>Comments</b>
<b>4.8.4.3</b>	<b>TABLE: Battery replacement test</b>			—
	Battery part no. .... :			—
	Battery Installation/withdrawal		Battery Installation/Removal Cycle	Comments
			1	
			2	
			3	
			4	
			5	

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
		6	
		7	
		8	
		9	
		10	
<b>4.8.4.4</b>	<b>TABLE: Drop test</b>		—
Impact Area	Drop Distance	Drop No.	Observations
		2	
<b>4.8.4.5</b>	<b>TABLE: Impact</b>		—
Impacts per surface	Surface tested	Impact energy (Nm)	Comments
<b>4.8.4.6</b>	<b>TABLE: Crush test</b>		—
Test position	Surface tested	Crushing Force (N)	Duration force applied (s)
Supplementary information:			

<b>4.8.5</b>	<b>TABLE: Lithium coin/button cell batteries mechanical test result</b>			N/A
Test position	Surface tested	Force (N)	Duration force applied (s)	
Supplementary information:				

<b>5.2</b>	<b>Table: Classification of electrical energy sources</b>						P
5.2.2.2 – Steady State Voltage and Current conditions							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				U (Vrms or Vpk)	I (A <sub>pk</sub> or A <sub>rms</sub> )	Hz	
1	240V, 60Hz	CN802 pin 5,6 to earth	Normal	30.0Vdc	--	--	ES1
			Abnormal	30.0Vdc	--	--	
			Single fault – D801 short	0Vdc	--	--	
5.2.2.3 - Capacitance Limits							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters		ES Class	
				Capacitance, nF	U <sub>pk</sub> (V)		
--	--	--	Normal	--	--	--	

IEC 62368-1							
Clause	Requirement + Test			Result - Remark			Verdict
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	
5.2.2.4 - Single Pulses							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Duration (ms)	Upk (V)	lpk (mA)	
--	--	--	Normal	--	--	--	--
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	
5.2.2.5 - Repetitive Pulses							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Off time (ms)	Upk (V)	lpk (mA)	
--	--	--	Normal	--	--	--	--
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	
Test Conditions: Normal – Max. normal load Supplementary information: SC=Short Circuit, OC=Open Circuit							

5.4.1.4, 6.3.2, 9.0, B.2.6	TABLE: Temperature measurements						P
	Supply voltage (V) .....	20.0Vdc Horizontal	20.0Vdc Vertical	--	--	--	—
	Ambient T <sub>min</sub> (°C) .....	24.1	23.0	--	--	--	—
	Ambient T <sub>max</sub> (°C) .....	24.1	23.0	--	--	--	—
	T <sub>ma</sub> (°C) .....	40.0	40.0	--	--	--	—
Maximum measured temperature T of part/at:			T (°C)			Allowed T <sub>max</sub> (°C)	
Tested with construction 1 HDMI mode							

IEC 62368-1							
Clause	Requirement + Test			Result - Remark			Verdict
L801 coil(on 715GA907 board)	45.4	46.9	--	--			88.0
L801 core(on 715GA907 board)	44.5	45.0	--	--			88.0
L981 coil(on 715GA907 board)	39.8	41.0	--	--			88.0
DC inlet CN7981 (on 715GA907 board)	36.0	39.9	--	--			53.0
C801 body(on 715GA907 board)	40.0	44.6	--	--			88.0
C983 body(on 715GA907 board)	41.3	41.2	--	--			88.0
C809 body(on 715GA907 board)	47.6	45.4	--	--			88.0
C816 body(on 715GA907 board)	49.0	45.1	--	--			88.0
PCB near Main IC (on main board)	50.9	48.8	--	--			88.0
Ambient	24.1	23.0	--	--			--
Touch temperature for accessible part under normal condition							
Plastic enclosure outside	27.5	26.6	--	--			77.0
Metal enclosure	34.1	33.3	--	--			60.0
Panel surface	28.4	26.7	--	--			77.0
Button	27.3	26.0	--	--			60.0
Ambient	24.1	23.0	--	--			--
Supplementary information:							
Temperature T of winding:	t <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	t <sub>2</sub> (°C)	R <sub>2</sub> (Ω)	T (°C)	Allowed T <sub>max</sub> (°C)	Insulation class
Supplementary information:							
Note 1: T <sub>ma</sub> should be considered as directed by applicable requirement							
Note 2: T <sub>ma</sub> is not included in assessment of Touch Temperatures (Clause 9)							

5.4.1.10.2	TABLE: Vicat softening temperature of thermoplastics						N/A
Penetration (mm).....:							—
Object/ Part No./Material	Manufacturer/t rademark		T softening (°C)				
Supplementary information:							

5.4.1.10.3	TABLE: Ball pressure test of thermoplastics				N/A
Allowed impression diameter (mm).....:	≤ 2 mm				—
Object/Part No./Material	Manufacturer/trademark	Test temperature (°C)	Impression diameter (mm)		
--	--	--	--		
Supplementary information:					



IEC 62368-1							
Clause	Requirement + Test				Result - Remark		Verdict
<b>5.4.2.2, 5.4.2.4 and 5.4.3</b>	<b>TABLE: Minimum Clearances/Creepage distance</b>						N/A
Clearance (cl) and creepage distance (cr) at/of/between:	Up (V)	U r.m.s. (V)	Frequency (kHz)	Required cl (mm)	cl (mm)	Required cr (mm)	cr (mm)
Supplementary information:							

<b>5.4.2.3</b>	<b>TABLE: Minimum Clearances distances using required withstand voltage</b>						N/A
	<b>Overvoltage Category (OV):</b>					--	
	<b>Pollution Degree:</b>					--	
Clearance distanced between:	Required withstand voltage		Required cl (mm)		Measured cl (mm)		
Supplementary information:							

<b>5.4.2.4</b>	<b>TABLE: Clearances based on electric strength test</b>						N/A
Test voltage applied between:	Required cl (mm)		Test voltage (kV) peak/ r.m.s. / d.c.		Breakdown Yes / No		
Supplementary information:							

<b>5.4.4.2, 5.4.4.5 c) 5.4.4.9</b>	<b>TABLE: Distance through insulation measurements</b>					N/A
Distance through insulation di at/of:	Peak voltage (V)	Frequency (kHz)	Material	Required DTI (mm)	DTI (mm)	

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

5.4.9	TABLE: Electric strength tests			N/A
Test voltage applied between:	Voltage shape (AC, DC)	Test voltage (V)	Breakdown Yes / No	
Functional:				
Basic/supplementary:				
Reinforced:				
Routine Tests:				
Supplementary information:				

5.5.2.2	TABLE: Stored discharge on capacitors					N/A
Supply Voltage (V), Hz	Test Location	Operating Condition (N, S)	Switch position On or off	Measured Voltage (after 2 seconds)	ES Classification	
Supplementary information:						
X-capacitors installed for testing are:						
<input type="checkbox"/> bleeding resistor rating:						
<input type="checkbox"/> ICX:						
Notes:						
A. Test Location:						
Phase to Neutral; Phase to Phase; Phase to Earth; and/or Neutral to Earth						
B. Operating condition abbreviations:						
N – Normal operating condition (e.g., normal operation, or open fuse); S –Single fault condition						

5.6.6.2	TABLE: Resistance of protective conductors and terminations				N/A
Accessible part	Test current (A)	Duration (min)	Voltage drop (V)	Resistance (mΩ)	

IEC 62368-1				
Clause	Requirement + Test		Result - Remark	Verdict
Supplementary information:				

5.7.2.2, 5.7.4	TABLE: Earthed accessible conductive part		N/A
Supply voltage .....			—
Location	Test conditions specified in 6.1 of IEC 60990 or Fault Condition No in IEC 60990 clause 6.2.2.1 through 6.2.2.8, except for 6.2.2.7		Touch current (mA)
	1		
	2*		--
	3		--
	4		--
	5		--
	6		--
	8		--
Supplementary Information:			
Notes:			
[1] Supply voltage is the anticipated maximum Touch Voltage			
[2] Earthed neutral conductor [Voltage differences less than 1% or more]			
[3] Specify method used for measurement as described in IEC 60990 sub-clause 4.3			
[4] IEC60990, sub-clause 6.2.2.7, Fault 7 not applicable.			
[5] (*) IEC60990, sub-clause 6.2.2.2 is not applicable if switch or disconnect device (e.g., appliance coupler) provided.			

