

2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China Tel : +86-755-27521059 Fax: +86-755-27521011

Report No.: CTC20202040S01

Page 1 of 53

# **TEST REPORT**

Product name:	IP Phone
Trademark:	XONTEL
Model No:	XT-19G
Applicant:	XonTel Technology Trd. Co. W.L.L
Address of applicant::	Kuwait City, Qibla, Aladel Tower, F21, state of Kuwait
Test date:	Dec. 25, 2020 to Jan. 08, 2021
Date of issue:	Jan. 08, 2021

Test result:	Pass *
--------------	--------

\* In the configuration tested, the EUT complied with the standard EN 62368-1:2014+A11:2017.



This Test report consist of 53 pages main report and 17 pages attachments. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CTC. The test results in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver. Any objections must be raised to CTC within 15 days since the date.

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 下 中国国家认证认可监督管理委员会 For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



# TEST REPORT IEC 62368-1

# Audio/video, information and communication technology equipment Part 1: Safety requirements

Report Number	CTC20202040S01			
Tested by (+ signature):	Alison Wang Alison Wong Hardy Huang Marphi Kuang			
Compiled by (+ signature):	Hardy Huang			
Approved by (+ signature):	Totti Zhao			
Date of issue	Dec. 25, 2020			
Total number of pages	53 pages			
Testing laboratory	CTC Laboratories, Inc.			
Address:	2/F., Building 1 and 1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Longhua District, Shenzhen, Guangdong, China			
Testing location:	As above			
Applicant's name	XonTel Technology Trd. Co. W.L.L			
Address:	Kuwait City, Qibla, Aladel Tower, F21, state of Kuwait			
Test specification:				
Standard:	IEC 62368-1:2014 (Second Edition)			
Test procedure:	CE Attestation			
Non-standard test method	N/A			
Test Report Form No	IEC62368_1B			
Test Report Form(s) Originator :	UL(US)			
Master TRF:	2014-03			
This test report is specially limited to the above client company and product model only. It may not be duplicated without prior written consent of CTC. Test.				
Test Item description	IP Phone			
Trade Mark	XONTEL			
Manufacturer	Same as applicant.			
Model/Type reference	XT-19G			
Ratings:	5V === 600mA(Supply by external power adapter) /48VDC Ethernet (POE) complied switch			

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

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 下or anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>vz.cnca.cn</u>



ed (name of test and test clause): ests as described in Test Case and Sections were performed. performed during evaluation Electrical energy source classifications Maximum operating temperatures for materials, components and systems Input tests Simulated Abnormal operating condition tests Simulated single fault conditions Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	Testing location: CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China
Sections were performed. performed during evaluation Electrical energy source classifications Maximum operating temperatures for materials, components and systems Input tests Simulated Abnormal operating condition tests Simulated single fault conditions Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park,
performed during evaluation Electrical energy source classifications Maximum operating temperatures for materials, components and systems Input tests Simulated Abnormal operating condition tests Simulated single fault conditions Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	Building, Guanlan High-Tech Park,
Electrical energy source classifications Maximum operating temperatures for materials, components and systems Input tests Simulated Abnormal operating condition tests Simulated single fault conditions Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	Shenzhen 518110, Guangdong, China
Maximum operating temperatures for materials, components and systems Input tests Simulated Abnormal operating condition tests Simulated single fault conditions Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	
materials, components and systems Input tests Simulated Abnormal operating condition tests Simulated single fault conditions Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	
Input tests Simulated Abnormal operating condition tests Simulated single fault conditions Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	
Simulated Abnormal operating condition tests Simulated single fault conditions Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	
Simulated single fault conditions Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	
Simulated single fault conditions Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	
Durability, legibility and permanence of markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	
markings CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	
CRITERIA FOR TELEPHONE RINGING SIGNALS Steady force test, 10 N	
SIGNALS Steady force test, 10 N	
Dianak farra tant OFO N	
Steady force test, 250 N	
Enclosure impact test	
Drop tests	
Stress relief test	
f above tests.	
	Drop tests Stress relief test sample was found to comply with the

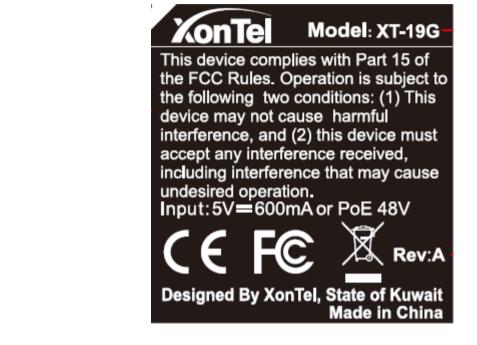


#### Summary of compliance with National Differences:

- EU Group Differences, EU Special National Conditions
- The product fulfils the requirements of EN 62368-1:2014+A11:2017.

#### Copy of marking plate(s):

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.



Notes:

ΞN

- 1. Since similar label used, only label for model above listed to represent other similar ones.
- 2. The height dimension of CE mark should not less than 5mm, height dimension of WEEE mark should not less than 7mm.



Test item particulars:	
Classification of use by	Ordinary person
	Instructed person
	Skilled person
	Children likely to be present
Supply Connection	AC Mains DC Mains
	External Circuit - not Mains connected
	- 🖾 ES1 🔲 ES2 🗌 ES3
Supply % Tolerance:	+10%/-10%
	+20%/-15%
	+%/%
	None
Supply Connection – Type:	pluggable equipment type A -
	non-detachable supply cord
	appliance coupler
	direct plug-in
	mating connector
	pluggable equipment type B -
	non-detachable supply cord appliance coupler
	permanent connection
	mating connector other: building-in equipment
	shall be evaluated in end system (see also general
	product information).
Considered autrent rating of protective device on part	Not directly connected to the mains
Considered current rating of protective device as part of building or equipment installation	○ (Not directly connected to mains) Installation location: □ building; □ equipment
Equipment mobility	movable     hand-held     transportable     stationary     for building-in     direct plug-in
	□ rack-mounting
Over voltage category (OVC):	
	OVC IV 🛛 other: _ class III appliance
Class of equipment:	🗌 Class I 🛛 Class II 🛛 Class III
Access location:	$\Box$ restricted access location $\boxtimes$ N/A
Pollution degree (PD)	□ PD 1
Manufacturer's specified maximum operating ambient	40°C
IP protection class	⊠ IPX0 □ IP
Power Systems	⊠ TN □ TT □ IT - <u>230</u> V <sub>L-L</sub>
Altitude during operation (m)	⊠ 2000 m or less <u>5000</u> m
Altitude of test laboratory (m)	⊠ 2000 m or less □ m

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn

中国国家认证认可监督管理委员会 EN



4F, Block A, Building 1#, GaoXinQi Hi-Tech Park (Phase-

II), 67th District, Bao An, Shenzhen, China

Mass of equipment (kg)	⊠ 0.76kg
POSSIBLE TEST CASE VERDICTS:	
- 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)
TESTING:	
Date of receipt of test item:	Dec. 25, 2020
Date (s) of performance of tests:	Dec. 25, 2020 to Jan. 08, 2021

#### GENERAL REMARKS:

"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.

Throughout this report a  $\Box$  comma /  $\boxtimes$  point is used as the decimal separator.

Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:

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	<ul> <li>☐ Yes</li> <li>☑ Not applicable</li> </ul>
When differences exist; they shall be identified in th	e General product information section.
Name and address of factory (ies)	XonTel Technology Trd. Co. W.L.L

#### **GENERAL PRODUCT INFORMATION:**

1. The product in this report is an IP Phone, class III equipment used for information technology equipment.

- 2. The maximum ambient temperature specified by manufacturer is +40°C.
- 3. The product shall be charged by a suitable rated and certified DC power supply accordingly to IEC/EN 60950-1 with Limited Power Sources, or accordingly to IEC/EN 62368-1 with output within PS 2.
- 4. This report is based on the original report CTC20192368S01, except for changing the applicant, the manufacturer, the factory, the trade Mark and the model name. About the changes, no additional tests should be considered, all the test data were derived from the original test report CTC20192368S01.



#### Abbreviations used in the report:

- normal conditions	N.C.	- single fault conditions	S.F.C
- functional insulation	FI	<ul> <li>basic insulation</li> </ul>	BI
- double insulation	DI	<ul> <li>supplementary insulation</li> </ul>	SI
- between parts of opposite			
polarity	BOP	- reinforced insulation	RI
Indicate used abbreviations	; (if any)		

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 下or anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>vz.cnca.cn</u>



ENERGY SOURCE IDENTIFICATION AND CLASSIFICAT				
(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.				
Electrically-caused injury (Clause 5): (Note: Identify type of source, list sub-assembly or circuit designation and corresponding energy source classification) Example: +5 V dc input ES1				
Source of electrical energy	Corresponding classification (ES)			
All internal circuits	ES1			
DC input circuits	ES1			
Ringing signals	ES2			
Electrically-caused fire (Clause 6): (Note: List sub-assembly or circuit designation and corresponding energy source classification) Example: Battery pack (maximum 85 watts): PS2				
Source of power or PIS	Corresponding classification (PS)			
DC input circuits	PS1			
Injury caused by hazardous substances (Clause 7)(Note: Specify hazardous chemicals, whether produces ozone or other chemical construction not addressed as part of the component evaluation.)Example: Liquid in filled componentGlycol				
Source of hazardous substances	Corresponding chemical			
N/A	N/A			
Mechanically-caused injury (Clause 8)         (Note: List moving part(s), fan, special installations, etc. & corresponding MS classification based on Table 35.)         Example: Wall mount unit       MS2				
Source of kinetic/mechanical energy	Corresponding classification (MS)			
Edges and corners of enclosure	MS1			
Mass of the unit	MS1			
Thermal burn injury (Clause 9)         (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       TS1				
Source of thermal energy	Corresponding classification (TS)			
External surface	TS1			
Radiation (Clause 10) (Note: List the types of radiation present in the product and t Example: DVD – Class 1 Laser Product	the corresponding energy source classification.) RS1			
Type of radiation	Corresponding classification (RS)			
LED indicator	RS1			

CTC Laboratories, Inc.