6.2.2	TABLE: Electrical power sources (PS) measurements for classification				P
Source	Description	Measurement	Max Power after 3 s	Max Power after 5 s <sup>*</sup>	PS Classification
A	DC input on board	Power (W) .....	--	--	PS2 (See Table Annex Q.1)
		VA (V) .....	--	--	
		IA (A) .....	--	--	
Supplementary Information:					
(*) Measurement taken only when limits at 3 seconds exceed PS1 limits					

6.2.3.1	Table: Determination of Potential Ignition Sources (Arcing PIS)				N/A
Location	Open circuit voltage After 3 s (V <sub>p</sub> )	Measured r.m.s current (I <sub>rms</sub> )	Calculated value (V <sub>p</sub> x I <sub>rms</sub> )	Arcing PIS? Yes / No	

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

- 1) An Arcing PIS requires a minimum of 50 V (peak) a.c. or d.c. An Arcing PIS is established when the product of the open circuit voltage ( $V_p$ ) and normal operating condition rms current ( $I_{rms}$ ) is greater than 15.

6.2.3.2	Table: Determination of Potential Ignition Sources (Resistive PIS)				P
Circuit Location (x-y)	Operating Condition (Normal / Describe Single Fault)	Measured wattage or VA During first 30 s (W / VA)	Measured wattage or VA After 30 s (W / VA)	Protective Circuit, Regulator, or PTC Operated? Yes / No (Comment)	Resistive PIS? Yes/No
3)	3)	3)	3)	--	Yes

Supplementary information:

- 1) A combination of voltmeter, VA and ammeter IA may be used instead of a wattmeter. If a separate voltmeter and ammeter are used, the product of ( $VA \times IA$ ) is used to determine Resistive PIS classification.
- 2) A Resistive PIS: (a) dissipates more than 15 W, measured after 30 s of normal operation, or (b) under single fault conditions has either a power exceeding 100 W measured immediately after the introduction of the fault if electronic circuits, regulators or PTC devices are used, or has an available power exceeding 15 W measured 30 s after introduction of the fault.
- 3) All components located within the EUT are considered as resistive PIS.

8.5.5	TABLE: High Pressure Lamp			N/A
Description	Values		Energy Source Classification	
Lamp type.....:			—	
Manufacturer.....:			—	
Cat no.....:			—	
Pressure (cold) (MPa).....:			MS_	
Pressure (operating) (MPa).....:			MS_	
Operating time (minutes).....:			—	
Explosion method.....:			—	
Max particle length escaping enclosure (mm) ..:			MS_	
Max particle length beyond 1 m (mm).....:			MS_	
Overall result.....:				

Supplementary information:

B.2.5	TABLE: Input test						P
U (V)	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
<b>Test with construction 1</b>							
HDMI mode							
20.0	2.62	4.50	52.4	--	--	--	Max. normal load condition.
DP mode							
20.0	2.60	4.50	52.0	--	--	--	Max. normal load condition.

IEC 62368-1				
Clause	Requirement + Test		Result - Remark	Verdict

Test with construction 2							
HDMI mode							
20.0	2.50	4.50	50.0	--	--	--	Max. normal load condition.
DP mode							
20.0	2.45	4.50	49.9	--	--	--	Max. normal load condition.
Supplementary information:							
1. Maximum normal load: maximum brightness, maximum contrast, full white screen; speakers were loaded with 1KHz sinusoidal signal and turned to maximum volume; each USB 3.0 port was loaded 5V/0.9A; USB fast charging port loaded 5V/1.5A. 2. Maximum normal load: maximum brightness, maximum contrast, full white screen; speakers were loaded with 1KHz sinusoidal signal and turned to maximum volume. 3. If not specified particularly, HDMI mode was used for all other tests.							

B.3	TABLE: Abnormal operating condition tests							N/A
Ambient temperature (°C) .....							—	
Power source for EUT: Manufacturer, model/type, output rating ...:							—	
Component No.	Abnormal Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation
Supplementary information: Test table is provided to record abnormal and fault conditions for all applicable energy sources including Thermal burn injury. Column “Abnormal/Fault.” Specify if test condition by indicating “Abnormal” then the condition for a Clause B.3 test or “Single Fault” then the condition for Clause B.4.								

B.4	TABLE: Fault condition tests							P
Ambient temperature (°C) .....					See below		—	
Power source for EUT: Manufacturer, model/type, output rating ...:					See table 4.1.2		—	
Component No.	Fault Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation

IEC 62368-1								
Clause	Requirement + Test				Result - Remark			Verdict
Q801 pin2-3	Shorted	20.0Vdc	5 min	--	--	--	--	Unit shut down, no hazards.
D801	Shorted	20.0Vdc	5 min	--	--	--	--	Unit shut down, no hazards.
C991	Shorted	20.0Vdc	5 min	--	--	--	--	Unit shut down, no hazards.
C983	Shorted	20.0Vdc	5 min	--	--	--	--	Unit shut down, no hazards.
Supplementary information: 1) SC=Short circuit, OC=Open circuit, OL=Over load								

Annex M	TABLE: Batteries								N/A
The tests of Annex M are applicable only when appropriate battery data is not available									
Is it possible to install the battery in a reverse polarity position? .....									
	Non-rechargeable batteries			Rechargeable batteries					
	Discharging		Un-intentional charging	Charging		Discharging		Reversed charging	
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Max. current during normal condition									
Max. current during fault condition									
Test results:									
- Chemical leaks								Verdict	
- Explosion of the battery									
- Emission of flame or expulsion of molten metal									
- Electric strength tests of equipment after completion of tests									
Supplementary information:									

Annex M.4	Table: Additional safeguards for equipment containing secondary lithium batteries						N/A
Battery/Cell No.	Test conditions	Measurements			Observation		
		U	I (A)	Temp (C)			

IEC 62368-1					
Clause	Requirement + Test			Result - Remark	Verdict
	Normal				
	Abnormal				
	Single fault –SC/OC				
	Normal				
	Abnormal				
	Single fault – SC/OC				
Supplementary information:					
Battery identification	Charging at T <sub>lowest</sub> (°C)	Observation	Charging at T <sub>highest</sub> (°C)	Observation	
Supplementary information:					

Annex Q.1	TABLE: Circuits intended for interconnection with building wiring (LPS)					P
Note: Measured UOC (V) with all load circuits disconnected:						
Output Circuit	Components	U <sub>oc</sub> (V)	I <sub>sc</sub> (A)		S (VA)	
			Meas.	Limit	Meas.	Limit
<b>Circuit output tested: DC input of DC converter board <sup>2)</sup></b>						
See above	Normal condition	20.4	6.3	1000/U <sub>oc</sub> = 40	121	250
Supplementary Information:						
1. Input Voltage is 20.0Vdc.						
2. DCIN inputs with fuses F901 and F801 that will break the circuit within 120 s with a current equal to 210%. Current limit of table 2C reduced to breaking capacity of the fuse (40A).						

T.2, T.3, T.4, T.5	TABLE: Steady force test					N/A
Part/Location	Material	Thickness (mm)	Force (N)	Test Duration (sec)	Observation	
Supplementary information:						

T.6, T.9	TABLE: Impact tests				N/A
Part/Location	Material	Thickness (mm)	Vertical distance (mm)	Observation	
Supplementary information:					

IEC 62368-1					
Clause	Requirement + Test			Result - Remark	Verdict
<b>T.7</b>	<b>TABLE: Drop tests</b>				<b>N/A</b>
Part/Location	Material	Thickness (mm)	Drop Height (mm)	Observation	
Supplementary information:					

IEC 62368-1						
Clause	Requirement + Test					Verdict
<b>T.8</b>	<b>TABLE: Stress relief test</b>					<b>N/A</b>
Part/Location	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observation	
Supplementary information:						



**List of test equipment used:**

A completed list of used test equipment shall be provided in the Test Reports when a Manufacturer Testing Laboratory according to TMP/CTF stage 1 or WMT/CTF stage 2 procedure has been used.

Clause	Measurement / testing	Testing / measuring equipment / material used	Range used	Calibration date

Information:

"No listing of test equipment used necessary for chosen test procedure".

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

### Photos for construction 1:



Figure 1. Front view



Figure 2. Rear view

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)



Figure 3. Rear view

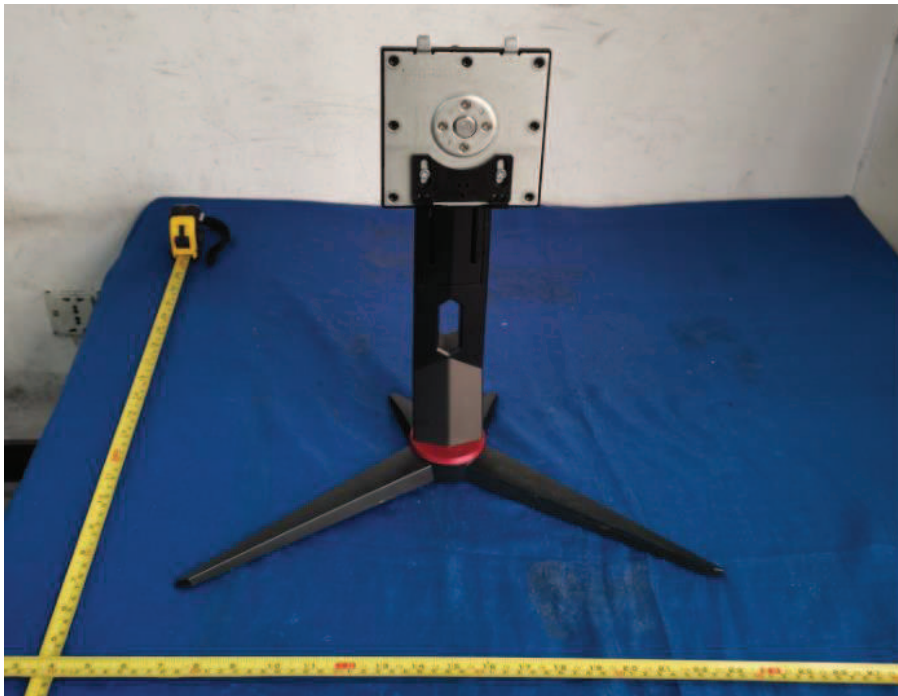


Figure 4. Base stand

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

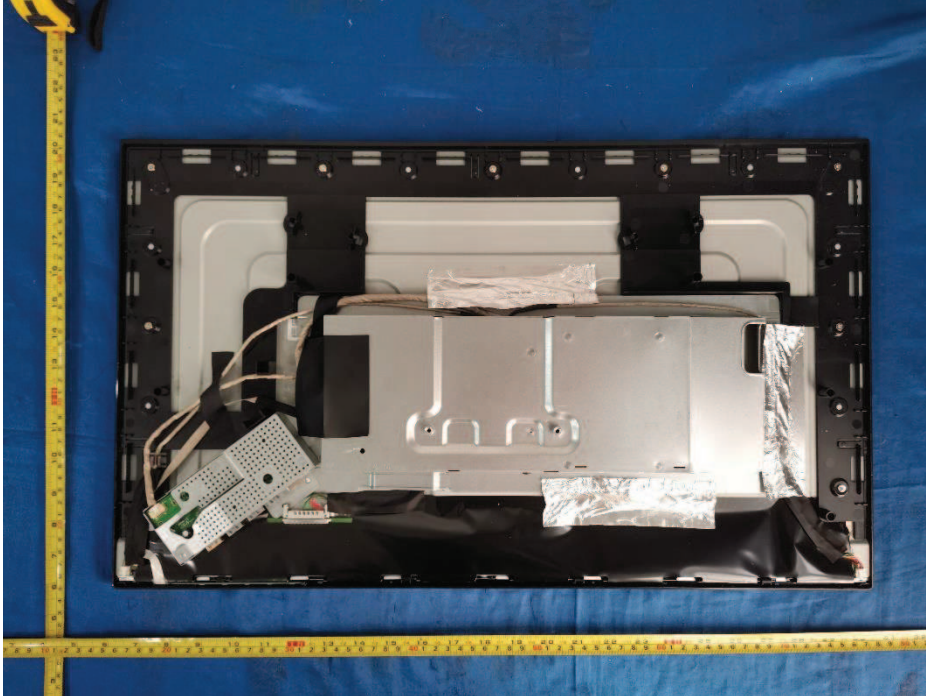


Figure 5. Internal view

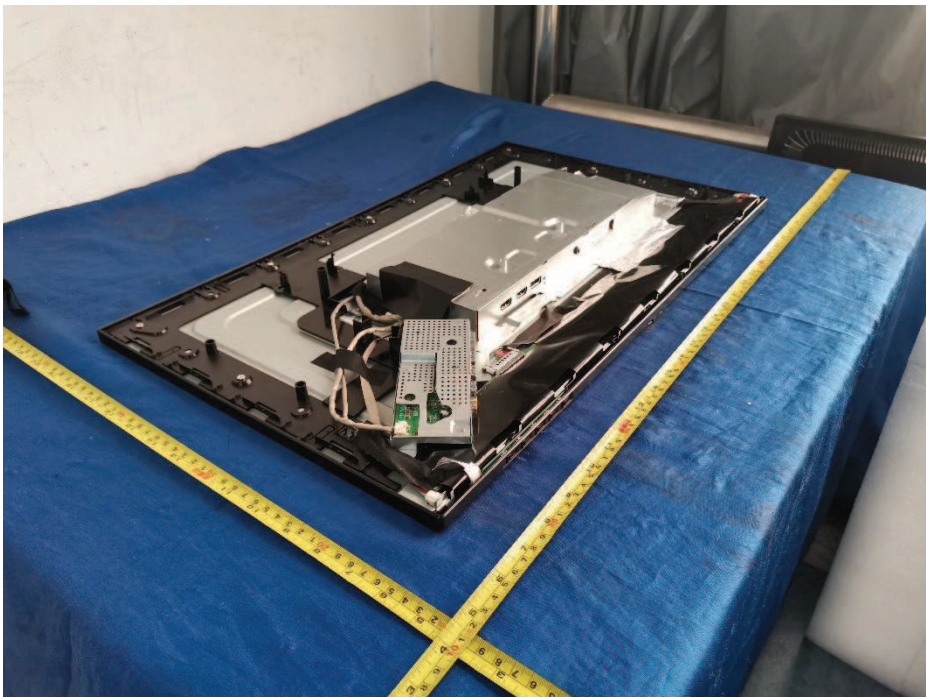


Figure 6. Internal view

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

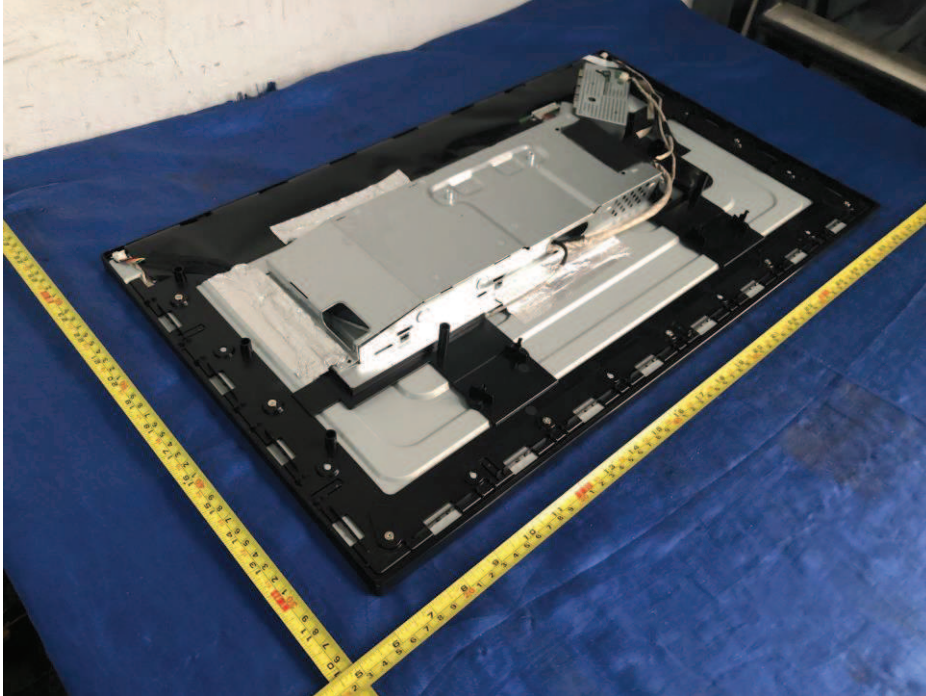


Figure 7. Internal view

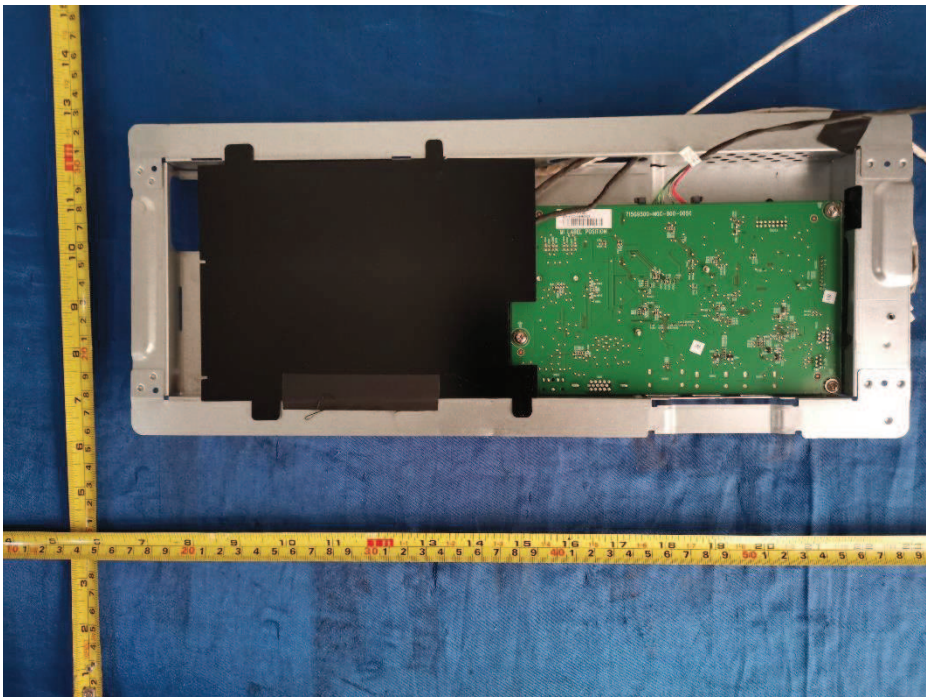


Figure 8. Internal view of enclosure for DC converter board

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U , \*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