1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn

EN 中国国家认证认可监督管理委员会



#### ENERGY SOURCE DIAGRAM

Indicate which energy sources are included in the energy source diagram. Insert diagram below

(Refer to above table)

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 下or anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>vz.cnca.cn</u>



OVERVIEW OF EMPLOYED SAFEGUARDS				
Clause	Possible Hazard			
5.1	Electrically-caused injury			
Body Part	Energy Source	Safeguards		
(e.g. Ordinary)	(ES3: Primary Filter circuit)	Basic	Supplementary	Reinforced (Enclosure)
Ordinary person	ES1: All internal circuits ES1: DC input circuits	N/A	N/A	N/A
Ordinary person	ES2: Ringing signal	Equipment	N/A	N/A
6.1	Electrically-caused fire			
Material part	Energy Source		Safeguards	
(e.g. mouse enclosure)		Basic	Supplementary	Reinforced
Combustible materials within equipment	PS1: <15 Watt circuit	N/A	N/A	N/A
Outside enclosure	PS1: <15 Watt circuit	N/A	N/A	N/A
7.1	Injury caused by hazardous substances			
Body Part	Energy Source	Safeguards		
(e.g., skilled)	(hazardous material)	Basic	Supplementary	Reinforced
N/A (no such sources)	N/A	N/A	N/A	N/A
8.1	Mechanically-caused injury			
Body Part	Energy Source	Safeguards		
(e.g. Ordinary)	(MS3:High Pressure Lamp)	Basic	Supplementary	Reinforced (Enclosure)
Ordinary	MS1: Edges and corners	N/A	N/A	N/A
Mass of the unit	MS1	N/A	N/A	N/A
9.1	Thermal Burn –			
Body Part	Energy Source		Safeguards	
(e.g., Ordinary)	(TS2)	Basic	Supplementary	Reinforced
Ordinary	TS1: Accessible parts	N/A	N/A	N/A
10.1	Radiation			
Body Part	Energy Source Safeguards			
(e.g., Ordinary)	(Output from audio port)	Basic	Supplementary	Reinforced
Ordinary	No radiation	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				

CTC Laboratories, Inc.

EN 中国国家认证认可监督管理委员会

<sup>1-2/</sup>F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn



Page 11 of 53

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

4	GENERAL REQUIREMENTS		
4.1.1	Acceptance of materials, components and subassemblies	See appended table 4.1.2	Р
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. See also Annex G	Ρ
4.1.3	Equipment design and construction	Evaluation of safeguards regarding limiting the outputs to fulfill ES1 and protection in regard to risk of spread of fire, mechanical and thermal burn injury considered.	Ρ
4.1.15	Markings and instructions:	(See Annex F)	Р
4.4.4	Safeguard robustness	See below.	Р
4.4.4.2	Steady force tests:	(See Annex T.2 and T.5 )	Р
4.4.4.3	Drop tests:	See Annex T.7	Р
4.4.4.4	Impact tests:	See Annex T.6	Р
4.4.4.5	Internal accessible safeguard enclosure and barrier tests:	The external enclosure cannot be opened without damaging the product.	N/A
4.4.4.6	Glass Impact tests	No such glass used.	N/A
4.4.4.7	Thermoplastic material tests	Not thermoplastic material	N/A
4.4.4.8	Air comprising a safeguard	Class 1 energy source	N/A
4.4.4.9	Accessibility and safeguard effectiveness	Class 1 energy source	N/A
4.5	Explosion	No explosion occurs during normal/abnormal operation and single fault conditions	Р
4.6	Fixing of conductors	No conductors to fix.	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	Not 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		N/A
4.8.2	Instructional safeguard		N/A

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 12 of 53

#### IEC 62368-1

Clause	Requirement + Test	Result - Remark	Verdict
4.8.3	Battery Compartment Construction		N/A
	Means to reduce the possibility of children removing the battery		
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	PS1	N/A

5.2.2       ES1, ES2 and ES3 limits         5.2.2.2       Steady-state voltage and current	P
5.2.2.2Steady-state voltage and current	ended table 5.2) P
5.2.2.3       Capacitance limits	Р
EUT5.2.2.4Single pulse limitsNo such the EUT5.2.2.5Limits for repetitive pulsesNo such EUT5.2.2.6Ringing signalsES2	ended table 5.2) P
5.2.2.5       Limits for repetitive pulses       No such EUT         5.2.2.6       Ringing signals       ES2	capacitance within the N/A
5.2.2.6     Ringing signals     ES2	single pulses generated in N/A or applied to it.
	epetitive pulses within the N/A
5.2.2.7 Audio signals	Р
	audio signals N/A
5.3 Protection against electrical energy sources Only ES	circuit for this product. N/A
5.3.1 General Requirements for accessible parts to ordinary, instructed and skilled persons	N/A
5.3.2.1 Accessibility to electrical energy sources and safeguards	N/A
5.3.2.2 Contact requirements	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	erminals. N/A
5.4 Insulation materials and requirements	Р
taken int this Clau natural r	e and application have N/A account as specified in se 5 and Annex T and bber, hygroscopic or asbestos are not used ion.
5.4.1.3 Humidity conditioning: No hygro	scopic material used. N/A

٣

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 13 of 53

IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict	
5.4.1.4	Maximum operating temperature for insulating materials:		N/A	
5.4.1.5	Pollution degree:	2		
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound	Pollution degree 2 is applied. No insulating compound applied.	N/A	
5.4.1.5.3	Thermal cycling	See above	N/A	
5.4.1.6	Insulation in transformers with varying dimensions	No such transformer within the EUT	N/A	
5.4.1.7	Insulation in circuits generating starting pulses	No such starting pulses within the EUT	N/A	
5.4.1.8	Determination of working voltage		N/A	
5.4.1.9	Insulating surfaces		N/A	
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	No such thermoplastic parts.	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	Class 1 energy source	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:	Class 1 energy source	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	

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 14 of 53

IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict	
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 (MΩ):		N/A	
5.4.6	Insulation of internal wire as part of supplementary safeguard:	No such 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	No test requirement .	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	No such external circuits	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:	No such connections for external circuit applied within the EUT	N/A	
5.4.11.1	Exceptions to separation between external circuits and earth	No such connections to external circuit as above.	N/A	
5.4.11.2	Requirements		N/A	

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'





Page 15 of 53

IEC 62368-1			
Clause	Requirement + Test Result - Remark	Verdict	
	Nominal voltage U <sub>peak</sub> (V):		
	Max increase due to variation U <sub>sp</sub> :		
	Max increase due to ageing Usa:		
	Uop= Upeak + Usp + Usa:		
5.5	Components as safeguards		
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	
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 class III equipment with no means of earthing	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	NA	
	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	

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 中国国家认证认可监督管理委员会 For anti-fake verification, please visit the official website of Certification Administration of the People's Papublic of China version For anti-fake verification, please visit the official website of Certification and

Accreditation Administration of the People's Republic of China: yz.cnca.cn

t



Page 16 of 53

IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict	
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 (Ω):		N/A	
5.6.7	Reliable earthing		N/A	
5.7	Prospective touch voltage, touch current and prote	ective conductor current	N/A	
5.7.2	Measuring devices and networks	class III equipment	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):			
	Multiple connections to mains (one connection at a time/simultaneous connections)		—	
5.7.4	Earthed conductive accessible parts:		N/A	
5.7.5	Protective conductor current		N/A	
	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	

6	ELECTRICALLY- CAUSED FIRE		Р
6.2	Classification of power sources (PS) and potential ig	nition sources (PIS)	Р
6.2.2	Power source circuit classifications	PS (power source) classification determined by measuring the maximum power in Figures 34 and 35 for load and power source circuits.	Ρ

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 17 of 53

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
6.2.2.1	General	See the following details.	P
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:		N/A
6.2.2.6	PS3:		N/A
6.2.3	Classification of potential ignition sources		N/A
6.2.3.1	Arcing PIS:		N/A
6.2.3.2	Resistive PIS:		N/A
6.3	Safeguards against fire under normal operating and	abnormal operating conditions	Р
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:	No ignition and no such temperature attained within the equipment. (See appended table 5.4.1.4, 6.3.2, 9.0, B.2.6)	Р
6.3.1 (b)	Combustible materials outside fire enclosure		N/A
6.4	Safeguards against fire under single fault conditions	3	Р
6.4.1	Safeguard Method		N/A
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits	PS1	Р
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits		N/A
6.4.3.1	General		Р
6.4.3.2	Supplementary Safeguards		Р
	Special conditions if conductors on printed boards are opened or peeled		N/A
6.4.3.3	Single Fault Conditions :	(See appended table B.4)	Р
	Special conditions for temperature limited by fuse	No such consideration.	N/A
6.4.4	Control of fire spread in PS1 circuits		Р
6.4.5	Control of fire spread in PS2 circuits	PS1	N/A
6.4.5.2	Supplementary safeguards:	No supplementary safeguards.	N/A
6.4.6	Control of fire spread in PS3 circuit	Not PS3 circuit.	N/A
6.4.7	Separation of combustible materials from a PIS		Р
6.4.7.1	General:		Р
6.4.7.2	Separation by distance		Р
6.4.7.3	Separation by a fire barrier		N/A
6.4.8	Fire enclosures and fire barriers	See below.	Р

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 18 of 53

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
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	See below	Р
6.4.8.3.1	Fire enclosure and fire barrier openings		N/A
6.4.8.3.2	Fire barrier dimensions	No fire barrier.	N/A
6.4.8.3.3	Top Openings in Fire Enclosure: dimensions (mm)	Metal enclosure	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:		Р
6.5	Internal and external wiring		N/A
6.5.1	Requirements		N/A
6.5.2	Cross-sectional area (mm <sup>2</sup> ):		
6.5.3	Requirements for interconnection to building wiring:		N/A
6.6	Safeguards against fire due to connection to additional equipment		N/A
	External port limited to PS2 or complies with Clause Q.1		N/A

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES		N/A
7.2	Reduction of exposure to hazardous substances	Not 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:	No battery used.	N/A

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn E的中国国家认证认可监督管理委员会 Accreditation Administration of the People's Republic of China: yz.