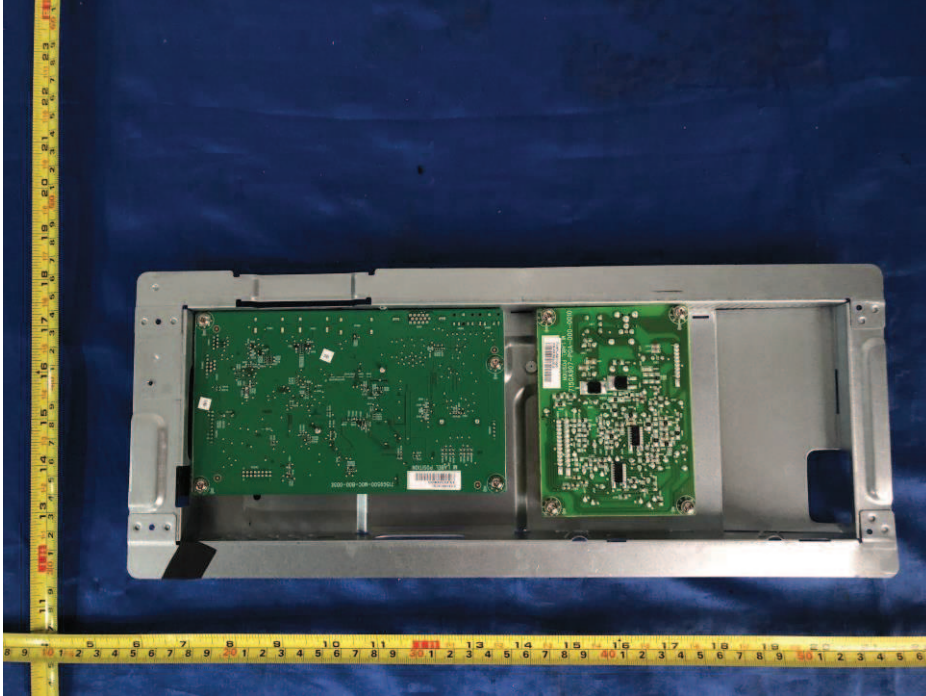


Figure 9. Internal view of enclosure for DC converter board

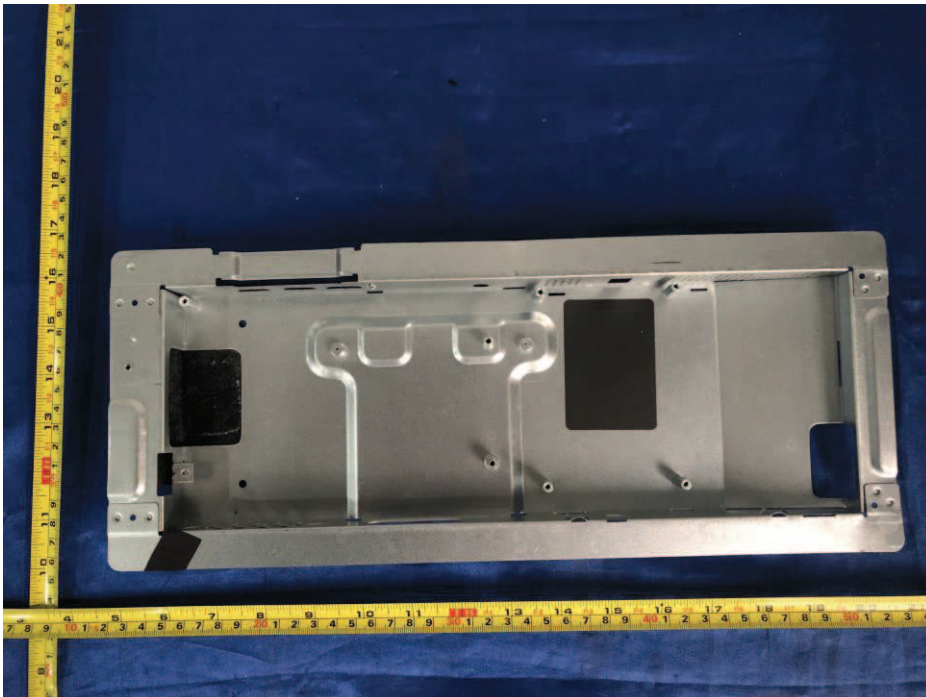


Figure 10. Internal view of enclosure for DC converter board

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

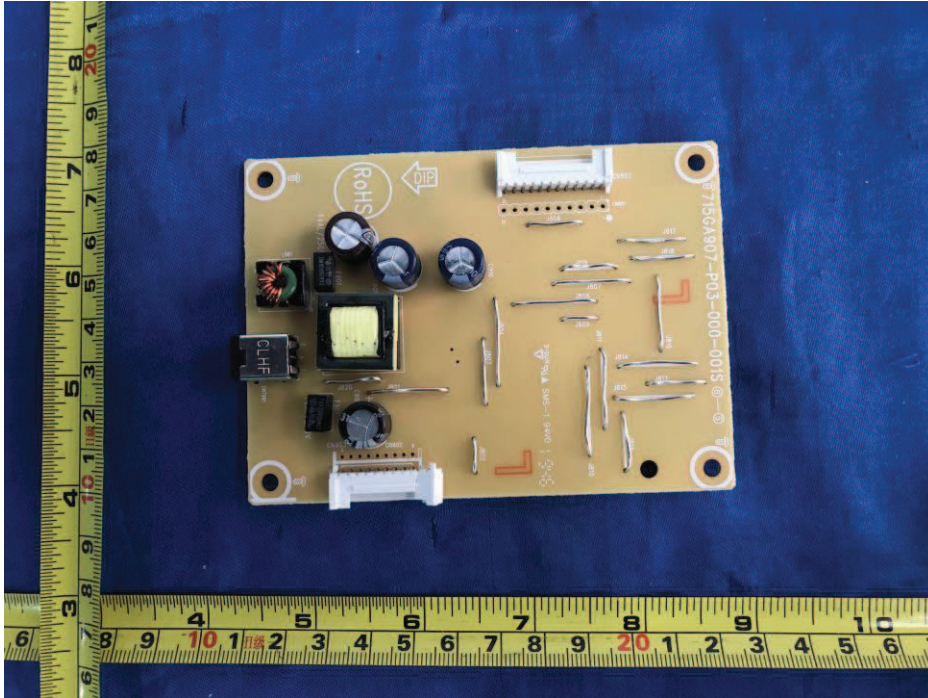


Figure 11. DC converter board 715GA907

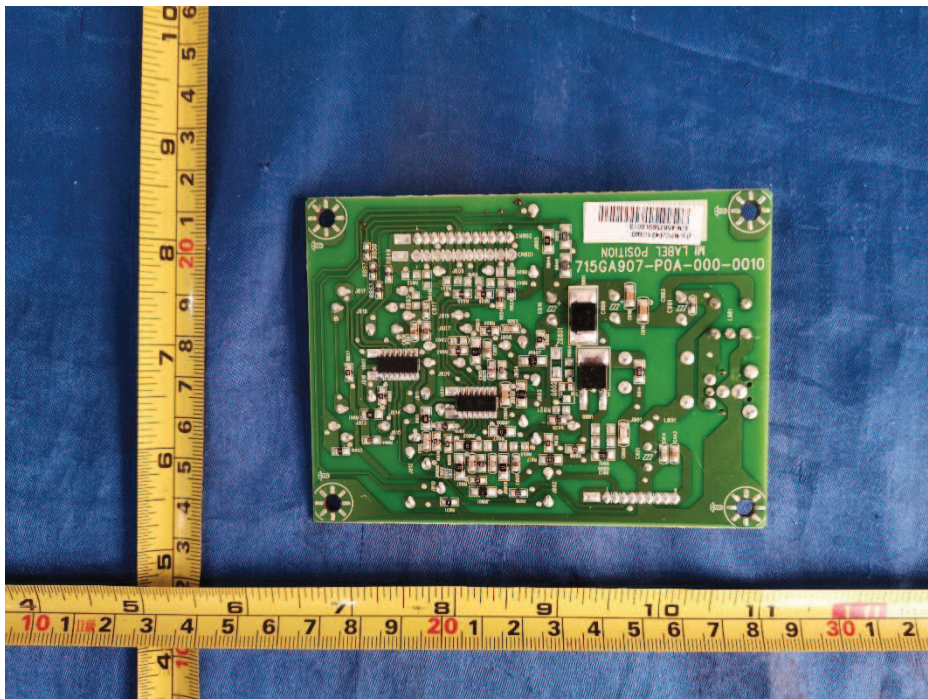


Figure 12. DC converter board 715GA907

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

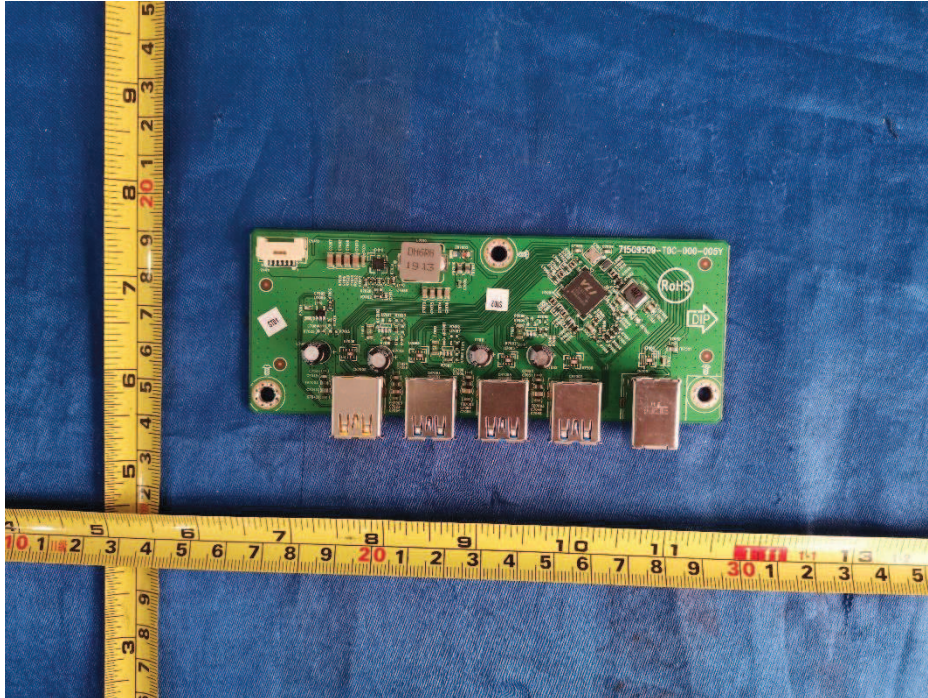


Figure 13. USB board 715G9509

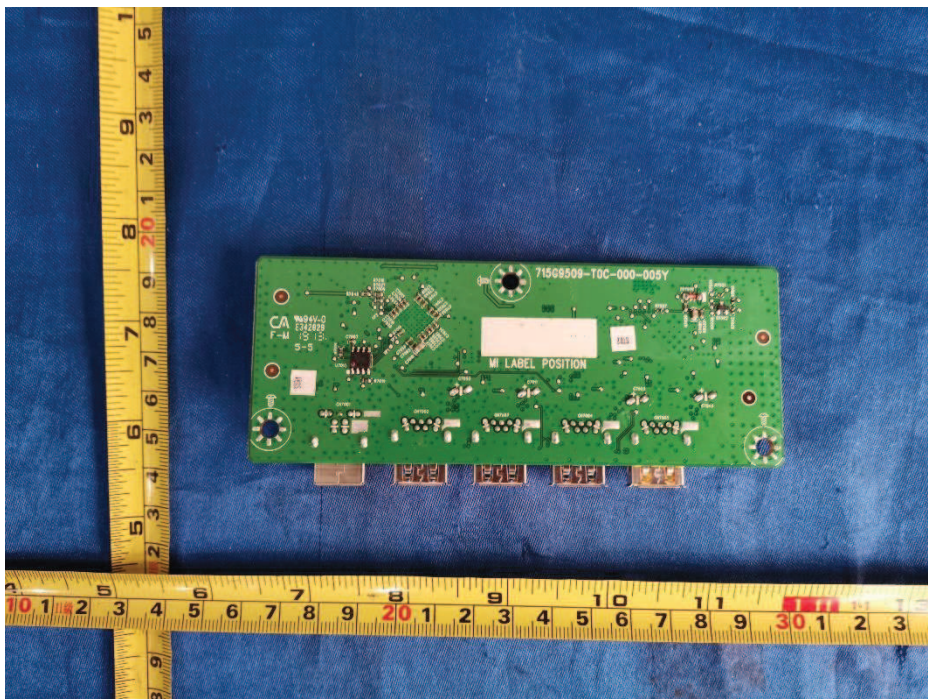


Figure 14. USB board 715G9509



Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

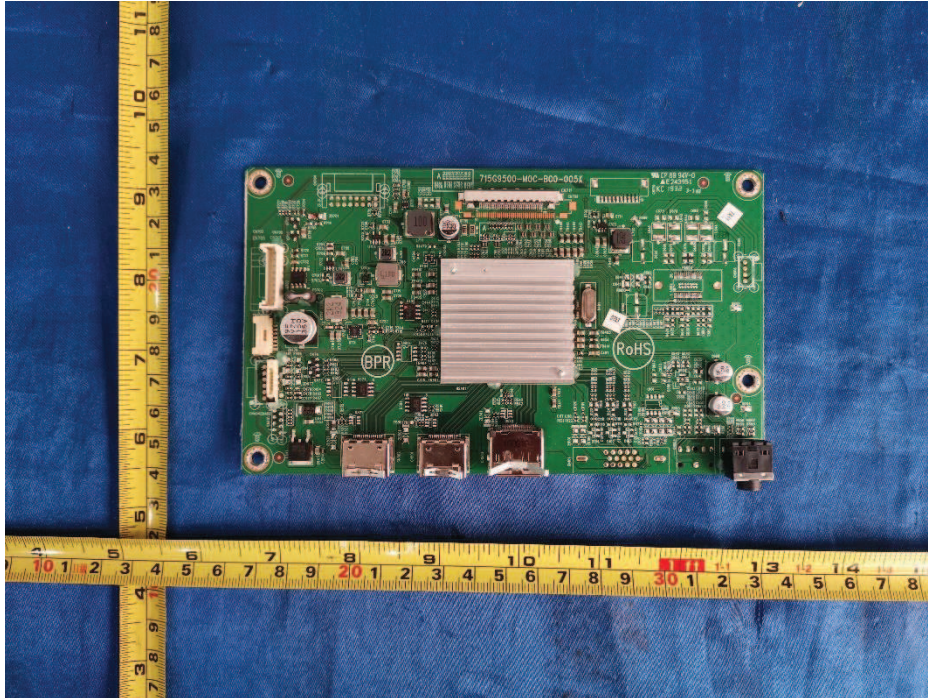


Figure 15. Internal view of enclosure for main board

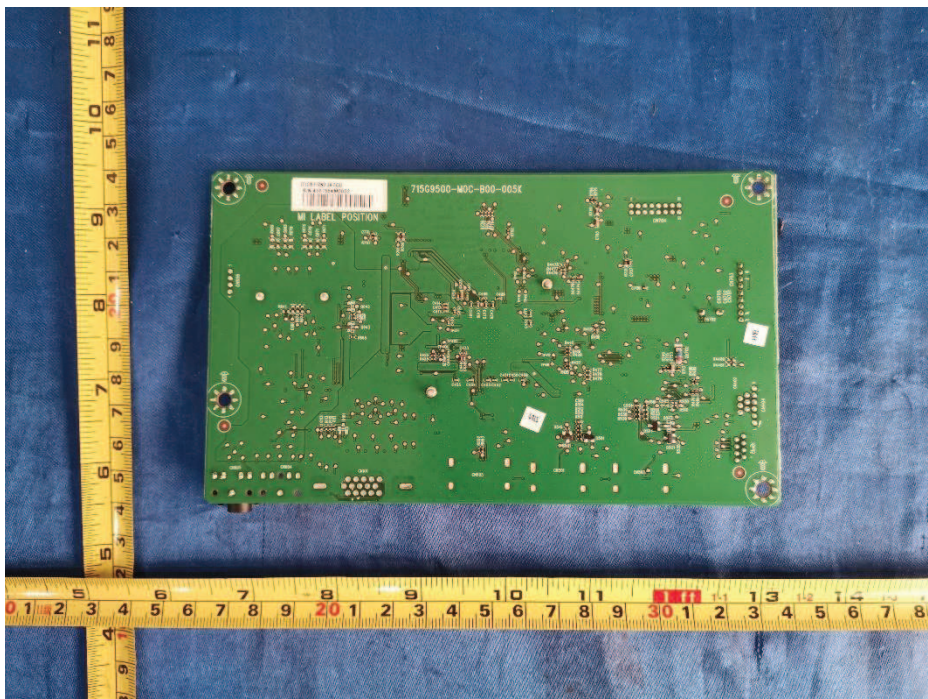


Figure 16. Main board 715G9960

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

### Photos for construction 2:



Figure 17. Front view



Figure 18. Rear view

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)