Page 19 of 53

IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict	
8	MECHANICALLY-CAUSED INJURY		Р	
8.1	General	No moving parts in the equipment – see below regarding edges and corners.	Р	
8.2	Mechanical energy source classifications	MS1	Р	
8.3	Safeguards against mechanical energy sources		N/A	
8.4	Safeguards against parts with sharp edges and corners	Edges and corners of the enclosure are rounded.	Р	
8.4.1	Safeguards		N/A	
8.5	Safeguards against moving parts	No 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 :			
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	Classification MS1 according to table 35, line 5 and no stability requirements.	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			

TV ODILLA

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn EN 中国国家认证认可监督管理委员会



Page 20 of 53

IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict	
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	Not such equipment.	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 provided.	N/A	
8.8.1	Classification		N/A	
8.8.2	Applied Force:		N/A	
8.9	Wheels or casters attachment requirements	No wheels or casters.	N/A	
8.9.1	Classification		N/A	
8.9.2	Applied force:			
8.10	Carts, stands and similar carriers	No carts, stands or similar carriers.	N/A	
8.10.1	General		N/A	
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	Not such equipment.	N/A	
8.11.1	General		N/A	
8.11.2	Product Classification		N/A	
8.11.3	Mechanical strength test, variable N		N/A	
8.11.4	Mechanical strength test 250N, including end stops		N/A	
8.12	Telescoping or rod antennas	No such parts.	N/A	
	Button/Ball diameter (mm)			

9	THERMAL BURN INJURY		Р
9.2		TS1: accessible parts, based on a max. Tma of 25°C	Р
9.3	Safeguard against thermal energy sources	TS1.	N/A

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 21 of 53

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
9.4	Requirements for safeguards		N/A

9.4	Requirements for safeguards	N/A
9.4.1	Equipment safeguard	N/A
9.4.2	Instructional safeguard:	N/A

10	RADIATION		Р
10.2	Radiation energy source classification	RS1: The LED only used for indicating, which is considered as low power & inherently exempt group according to IEC 62471	Ρ
10.2.1	General classification		Р
10.3	Protection against laser radiation	No laser radiation	N/A
	Laser radiation that exists equipment:		—
	Normal, abnormal, single-fault:		
	Instructional safeguard:		_
	Tool:		_
10.4	Protection against visible, infrared, and UV radiation	No protection needed for RS1 indicating LED.	N/A
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	No such x-radiation generated from the equipment	N/A
10.5.1	X- radiation energy source that exists equipment :		N/A
	Normal, abnormal, single fault conditions		N/A

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 22 of 53

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
	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	Not such equipment.	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 input		N/A
	Input voltage with 94 dB(A) <i>L<sub>Aeq</sub></i> 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):		

в	NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS		
B.2	Normal Operating Conditions	See the following details.	Р
B.2.1	General requirements:	(See summary of testing & appended test tables)	Р
	Audio Amplifiers and equipment with audio amplifiers:	Not such equipment.	N/A
B.2.3	Supply voltage and tolerances	(See appended table B.2.5)	Р

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



#### IEC 62368-1

Clause	Requirement + Test	Result - Remark	Verdict
B.2.5	Input test:	(See appended table B.2.5)	Р
B.3	Simulated abnormal operating conditions		Р
B.3.1	General requirements:	(See appended table B.3)	Р
B.3.2	Covering of ventilation openings	(See appended table B.3)	Р
B.3.3	D.C. mains polarity test	The EUT is not connected to a D.C. mains	N/A
B.3.4	Setting of voltage selector:	No setting of voltage selector within the EUT	N/A
B.3.5	Maximum load at output terminals	No output terminals	N/A
B.3.6	Reverse battery polarity	No battery.	N/A
B.3.7	Abnormal operating conditions as specified in Clause E.2.	(See appended table B.3)	Ρ
B.3.8	Safeguards functional during and after abnormal operating conditions		Р
B.4	Simulated single fault conditions		Р
B.4.2	Temperature controlling device open or short- circuited :	No such device used.	N/A
B.4.3	Motor tests	No motors used.	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 the following details.	Р
B.4.4.1	Short circuit of clearances for functional insulation	(See appended table B.3&B.4)	Р
B.4.4.2	Short circuit of creepage distances for functional insulation	(See appended table B.3&B.4)	Р
B.4.4.3	Short circuit of functional insulation on coated printed boards	No coated printed boards within the EUT.	N/A
B.4.5	Short circuit and interruption of electrodes in tubes and semiconductors		N/A
B.4.6	Short circuit or disconnect of passive components	(See appended table B.3&B.4)	Р
B.4.7	Continuous operation of components	The EUT is continuous operating type and no such components intended for short time operation or intermittent operation.	N/A
B.4.8	Class 1 and Class 2 energy sources within limits during and after single fault conditions	No change to circuits classified in 5.3.	Ρ
B.4.9	Battery charging under single fault conditions :	No battery.	N/A

С	UV RADIATION		N/A
C.1		No such UV generated from the equipment.	N/A

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



#### IEC 62368-1

Clause	Requirement + Test	Result - Remark	Verdict
C.1.2	Requirements	See above.	N/A
C.1.3	Test method	See above.	N/A
C.2	UV light conditioning test	See above.	N/A
C.2.1	Test apparatus	See above.	N/A
C.2.2	Mounting of test samples	See above.	N/A
C.2.3	Carbon-arc light-exposure apparatus	See above.	N/A
C.2.4	Xenon-arc light exposure apparatus	See above.	N/A

D	TEST GENERATORS		N/A
D.1	Impulse test generators	No such consideration.	N/A
D.2	Antenna interface test generator	See above.	N/A
D.3	Electronic pulse generator	See above.	N/A

E	TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS		Р
E.1	Audio amplifier normal operating conditions		Р
	Audio signal voltage (V):		_
	Rated load impedance (Ω):	4Ω	_
E.2	Audio amplifier abnormal operating conditions		Р

F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND	DINSTRUCTIONAL SAFEGUARDS	Р
F.1	General requirements	See the following details.	Р
	Instructions – Language	English.	_
F.2	Letter symbols and graphical symbols	See the following details.	Р
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027- 1.	Р
F.2.2	Graphic symbols IEC, ISO or manufacturer specific	Graphical symbols are complied with IEC 60417, ISO 3864-2, ISO 7000 or ISO 7010.	Р
F.3	Equipment markings		Р
F.3.1	Equipment marking locations	Equipment marking is located on the enclosure surface and is easily visible.	Ρ
F.3.2	Equipment identification markings	See the following details.	Р
F.3.2.1	Manufacturer identification	See copy of marking on page 4.	
F.3.2.2	Model identification:	See page 2 for details.	
F.3.3	Equipment rating markings	See the following details.	Р

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 中国国家认证认可监督管理委员会 For anti-fake verification, please visit the official website of Certification Administration of the People's Papublic of China version



Page 25 of 53

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
F.3.3.1	Equipment with direct connection to mains		N/A
F.3.3.2	Equipment without direct connection to mains		Р
F.3.3.3	Nature of supply voltage		
F.3.3.4	Rated voltage		
F.3.3.4	Rated frequency		
F.3.3.6	Rated current or rated power:		
F.3.3.7	Equipment with multiple supply connections	Equipment does not have multiple supply connections.	N/A
F.3.4	Voltage setting device	No voltage selector provide within the equipment.	N/A
F.3.5	Terminals and operating devices		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		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	Class III equipment.	N/A
F.3.6.1	Class I 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)		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:	IPX0.	
F.3.8	External power supply output marking		N/A
F.3.9	Durability, legibility and permanence of marking	Marking is considered to be legible and easily discernible. See also the following details.	Р



	IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict	
F.3.10	Test for permanence of markings	The label was subjected to the permanence of marking test. The label was rubbed with cloth soaked with water for 15 sec. And then again for 15 sec. With the cloth soaked with petroleum spirit. After this test there was no damage to the label. The marking on the label did not fade. After each test, the marking remained legible.	Ρ	
F.4	Instructions		Р	
	a) Equipment for use in locations where children not likely to be present - marking		N/A	
	b) Instructions given for installation or initial use		Р	
	c) Equipment intended to be fastened in place		Р	
	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	No such terminals provided.	N/A	
	f) Protective earthing employed as safeguard		N/A	
	g) Protective earthing conductor current exceeding ES2 limits		N/A	
	h) Symbols used on equipment	No such symbols used as a safeguard considered.	N/A	
	i) Permanently connected equipment not provided with all-pole mains switch	Not permanently connected equipment.	N/A	
	j) Replaceable components or modules providing safeguard function	No such markings.	N/A	
F.5	Instructional safeguards	No instructional safeguard is considered as necessary.	N/A	
	Where "instructional safeguard" is referenced in the test report it specifies the required elements, location of marking and/or instruction	No instructional safeguard required in the equipment.	N/A	