Figure 19. Internal view

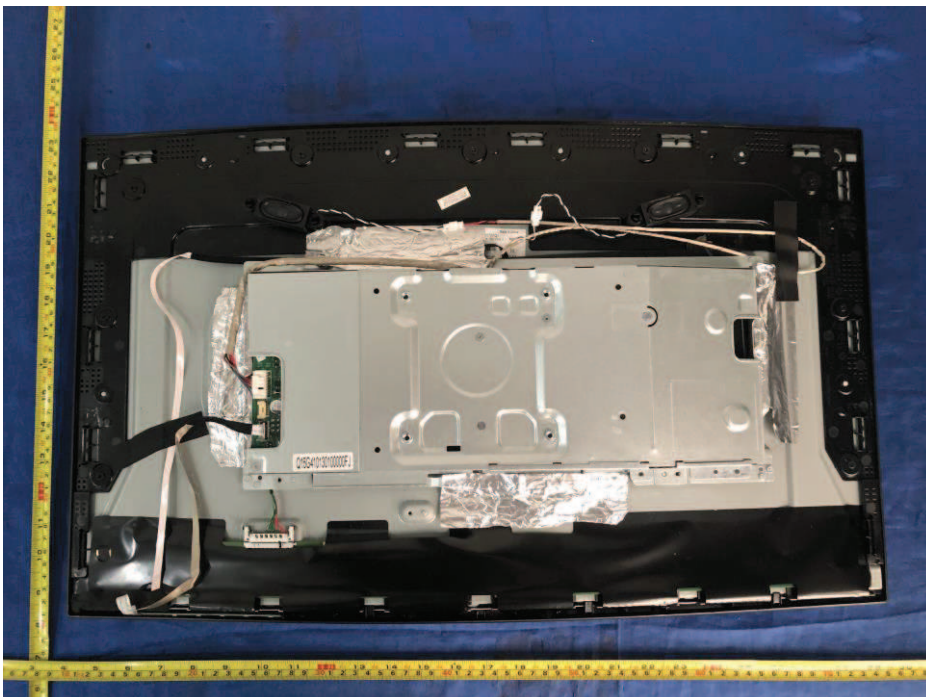


Figure 20. Internal view

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

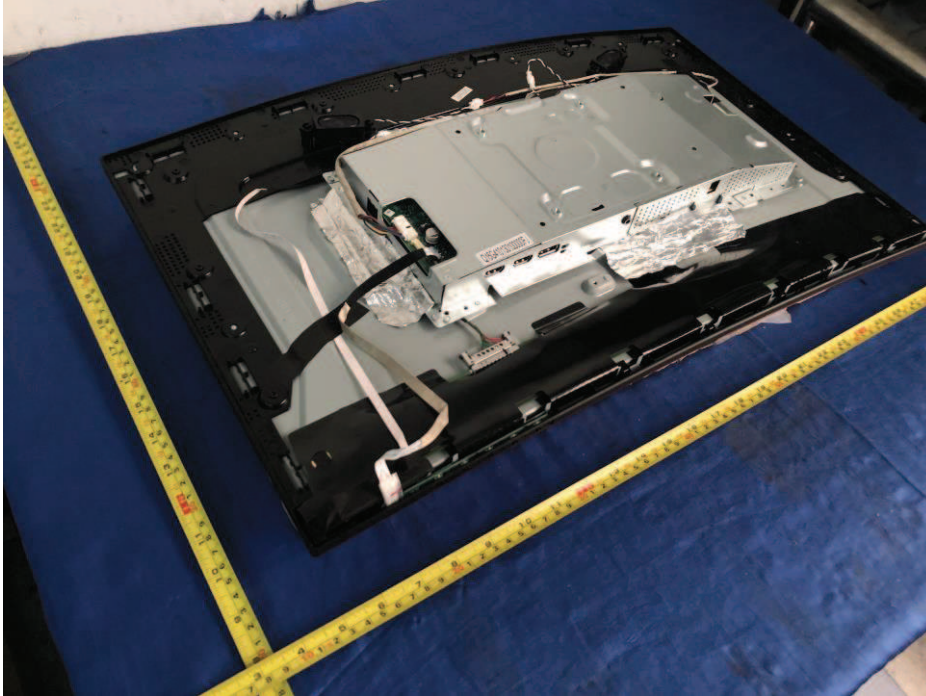


Figure 21. Internal view

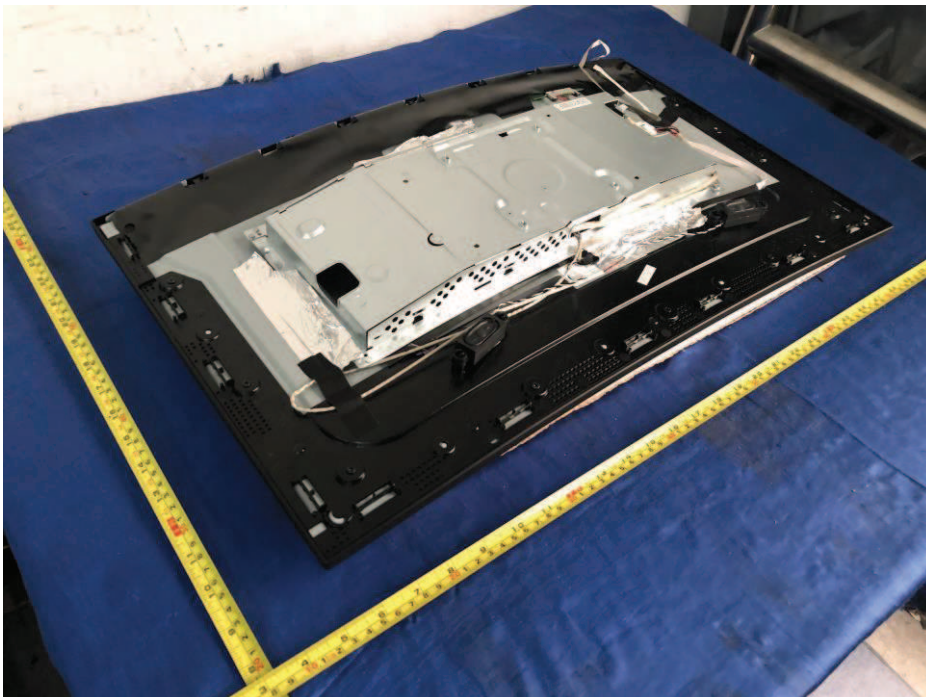


Figure 22. Internal view

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)