G	COMPONENTS		Р
G.1	Switches		N/A
G.1.1	General requirements	No switch used.	N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.2	Relays		N/A
G.2.1	General requirements	No such relay provided within the equipment.	N/A

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 中国国家认证认可监督管理委员会 For anti-fake verification, please visit the official website of Certification Administration of the People's Papublic of China version



#### IEC 62368-1

	·	1	
Clause	Requirement + Test	Result - Remark	Verdict
G.2.2	Overload test	See above.	N/A
G.2.3	Relay controlling connectors supply power	See above.	N/A
G.2.4	Mains relay, modified as stated in G.2	See above.	N/A
G.3	Protection Devices		N/A
G.3.1	Thermal cut-offs	No thermal cut-off provided within the equipment.	N/A
G.3.1.1a) &b)	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)	See above.	N/A
G.3.1.1c)	Thermal cut-outs tested as part of the equipment as indicated in c)	See above.	N/A
G.3.1.2	Thermal cut-off connections maintained and secure	See above.	N/A
G.3.2	Thermal links		N/A
G.3.2.1a)	Thermal links separately tested with IEC 60691	No thermal link provided within the equipment.	N/A
G.3.2.1b)	Thermal links tested as part of the equipment	See above.	N/A
	Aging hours (H)	See above.	
	Single Fault Condition	See above.	
	Test Voltage (V) and Insulation Resistance ( $\Omega$ ). :	See above.	
G.3.3	PTC Thermistors	No PTC thermistor provided within the equipment.	N/A
G.3.4	Overcurrent protection devices	No 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	No such safeguards components	N/A
G.3.5.2	Single faults conditions		N/A
G.4	Connectors		N/A
G.4.1	Spacings	No such connector .	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
G.5	Wound Components		N/A
G.5.1	Wire insulation in wound components	No 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

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 28 of 53

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
G.5.2.2	Heat run test		N/A
	Time (s):		
	Temperature (°C):		
G.5.2.3	Wound Components supplied by mains		N/A
G.5.3	Transformers		N/A
G.5.3.1	Requirements applied (IEC61204-7, IEC61558- 1/-2, and/or IEC62368-1):	No transformers	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
G.5.4	Motors		N/A
G.5.4.1	General requirements	No motors used.	N/A
	Position:		
G.5.4.2	Test conditions		N/A
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

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 29 of 53

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
	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:		
G.6	Wire Insulation		N/A
G.6.1	General	No power supply cord used	N/A
G.6.2	Solvent-based enamel wiring insulation		N/A
G.7	Mains supply cords		N/A
G.7.1	General requirements	Not directly connected to mains	N/A
	Туре		
	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
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
G.8	Varistors		N/A
G.8.1	General requirements	No varistors used.	N/A
G.8.2	Safeguard against shock		N/A
G.8.3	Safeguard against fire		N/A

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 30 of 53

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.8.3.2	Varistor overload test:		N/A
G.8.3.3	Temporary overvoltage		N/A
G.9	Integrated Circuit (IC) Current Limiters	1	N/A
G.9.1 a)	Manufacturer defines limit at max. 5A.	No IC current limiter provided within the equipment.	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
G.10	Resistors		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	No such resistors	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
G.11	Capacitor and RC units		N/A
G.11.1	General requirements	No capacitor and RC units	N/A
G.11.2	Conditioning of capacitors and RC units		N/A
G.11.3	Rules for selecting capacitors		N/A
G.12	Optocouplers	·	N/A
	Optocouplers comply with IEC 60747-5-5:2007 Spacing or Electric Strength Test (specify option and test results)	No optocouplers	N/A
	Type test voltage Vini, a		
	Routine test voltage, Vini,b:		
G.13	Printed boards		Р
G.13.1	General requirements	See the following details.	Р
G.13.2	Uncoated printed boards		Р
G.13.3	Coated printed boards	No coated printed board or multilayer board applied for within the equipment.	N/A

>

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 下or anti-fake verification, please visit the official website of Certification Administration of the People's Republic of China: vz.



Page 31 of 53

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
G.13.4	Insulation between conductors on the same inner surface	See above.	N/A
	Compliance with cemented joint requirements (Specify construction):		
G.13.5	Insulation between conductors on different surfaces	See above.	N/A
	Distance through insulation		N/A
	Number of insulation layers (pcs)		
G.13.6	Tests on coated printed boards	See above.	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
G.14	Coating on components terminals		N/A
G.14.1	Requirements	No coating on component terminals considered to affect creepage or clearances.	N/A
G.15	Liquid filled components		N/A
G.15.1	General requirements	No such device provided within the equipment.	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
G.16	IC including capacitor discharge function (ICX)		N/A
a)	Humidity treatment in accordance with sc5.4.8 – 120 hours	No such ICX provided within the equipment.	N/A
b)	Impulse test using circuit 2 with Uc = to transient voltage:		N/A
C1)	Application of ac voltage at 110% of rated voltage for 2.5 minutes		N/A
C2)	Test voltage:		—

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn E的中国国家认证认可监督管理委员会 Accreditation Administration of the People's Republic of China: yz.



Page 32 of 53

	IEC 62368-1				
Clause	Requirement + Test	Result - Remark	Verdict		
D1)	10,000 cycles on and off using capacitor with smallest capacitance resistor with largest resistance specified by manufacturer		N/A		
D2)	Capacitance:		<u> </u>		
D3)	Resistance:		—		

Н	CRITERIA FOR TELEPHONE RINGING SIGNALS		Р
H.1	General		Р
H.2		a) /гs1<16mA c) /гs1<20mA	Р
		с) <sub>ПS1</sub> <2011А	
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):		
J	INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION		N/A
	General requirements		N/A

К	SAFETY INTERLOCKS	SAFETY INTERLOCKS	
K.1	General requirements No safety interlock provided within the equipment.		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

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 33 of 53

IEC 62368-1				
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	

L	DISCONNECT DEVICES	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

М	EQUIPMENT CONTAINING BATTERIES AND TH	EIR PROTECTION CIRCUITS	N/A
M.1	General requirements	No battery used.	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:		_

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 中国国家认证认可监督管理委员会 For anti-fake verification, please visit the official website of Certification Administration of the People's Papublic of China version



Page 34 of 53

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

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 35 of 53

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

N	ELECTROCHEMICAL POTENTIALS		N/A
	Metal(s) used:	Class III equipment.	—
0	MEASUREMENT OF CREEPAGE DISTANCES A	ND CLEARANCES	N/A
	Figures O.1 to O.20 of this Annex applied:	Class III equipment.	
Ρ	SAFEGUARDS AGAINST ENTRY OF FOREIGN OBJECTS AND SPILLAGE OF INTERNAL LIQUIDS		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	No such 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	No such construction.	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

EN



Page 36 of 53

	IEC 62368-1		
Clause	Requirement + Test	Result - Remark	Verdict
Q	CIRCUITS INTENDED FOR INTERCONNECTION	I WITH BUILDING WIRING	N/A
Q.1	Limited power sources	Equipment not intended for interconnection with building wiring.	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
	Maximum output current (A)		
	Current limiting method:		
R	LIMITED SHORT CIRCUIT TEST		N/A
R.1	General requirements	No such consideration.	N/A
R.2	Determination of the overcurrent protective device and circuit	See above.	N/A
R.3	Test method Supply voltage (V) and short-circuit current (A)):	See above.	N/A

S	TESTS FOR RESISTANCE TO HEAT AND FIRE	N/A
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):	

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 中国国家认证认可监督管理委员会 For anti-fake verification, please visit the official website of Certification Administration of the People's Papublic of China version



Page 37 of 53

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

т	MECHANICAL STRENGTH TESTS		Р
T.1	General requirements		Р
T.2	Steady force test, 10 N	(See appended table T2)	Р
Т.3	Steady force test, 30 N		N/A
T.4	Steady force test, 100 N		N/A
T.5	Steady force test, 250 N	(See appended table T5)	Р
Т.6	Enclosure impact test	(See appended table T6)	Р
	Fall test		Р
	Swing test		N/A
T.7	Drop test	(See appended table T7)	Р
T.8	Stress relief test	(See appended table T8)	
Т.9	Impact Test (glass)	No glass used.	N/A
T.9.1	General requirements		N/A
T.9.2	Impact test and compliance		N/A
	Impact energy (J):		

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certifica Accreditation of the People's People'



Page 38 of 53

## IEC 62368-1

Clause	Requirement + Test	Result - Remark	Verdict
	Height (m)		_
T.10	Glass fragmentation test		N/A
T.11	Test for telescoping or rod antennas	No such antennas provided within the equipment.	N/A
	Torque value (Nm):	See above.	—

U	MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFECTS OF IMPLOSION		N/A
U.1	General requirements	No CRT provided within the equipment.	N/A
U.2	Compliance and test method for non-intrinsically protected CRTs	See above.	N/A
U.3	Protective Screen	See above.	N/A

V	DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)		
V.1	Accessible parts of equipment	No access with test probes (test probe V.1 used) to any hazardous parts	Р
V.2	Accessible part criterion	See above.	Р



Page 39 of 53

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

4.1.2	TABLE: List of critica	l components			Р
Object / part Manufacturer/ No. trademark		Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>
Adapter	Chenzhou Frecom Electronics Co., Ltd.	F05L5- 050060SPAB F05L5- 050060SPAV	Input: 100-240V~ 50/60Hz 0.2A Output:5VDC 0.6A	EN 60950- 1:2006+A11:200 9+A1:2010+A12: 2011+A2:2013	CB certified By TUV SUD (Certif. No. SG PSB-OF- 03951) Report No: 211-700166- 000)
Adapter	Shenzhen Frecom Electronics Co., Ltd.	F05L5- 050060SPAV F05L5- 050060SPAB	Input: 100-240V~ 50/60Hz 0.2A Output:5VDC 0.6A	EN 60950- 1:2006+A11:200 9+A1:2010+A12: 2011+A2:2013	CB certified By TUV SUD (Certif. No. SG-OF- 12218M1) Report No: 211-400845- 100)
PCB	Interchangeable	Interchangeable	V-0,130°C	UL796 (6 ed.): 2013	UL
Plastic enclosure material	CHI MEI CORPORATION	PA-757(+)	HB, 80°C	UL 94	UL E56070
Alternative	Interchangeable	Interchangeable	HB, 80°C	UL 94(6 ed.): 2013	UL

Supplementay information:

<sup>1)</sup> Provided evidence ensures the agreed level of compliance. See OD-CB2039.

4.8.4, 4.8.5	,			N/A
(The follow	(The following mechanical tests are conducted in the sequence noted.)			
4.8.4.2 TABLE: Stress Relief test		_		
Part Material		Material	Oven Temperature (°C)	Comments
4.8.4.3 TABLE: Battery replacement test				
Battery part no				_
Battery Ins	Battery Installation/withdrawal		Battery Installation/Removal Cycle	Comments

CTC Laboratories, Inc.

1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn

EN 中国国家认证认可监督管理委员会 For a

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



Page 40 of 53

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

Image: second secon	4.8.4, 4.8.5TABLE: Lithium coin/button cell batteries mechanical tests						
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	(The following mechanical tests are conducted in the sequence noted.)						
mpact Area     Drop Distance     Drop No.   Impacts per surface     Surface tested							
mpact Area     Drop Distance     Drop No.  <							
4.8.4.4       TABLE: Drop test          mpact Area       Drop Distance       Drop No.       Observations               mpact Area       Drop Distance       Drop No.       Observations                           4.8.4.5       TABLE: Impact           Impacts per surface       Surface tested       Impact energy (Nm)       Comments               4.8.4.6       TABLE: rush test           Test position       Surface tested       Crushing Force (N)       Duration force							
4.8.4.4     TABLE: Drop test        mpact Area     Drop Distance     Drop No.     Observations            mpact Area     Drop Distance     Drop No.     Observations                                     4.8.4.5     TABLE: Impact         Impacts per surface     Surface tested     Impact energy (Nm)     Comments             4.8.4.6     TABLE: Crush test         Test position     Surface tested     Crushing Force (N)     Duration force							
+.8.4.4       TABLE: Drop test          mpact Area       Drop Distance       Drop No.       Observations   4.8.4.5       TABLE: Impact           Impacts per surface       Surface tested       Impact energy (Nm)       Comments                Impacts per surface       Surface tested       Impact energy (Nm)       Comments                4.8.4.6       TABLE: Crush test           Test position       Surface tested       Crushing Force (N)       Duration force							
4.8.4.4       TABLE: Drop test          mpact Area       Drop Distance       Drop No.       Observations   4.8.4.5       TABLE: Impact          Impacts per surface       Surface tested       Impact energy (Nm)       Comments                     Impacts per surface       Surface tested       Impact energy (Nm)       Comments                4.8.4.6       TABLE: Crush test           Test position       Surface tested       Crushing Force (N)       Duration force							
Impact Area       TABLE: Drop test          mpact Area       Drop Distance       Drop No.       Observations   4.8.4.5       TABLE: Impact           Impacts per surface       Surface tested       Impact energy (Nm)       Comments                4.8.4.6       TABLE: Crush test           Test position       Surface tested       Crushing Force (N)       Duration force							
A.8.4.4       TABLE: Drop test       —         mpact Area       Drop Distance       Drop No.       Observations                                       4.8.4.5       TABLE: Impact           Impacts per surface       Surface tested       Impact energy (Nm)       Comments                Impacts per surface       Surface tested       Impact energy (Nm)       Comments                Impact sper surface       Surface tested       Impact energy (Nm)       Comments                4.8.4.6       TABLE: Crush test           Test position       Surface tested       Crushing Force (N)       Duration force							
mpact Area     Drop Distance     Drop No.     Observations                   4.8.4.5     TABLE: Impact         Impacts per surface     Surface tested     Impact energy (Nm)     Comments             Impacts per surface     Surface tested     Impact energy (Nm)     Comments             Impacts per surface     Surface tested     Impact energy (Nm)     Comments             4.8.4.6     TABLE: Crush test         Test position     Surface tested     Crushing Force (N)     Duration force		-					
4.8.4.5       TABLE: Impact           Impacts per surface       Surface tested       Impact energy (Nm)       Comments               Impacts per surface       Surface tested       Impact energy (Nm)       Comments               Impacts per surface       Surface tested       Impact energy (Nm)       Comments               4.8.4.6       TABLE: Crush test           Test position       Surface tested       Crushing Force (N)       Duration force	4.8.4.4	TABLE: Dro	op test		—		
<t< td=""><td>Impact Are</td><td>ea</td><td>Drop Distance</td><td>Drop No.</td><td>Observations</td></t<>	Impact Are	ea	Drop Distance	Drop No.	Observations		
Impacts     Impact     Impact etested     Impact energy (Nm)     Comments       Impacts     Impact etested     Impact energy (Nm)     Comments       Impacts     Impact etested     Impact energy (Nm)     Impact energy (Nm)       Impacts     Impact etested     Impact energy (Nm)     Impact energy (Nm)       Impacts     Impact energy (Nm)     Impact energy (Nm)     Impact energy (Nm)       Impacts     Impact energy (Nm)     Impact energy (Nm)     Impact energy (Nm)       Impact energy     Impact energy (Nm)     Impact energy (Nm)     Impact energy (Nm)       Impact energy     Impact energy (Nm)     Impact energy (Nm)     Impact energy (Nm)       Impact energy     Impact energy (Nm)     Impact energy (Nm)     Impact energy (Nm)       Impact energy     Impact energy (Nm)     Impact energy (Nm)     Impact energy (Nm)       Impact energy     Impact energy     Impact energy (Nm)     Impact energy (Nm)       Impact energy     Impact energy     Impact energy     Impact energy       Impact energy     Impact energy     Impact energy							
4.8.4.5       TABLE: Impact       —         Impacts per surface       Surface tested       Impact energy (Nm)       Comments   4.8.4.6       TABLE: Crush test       —          Test position       Surface tested       Crushing Force (N)       Duration force							
Impacts per surface     Surface tested     Impact energy (Nm)     Comments                         4.8.4.6     TABLE: Crush test         Test position     Surface tested     Crushing Force (N)     Duration force							
Image: Second	4.8.4.5	TABLE: Imp	pact				
4.8.4.6     TABLE: Crush test        Test position     Surface tested     Crushing Force (N)     Duration force	Impacts	per surface	Surface tested	Impact energy (Nm)	Comments		
4.8.4.6     TABLE: Crush test        Test position     Surface tested     Crushing Force (N)     Duration force							
4.8.4.6     TABLE: Crush test     —       Test position     Surface tested     Crushing Force (N)     Duration force							
Test position         Surface tested         Crushing Force (N)         Duration force							
	4.8.4.6	TABLE: Cr	ush test	•			
applied (s)	Test	position	Surface tested	Crushing Force (N)	Duration force applied (s)		
Supplementary information:	Supplemen	tary informatio	on:				

4.8.5	TABLE: Lith	ABLE: Lithium coin/button cell batteries mechanical test result			
Test p	osition	Surface tested	Force (N)	Duration force applied (s)	
-	-				
-	-				
Supplementa	ary informatio	n:			

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: yz.cnca.cn

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn



Page 41 of 53

# IEC 62368-1

Clause	Requirement + Test	Result - Remark	Verdict	

5.2	Table: 0	Classification of	electrical energy	sources				Р
5.2.2.2	- Steady Stat	e Voltage and Cu	rrent conditions					
		Location (e.g.		Parameters				
No.	Supply Voltage	circuit designation)	Test conditions <sup>1</sup>	) U (Vrms or Vp	k) (Ap	l ok or Arms)	Hz	ES Class
1	5V d.c. or 48V d.c.	Supplied by dc power. or	Normal	5 Vdc max or 48 Vdc max			DC	ES1
		POE	Abnormal					
			Single fault					
	1						1	
5.2.2.3	- Capacitance	Limits						
	Supply	Location (e.g.			Param	neters		
No.	Voltage	circuit designation)	Test conditions	Capacitance	ə, nF	Upk	(V)	ES Class
			Normal					
			Abnormal					
			Single fault – SC/OC					
Overall	capacity: Lim	iit: ES1=60V; ES2	2=120V.					
5.2.2.4	- Single Pulse	es						
	Supply	Location (e.g.	-		Param	neters		50.01
No.	Voltage	circuit designation)	Test conditions	Duration (ms)	Upk	(∨) Ir	ok (mA)	ES Class
			Normal			-		
			Abnormal			-		
			Single fault – SC/OC			-		
5.2.2.5	- Repetitive P	ulses						
		Location (e.g.		Parameters				<b>FO 0</b>
No.	Voltage	circuit designation)	Test conditions	Off time (ms)	Upk (	(V) Ip	k (mA)	ES Class
		[]	Normal					
			Abnormal					
			Single fault – SC/OC					

Accreditation Administration of the People's Republic of China: yz.cnca.cn

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and



Page 42 of 53

IEC 62368-1
-------------

Clause Requirement + Test	Result - Remark	Verdict
---------------------------	-----------------	---------

Test Conditions:

Normal – Full load and no load.