Figure 23. Internal view of enclosure for DC converter board

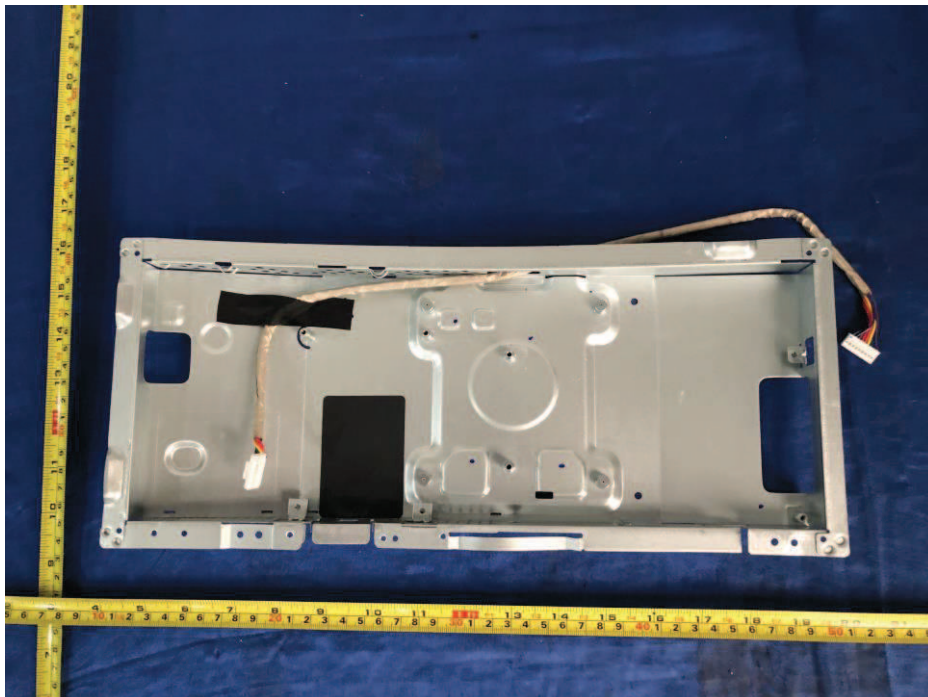


Figure 24. Internal view of enclosure for DC converter board

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

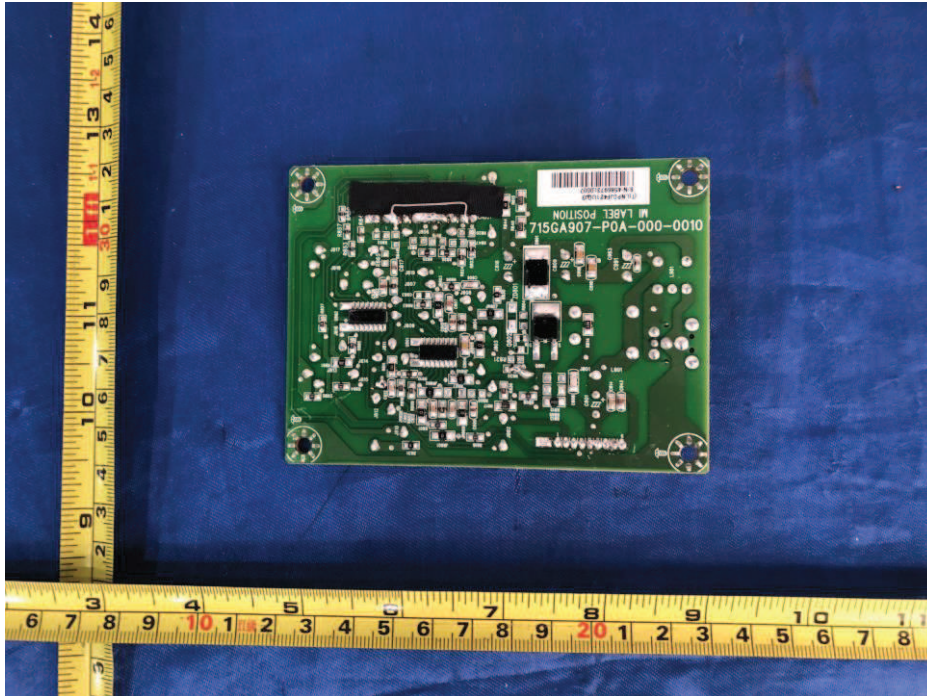


Figure 25. DC converter board 715GA907

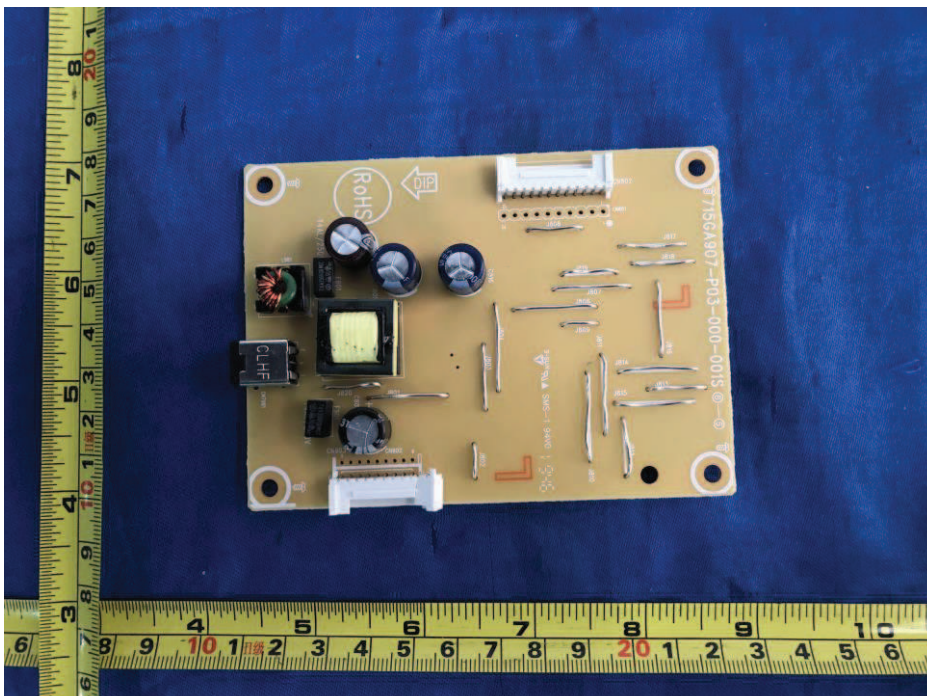


Figure 26. DC converter board 715GA907

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)



Figure 27. Main board 715G9960



Figure 28. Main board 715G9960

Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U , \*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

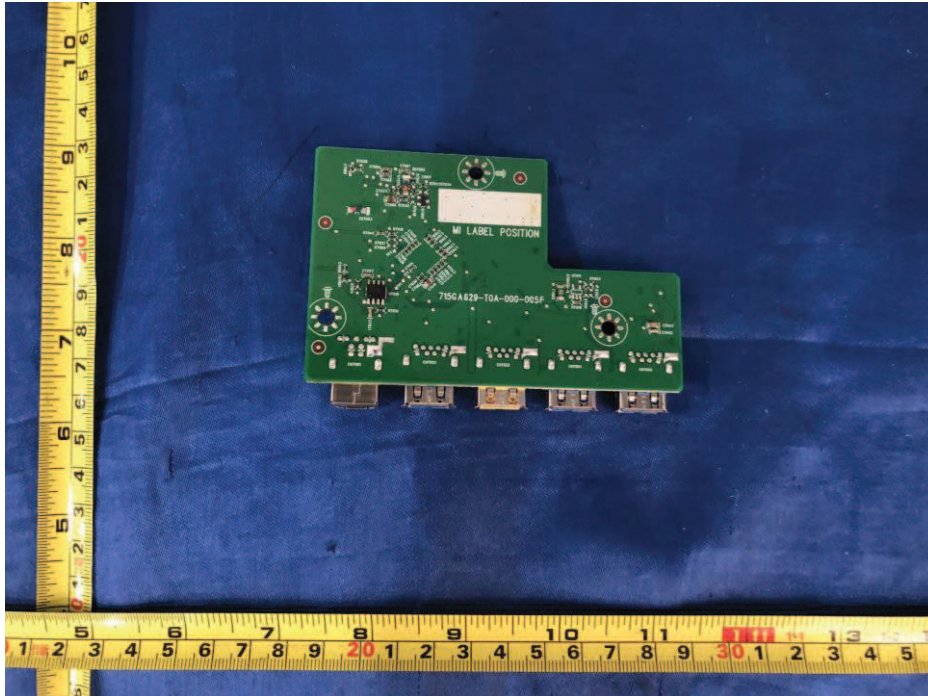


Figure 29. USB board 715GA629

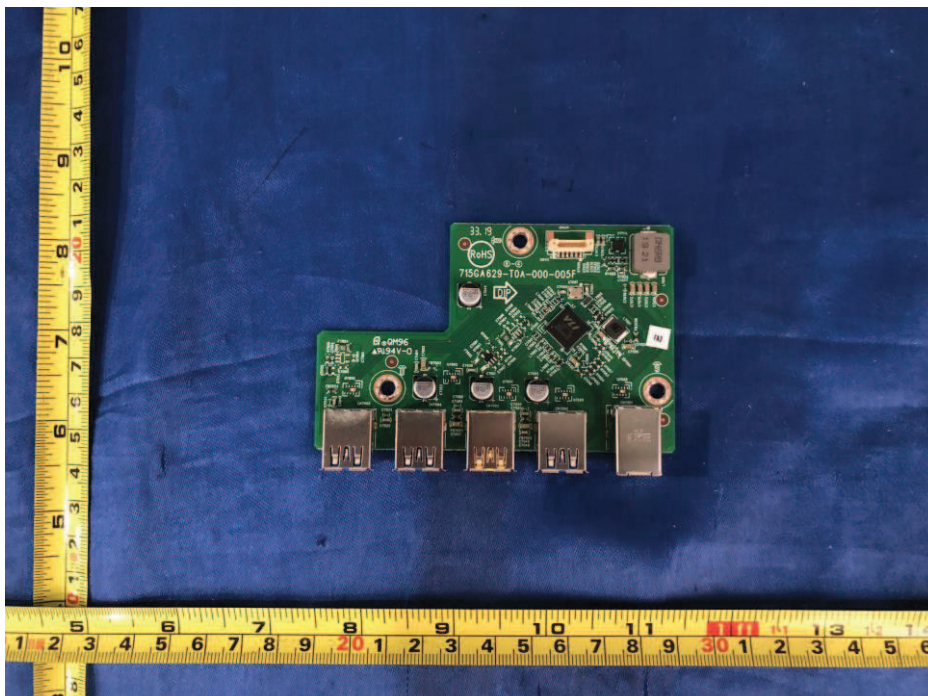


Figure 30. USB board 715GA629



Product: LCD MONITOR (LED backlight)

Type Designation: Q27G2U ,\*\*27G2\*\*\*\*\* (\* can be 0-9, A-Z, a-z, -, \, /, + or blank, represent different enclosure colour for marketing purpose)

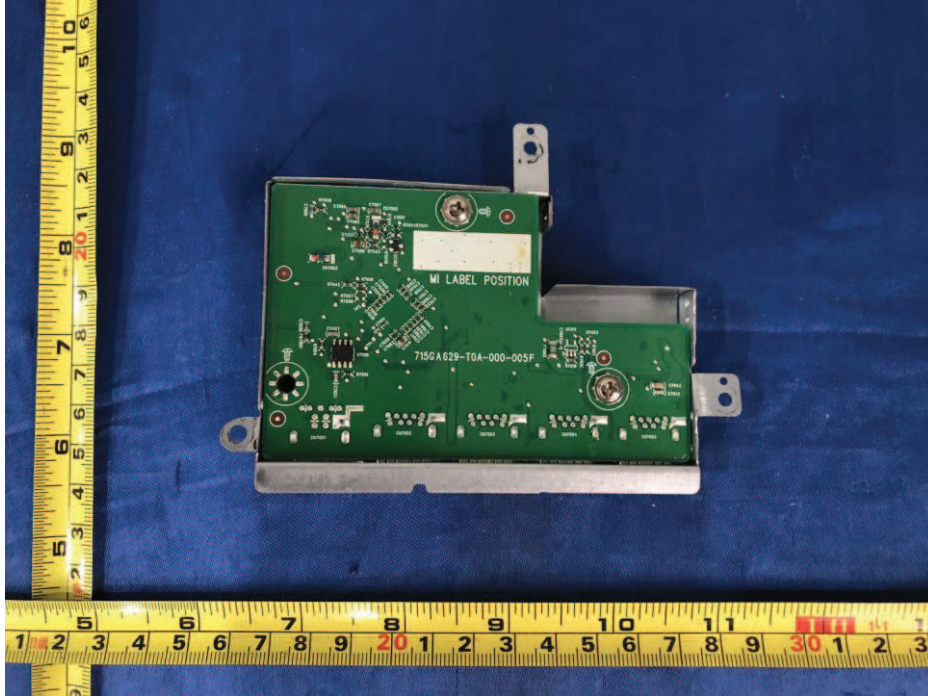


Figure 31. USB board 715GA629