Abnormal – Overload output

Supplementary information: SC=Short Circuit, OC=Open Circuit

5.4.1.4, 6.3.2, 9.0, B.2.6	TABLE: Temperature n	TABLE: Temperature measurements						
	Supply voltage (V) :		48 VDC					_
	Ambient T <sub>min</sub> (°C) :		24.6					_
	Ambient T <sub>max</sub> (°C) :		25.0					_
	Tma (°C) :		25.0					_
Maximum n of part/at:	neasured temperature T		T (°C)				AI	owed T <sub>max</sub> (°C)
EC2			43.2					105
PCB(near i	nput port)		46.3					130
PCB(button	board)		42.0					130
Spearker		42.2					Ref.	
Enclosure inside(above)		40.6					80	
Enclosure i	Enclosure inside(below)		43.0					80
Ambient		40.0						
Accessible	part							
Enclosure of	of adapter		29.6					60*
Input port		29.5					60*	
Button		25.9					60*	
Screen		26.2					56*	
Enclosure of	outside(above)		25.5					48*
Enclosure of	outside(below)		27.6					48*
Ambient			25.0					
Note 1: The (Tr	Supplementary information: * Temperature limit for TS1 of accessible enclosure according to Table 38. Note 1: The apparatus was submitted and evaluated for maximum manufacturer's recommended ambient (Tma) of 40°C.						nbient	
Note 2: The	e temperatures were mea							
Temperatur	e T of winding:	t₁ (°C)	R1 (Ω)	t <sub>2</sub> (°C)	R2 (Ω)	T (°C)	Allowed T <sub>max</sub> (°C	

CTC Laboratories, Inc.

--

1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn

--

--

---

日 中国国家认证认可监督管理委员会

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>

--

---

--

--



Page 43 of 53

## IEC 62368-1

Clause Requirement + Test Result - Remark Verd
--

5.4.1.10.2	5.4.1.10.2 TABLE: Vicat softening temperature of thermoplastics					
Penetration	(mm)			—		
:						
Object/ Part No./Material		Manufacturer/trademark	T softening (°C)			
supplementary information:						

5.4.1.10.3 TABLE: Ball pressure test of thermoplastics					
Allowed imp	pression diameter	(mm):	≤ 2 mm	—	
Object/Part No./Material Manufacturer/trademark		Test temperature (°C) Impression d		meter (mm)	
Supplement	ary information:				

5.4.2.2, 5.4.2.4 TABLE: Minimum Clearances/Creepage distance and 5.4.3							N/A	
Clearance (cl) and distance (cr) at/of/		Up (V)	U r.m.s. (V)	Frequenc y (Hz)	Required cl (mm)	cl (mm) <sup>2</sup>	Required <sup>3</sup> cr (mm)	cr (mm)
Supplementary inf	ormation: BI: Bas	sic insulat	ion; RI: Re	einforced ins	ulation.			

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn EE 中国国家认证认可监督管理委员会 Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



Page 44 of 53

IE	С	623	<b>68-</b> ′	1

Clause	Requirement + Test	Result - Remark	Verdict

5.4.2.3	TABLE: Minimum Clearances	/oltage	N/A		
	Overvoltage Category (OV):				
	Pollution Degree:				
Clearance distanced between:		Required withstand voltage	Required cl (mm)	Mea	asured cl (mm)
See table 5.4.2.2, 5.4.2.4 and 5.4.3 above.					
Suppleme	entary information:				

5.4.2.4	TABLE: Clearances based on electric strength test						
Test voltage applied between:		Required cl (mm)	Test voltage (kV) peak/ r.m.s. / d.c.	Breakdown Yes / No			
Supplement	Supplementary information: Using procedure 2 to determine the clearance.						

5.4.4.2, 5.4.4.5 c) 5.4.4.9	TABLE: Distance through insulation measurements					N/A	
Distance the di at/of:	rough insulation	Peak voltage (V)	Frequency (Hz)	Material	Required DTI (mm)	DTI (mm)	
Supplement	Supplementary information:						

5.4.9	TABLE: Electric strength tests				
Test voltag	e applied between:	Voltage shape (AC, DC)	Test voltage (Vpeak)	Breakdown Yes / No	
Supplementary information:					

5.5.2.2	.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 Clas	ssification
-	-						
-	-						
Supplemen	Supplementary information:						

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and

Accreditation Administration of the People's Republic of China: yz.cnca.cn



Page 45 of 53

IE	С	623	68-1
	<u> </u>	020	00 1

Clause	Requirement + Test	Result - Remark	Verdict

5.6.6.2	TABLE: Resistance of protective conductors and terminations					
	Accessible part	Test current (A)	Duration (min)	Voltage drop (V)	Resistar (Ω)	ICE
Suppleme	entary Information:					

5.7.2.2, 5.7.4	TABLE: Earthed accessible conductive part				
Supply volt	age:	264Vac	—		
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 (e closed, normal and reverse polarity p)			
		2* (netural open (switch n), earth intact and normal polarity, again in reverse polarity (switch p)			
		3 (for IT system, each phase conductor faulted to earth, one at a time (switch g)			
		4 (for three-phase, each phase conductor open, one at a time switches I)			

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.

a) Not considered IT power system.

b) Not three phase equipment.

c) Not IT power system or three phase delta system.

d) Not three-phase for use on centre-earthed dalta supply system.

e) Not such parts.

CTC Laboratories, Inc.

日 中国国家认证认可监督管理委员会

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>

<sup>1-2/</sup>F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn



Page 46 of 53

## IEC 62368-1

Clause	Requirement + Test	Result - Remark	Verdict

6.2.2	Table: Electrical power sources (PS) measurements for classification					
Source	Description	Measurement	Max Power after 3 s	Max Power after 5 s	s PS Classificatio	
Supplementary Information: *Unit shut-down immediately.						

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

6.2.3.2	Table: Determination of Potential Ignition Sources (Resistive PIS)					N/A
Circuit Loc	cation (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
See b	below					

Supplementary Information:

All power dissipating components in primary and secondary circuit which are supplied by a source exceeding 15W (since the output rating is higher than 15VA) are considerd as resistive PIS.

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 x IA) is used to determine Resistive PIS classification.

A Resistive PIS: (a) dissipates more than 15 W, measured after 30 s of normal operation, <u>or</u> (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.

\* A Resistive PIS is considered to exist in primary circuits and secondary circuits.

CTC Laboratories, Inc.

日本 中国国家认证认可监督管理委员会

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>

<sup>1-2/</sup>F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn



Page 47 of 53

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

8.5.5	TABLE: High Pressure Lamp			N/A
Description	1	Values	Energy Source Cl	assification
Lamp type.			_	
Manufactu	rer:		_	
Cat no			_	
Pressure (	cold) (MPa)		MS_	
Pressure (	operating) (MPa)		MS_	
Operating t	time (minutes)		—	
Explosion r	method:		_	
Max particl	e length escaping enclosure (mm) .:		MS_	
Max particl	e length beyond 1 m (mm)		MS_	
Overall res	ult:			
Supplemen	ntary information:			

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



Page 48 of 53

IEC 62368-1	
-------------	--

Clause	Requirement + Test	Result - Remark	Verdict

B.2.5	TABLE: Inp	ut test						Р
U (V)	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Conditi	on/status
5 Vdc	0.16	0.6	0.80				Maximum load. Supply by power ada	external
48 Vdc	0.02		0.96				Maximum load. Supply by (POE) cor switch.	Ethernet

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



Page 49 of 53

IEC 62368-1
-------------

Clause	Requirement + Test	Result - Remark	Verdict

B.3 & B.4 TABLE: Abnormal operating and fault condition tests									Р
Ambient terr	perature (°	C)				:	25.3°C, if		
Power source	e for EUT: I	Manufact	urer, mode	el/type, o	output ratir	ng:			
Component No.	Abnormal Condition	Supply voltage , (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T- couple	Temp. (°C)	Observa	tion
Q1 Pin G-S	S-C	48 Vdc	10 min			Туре К		Unit shut down, damaged, No ha	
Q1 Pin D-S	S-C	48 Vdc	10 min			Туре К		Unit working normally, No damage, no hazard.	
Q1 Pin G-D	S-C	48 Vdc	10 min			Туре К		Unit working norr No damage, no h	•
U1 Pin1-3	S-C	48 Vdc	10 min			Туре К		Unit shut down, No damaged, No hazard.	
U1 Pin2-3	S-C	48 Vdc	10 min			Туре К		Unit working norr No damage, no h	•



Page 50 of 53

				IE	C 62368	-1			
Clause		Req	uirement ·	+ Test			Result - Remark Ve		
Speaker	S-C	48Vdc	1h32 min			Туре К		Max input curre The equipment normally,no dar no hazards. 1. PCB(near inp 64.9°C 2. Ambient: 40° 3. Enclosure of 40.6°C 4. Input port:43 5. Button: 26.8 6. Screen:27.4° 7. Enclosure of (above):26.1°C 8. Enclosure of (below): 40.5°C	working naged, out port): C adapter: 4°C °C C utside utside

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.

1) SC: Short-circuited; OC: Open-circuit; OL: Overloaded.

2) The test result shown all safeguards remained effective and didn't lead to a single fault condition during abnormal operating condition; In addition all safeguards complied with applicable requirements in this standard after restoration of normal operating conditions.

3) The test result showed no Class 1 or 2 energy source become Class 3 level during and after single fault condition.



Page 51 of 53

IEC 62368-1

Clause	Requirement + Test	Result - Remark	Verdict

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										
										d charging
		Meas. current	Manuf. Specs.	intentional charging	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Max. curren during norm condition	-									
Max. current during fault										
				I	1		1	1		1
Test results	:									Verdict
- Chemical leaks										
- Explosion	of th	e battery								
- Emission of	of fla	me or exp	ulsion of m	olten metal						
- Electric str	eng	th tests of	equipment	after completi	on of tests					
Supplement	tary	informatior	n:							

	ble: Add	itional safe	guards for equ	iipment coi	ntaining	seconda	ry lithium		N/A
Battery/Cell No.		Test conditions			Meas	urements		Observation	
				U		I (A)	Temp (C)		
Normal									
Abnormal									
Single faul		t –SC/OC							
Normal									
Abnormal									
Single fault – S		t – SC/OC							
Supplementary	Informatio	on:							
Battery identification Charging at Observa T <sub>lowest</sub> (°C)		ition	Thi	ging at <sup>ighest</sup> °C)	Obs	ervat	ion		
Supplementary	Informatio	on:							

CTC Laboratories, Inc.

EN 中国国家认证认可监督管理委员会

Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>

<sup>1-2/</sup>F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn



Page 52 of 53

	IE(	Ce	623	68-	1
--	-----	----	-----	-----	---

Clause	Requirement + Test	Result - Remark	Verdict

Annex Q.1	TABLE: Circuits intended for interconnection with building wiring (LPS)							
Note: Measured UOC (V) with all load circuits disconnected:								
Output Circuit	Components	U <sub>oc</sub> (V)	I <sub>sc</sub> (A)		I <sub>sc</sub> (A) S (VA)			
			Meas.	Limit	Meas.	Limit		

T.2, T.3, T.4, T.5	TABI	LE: Steady force to	est			Р
Part/Loca	tion	Material	Thickness (mm)	Force (N)	Test Duration (sec)	Observation
Internal components				10	5	No damage, no hazards.
Top enclosure				250	5	No damage, no hazards.
Side enclosure				250	5	No damage, no hazards.
Bottom enclosure				250	5	No damage, no hazards.
Supplementary information:						

T.6, T.9	ТАВ	LE: Impact tests				Р
Part/Location		Material	Thickness (mm)	Vertical distance (mm)	Observation	
Horizontal surface		Plastic		1300	No damage, no hazards.	
The vertical Plastic surface			1300	No damage, no hazards.		
Supplementary information:						

Т.7	ТАВ	LE: Drop tests				Р	
Part/Location		Material	Thickness (mm)	Drop Height (mm)	Observation		
Top enclos	ure	Plastic		750	No damage, no hazards.		
Side enclos	ure	Plastic		750	No damage, no hazards.		

CTC Laboratories, Inc.

1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn

EN 中国国家认证认可监督管理委员会

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



Page 53 of 53

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

Bottom enclosure	Plastic		750	No damage, no hazards.			
Supplementary information:							

Т.8 Т	ABLE: Stress r	elief test				Р	
Part/Location	n Materia	Il Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observ	ation	
Enclosure	Plastic		70	7	No damage,	no hazard	
Supplementary	Supplementary information:						

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>vz.cnca.cn</u>



**Result - Remark** 

Page 1 of 11

#### IEC62368\_1B - ATTACHMENT

Requirement + Test

Clause

Verdict

		ΑΤΤΑ	-	O TEST REPO	RT		
(Audio/vide			IFFERENCI	2368-1 ES AND NATIOI <b>chnology equip</b>		ENCES 1: Safety require	ements)
Differences a	ccording to	: EN	l 62368-1:2	014+A11:2017			
Attachment F	Form No	EL	J_GD_IEC6	2368_1B_II			
Attachment C	Driginator	: Ne	emko AS				
Master Attacl	hment	: Da	ite 2017-09-	-22			
		em for Confo and. All rights		ng and Certifica	ation of Elec	trical Equipmen	ıt
	CENELEC C		DIFICATION	IS (EN)			
		clauses, notes 62368-1:2014		ires and annexes "Z".	s which are a	dditional to	
CONTENTS	Add the follo	wing annexes:					Р
	Annex ZA (normative)Normative references to international publications with their corresponding European publicationsAnnex ZB (normative)Special national conditionsAnnex ZC (informative)A-deviationsAnnex ZD (informative)IEC and CENELEC code designations for flexible cords						
	<b>Delete</b> all the "country" notes in the reference document (IEC 62368-1:2014) according to the following list:					Р	
	0.2.1	Note	1	Note 3	4.1.15	Note	
	4.7.3	Note 1 and 2	5.2.2.2	Note	5.4.2.3.2.2 Table 13	Note c	
	5.4.2.3.2.4	Note 1 and 3	5.4.2.5	Note 2	5.4.5.1	Note	
	5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3	
	5.7.5	Note	5.7.6.1	Note 1 and 2	10.2.1 Table 39	Note 2, 3 and 4	
	10.5.3	Note 2	10.6.2.1	Note 3	F.3.3.6	Note 3	
	For special r	ational condition	ons, see An	nex ZB.			Р
1		wing note: use of certain subst ment is restricted w					Р

CTC Laboratories, Inc.

1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn

日 中国国家认证认可监督管理委员会

Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



Page 2 of 11

Clause	Requirement + Test	Result - Remark	Verdict			
4.Z1	Add the following new subclause after 4.9:	4	N/A			
	To protect against excessive current, short-circui and earth faults in circuits connected to an a.c. <b>mains</b> , protective devices shall be included eithe as integral parts of the equipment or as parts of t building installation, subject to the following, a), b and c):	er he				
	a) except as detailed in b) and c), protective devices necessary to comply with the requirements of B.3.1 and B.4 shall be included as parts of the equipment;					
	b) for components in series with the mains input the equipment such as the supply cord, applianc coupler, r.f.i. filter and switch, short-circuit and ea fault protection may be provided by protective devices in the building installation;	e				
	c) it is permitted for <b>pluggable equipment type</b> or <b>permanently connected equipment</b> , to rely a dedicated overcurrent and short-circuit protection the building installation, provided that the means protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions.	on า in				
	If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for <b>pluggable equipment type</b> the building installation shall be regarded as providing protection in accordance with the rating the wall socket outlet.					
5.4.2.3.2.4	Add the following to the end of this subclause:		N/A			
	The requirement for interconnection with <b>externa circuit</b> is in addition given in EN 50491-3:2009.	al				
10.2.1	Add the following to <sup>c)</sup> and <sup>d)</sup> in table 39: For additional requirements, see 10.5.1.		N/A			

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>vz.cnca.cn</u>



Page 3 of 11

## IEC62368\_1B - ATTACHMENT

Clause	Requirement + Test	Result - Remark	Verdict
10.5.1	Add the following after the first paragraph:		N/A
	For RS 1 compliance is checked by measuremen under the following conditions:		
	In addition to the normal operating conditions, all controls adjustable from the outside by hand, by any object such as a tool or a coin, and those internal adjustments or presets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made.	2	
	NOTE Z1 Soldered joints and paint lockings are examples of adequate locking.		
	The dose-rate is determined by means of a radiation monitor with an effective area of 10 cm <sup>2</sup> any point 10 cm from the outer surface of the apparatus.	², at	
	Moreover, the measurement shall be made unde fault conditions causing an increase of the high- voltage, provided an intelligible picture is maintained for 1 h, at the end of which the measurement is made.	۲ <b>۲</b>	
	For RS1, the dose-rate shall not exceed 1 $\mu$ Sv/h taking account of the background level.		
	NOTE Z2 These values appear in Directive 96/29/Euratom of May 1996.	f 13	
10.6.1	Add the following paragraph to the end of the subclause:		N/A
	EN 71-1:2011, 4.20 and the related tests method and measurement distances apply.	is	
10.Z1	Add the following new subclause after 10.6.5.		N/A
	10.Z1 Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz		
	The amount of non-ionizing radiation is regulated European Council Recommendation 1999/519/E of 12 July 1999 on the limitation of exposure of th general public to electromagnetic fields (0 Hz to 3 GHz).	C ne	
	For intentional radiators, ICNIRP guidelines shou be taken into account for Limiting Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz). For han held and body-mounted devices, attention is draw to EN 50360 and EN 50566	d-	
G.7.1	Add the following note: NOTE Z1 The harmonized code designations corresponding the IEC cord types are given in Annex ZD.	to	N/A

1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn

EL (86)/55-2/521059 FAX: (86)/55-2/52101

Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



Page 4 of 11

Verdict

#### IEC62368\_1B - ATTACHMENT

Clause	Requirement + Test	Result - Remark	

Bibliography	Add the following	standards:	N/A
	Add the following	notes for the standards indicated:	
	IEC 60130-9	NOTE Harmonized as EN 60130-9.	
	IEC 60269-2	NOTE Harmonized as HD 60269-2.	
	IEC 60309-1	NOTE Harmonized as EN 60309-1.	
	IEC 60364	NOTE some parts harmonized in HD 384/HD 60364 series.	
	IEC 60601-2-4	NOTE Harmonized as EN 60601-2-4.	
	IEC 60664-5	NOTE Harmonized as EN 60664-5.	
	IEC 61032:1997	NOTE Harmonized as EN 61032:1998 (not modified).	
	IEC 61508-1	NOTE Harmonized as EN 61508-1.	
	IEC 61558-2-1	NOTE Harmonized as EN 61558-2-1.	
	IEC 61558-2-4	NOTE Harmonized as EN 61558-2-4.	
	IEC 61558-2-6	NOTE Harmonized as EN 61558-2-6.	
	IEC 61643-1	NOTE Harmonized as EN 61643-1.	
	IEC 61643-21	NOTE Harmonized as EN 61643-21.	
	IEC 61643-311	NOTE Harmonized as EN 61643-311.	
	IEC 61643-321	NOTE Harmonized as EN 61643-321.	
	IEC 61643-331	NOTE Harmonized as EN 61643-331.	
ZB	ANNEX ZB, SPE	CIAL NATIONAL CONDITIONS (EN)	N/A
4.1.15	Denmark, Finlan	d, Norway and Sweden	N/A
	To the end of the	subclause the following is added:	
	connection to othe safety relies on co surge suppressors network terminals marking stating th	e equipment type A intended for er equipment or a network shall, if onnection to reliable earthing or if s are connected between the and accessible parts, have a at the equipment shall be earthed mains socket-outlet.	
	The marking text i as follows:	in the applicable countries shall be	
		paratets stikprop skal tilsluttes en ord som giver forbindelse til "	
	In <b>Finland</b> : "Laite varustettuun pisto	on liitettävä suojakoskettimilla rasiaan"	
	In <b>Norway</b> : "Appa stikkontakt"	ratet må tilkoples jordet	
	In <b>Sweden</b> : "Appa uttag"	araten skall anslutas till jordat	



Page 5 of 11

IEC62368_	1B - ATTACHMENT
-----------	-----------------

Clause	Requirement + Test	Result - Remark	Verdict

4.7.3	United Kingdom	N/A
	To the end of the subclause the following is added:	
	The torque test is performed using a socket-outlet complying with BS 1363, and the plug part shall be assessed to the relevant clauses of BS 1363. Also see Annex G.4.2 of this annex	
5.2.2.2	Denmark	N/A
	After the 2nd paragraph add the following:	
	A warning (marking <b>safeguard</b> ) for high <b>touch</b> <b>current</b> is required if the <b>touch current</b> exceeds the limits of 3,5 mA a.c. or 10 mA d.c.	

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



Page 6 of 11

#### IEC62368\_1B - ATTACHMENT

IEC62368_1B - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
		T	I
5.4.11.1 and	Finland and Sweden		N/A
Annex G	To the end of the subclause the following is adde	d:	
	For separation of the telecommunication network from earth the following is applicable:		
	If this insulation is solid, including insulation formi part of a component, it shall at least consist of either the solution of the solution		
	• two layers of thin sheet material, each of which shall pass the electric strength test below, or		
	• one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below.	f	
	If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that clearances a creepage distances do not exist, if the componen passes the electric strength test in accordance wi the compliance clause below and in addition	nt	
	• passes the tests and inspection criteria of 5.4.8 with an electric strength test of 1,5 kV multiplied k 1,6 (the electric strength test of 5.4.9 shall be performed using 1,5 kV), and	by l	
	• is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5k	εV.	
	It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.		
	A capacitor classified Y3 according to EN 60384- 14:2005, may bridge this insulation under the following conditions:		
	• the insulation requirements are satisfied by havi a capacitor classified Y3 as defined by EN 60384 14, which in addition to the Y3 testing, is tested w an impulse test of 2,5 kV defined in 5.4.11;	-	
	• the additional testing shall be performed on all the test specimens as described in EN 60384-14;	he	
	the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14.	re	
5.5.2.1	Norway		N/A
	After the 3rd paragraph the following is added:		
	Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).		

<sup>1-2/</sup>F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn

EN 中国国家认证认可监督管理委员会

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



Page 7 of 11

### IEC62368\_1B - ATTACHMENT

Claus	Requirement + Test	Result - Remark	Verdict

5.5.6	Finland, Norway and Sweden	N/A
	To the end of the subclause the following is added:	
	Resistors used as <b>basic safeguard</b> or bridging <b>basic insulation</b> in <b>class I pluggable equipment type A</b> shall comply with G.10.1 and the test of G.10.2.	
5.6.1	Denmark	N/A
	Add to the end of the subclause	
	Due to many existing installations where the socket- outlets can be protected with fuses with higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment.	
	<i>Justification:</i> In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.	
5.6.4.2.1	Ireland and United Kingdom	N/A
	After the indent for <b>pluggable equipment type A</b> , the following is added:	
	<ul> <li>the protective current rating is taken to be 13 A, this being the largest rating of fuse used in the mains plug.</li> </ul>	
5.6.5.1	To the second paragraph the following is added:	N/A
	The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current over 10 A and up to and including 13 A is:	
	1,25 mm <sup>2</sup> to 1,5 mm <sup>2</sup> in cross-sectional area.	
5.7.5	Denmark	N/A
	To the end of the subclause the following is added:	
	The installation instruction shall be affixed to the equipment if the <b>protective conductor current</b> exceeds the limits of 3,5 mA a.c. or 10 mA d.c.	

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>vz.cnca.cn</u>



Page 8 of 11

## IEC62368\_1B - ATTACHMENT

01-	Deguitement : Test Deguite Degu		
Clause	Requirement + Test	Result - Remark	Verdic
5.7.6.1	Norway and Sweden		N/A
5.7.0.1	To the end of the subclause the following is added:		
	The screen of the television distribution system is normally not earthed at the entrance of the building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation needs to be isolated from the screen of a cable distribution system.		
	It is however accepted to provide the insulation external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by a retailer, for example.		
	The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in:		
	<ul> <li>"Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a connection to protective earthing – and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)"</li> <li>NOTE In Norway, due to regulation for CATV-installations, and in Sweden, a galvanic isolator shall provide electrical insulation below 5 MHz. The insulation shall withstand a dielectric strength</li> </ul>		
	of 1,5 kV r.m.s., 50 Hz or 60 Hz, for 1 min. Translation to Norwegian (the Swedish text will also be accepted in Norway):		
	"Apparater som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplet utstyr – og er tilkoplet et koaksialbasert kabel-TV nett, kan forårsake brannfare. For å unngå dette skal det ved tilkopling av apparater til kabel-TV nett installeres en galvanisk isolator mellom apparatet og kabel-TV nettet."		
	Translation to Swedish: "Apparater som är kopplad till skyddsjord via jordat vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa fall medfőra risk főr brand. Főr att undvika detta skall vid anslutning av apparaten till kabel-TV nät galvanisk isolator finnas mellan apparaten och kabel-TV nätet.".		

CTC Laboratories, Inc.

Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>

<sup>1-2/</sup>F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn

el.: (86)755-27521059 Fax.: (86)755-2752107



Page 9 of 11

IEC62368	<b>1B - ATTACHMENT</b>	
12002000		

IEC62368_1B - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
5.7.6.2	<b>Denmark</b> To the end of the subclause the following is adde The warning (marking safeguard) for high touch current is required if the touch current or the protective current exceed the limits of 3,5 mA.	.d:	N/A
B.3.1 and B.4	•	re B, d ent,	N/A
G.4.2	DenmarkTo the end of the subclause the following is addedSupply cords of single phase appliances having a rated current not exceeding 13 A shall be providedwith a plug according to DS 60884-2-D1:2011.CLASS I EQUIPMENT provided with socket-outlets wite earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be providedwith a plug in accordance with standard sheet DK 2-1a DK 2-5a.If a single-phase equipment having a RATED CURREN exceeding 13 A or if a poly-phase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2.Mains socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance DS 60884-2-D1:2011 standard sheet DKA 1-4a.Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or DK 1-1c.Mains socket-outlets with earth shall be in compliance with DS 60884-2-D1:2011 Standard Sheet DK 1-3a, DK 1-1c, DK1-1d, DK 1-5a or DK 7a Justification: Heavy Current Regulations, Section 6c	a ed th d a or NT ed KA	N/A



Page 10 of 11

## IEC62368\_1B - ATTACHMENT

Clause	Requirement + Test	Result - Remark	Verdict
G.4.2	United Kingdom		N/A
	To the end of the subclause the following is add		
	The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 1 12.11, 12.12, 12.13, 12.16, and 12.17, except the the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.	2.9, lat y an	
G.7.1	United Kingdom		N/A
	To the first paragraph the following is added:		
	Equipment which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord shall be fitted with a 'stand- plug' in accordance with the Plugs and Sockets (Safety) Regulations 1994, Statutory Instrument 1994 No. 1768, unless exempted by those regulations.	s ard etc	
	NOTE "Standard plug" is defined in SI 1768:1994 and essen means an approved plug conforming to BS 1363 or an appro conversion plug.		
G.7.1	Ireland		N/A
	To the first paragraph the following is added:		
	Apparatus which is fitted with a flexible cable or cord shall be provided with a plug in accordance with Statutory Instrument 525: 1997, "13 A Plugs and Conversion Adapters for Domestic Use Regulations: 1997. S.I. 525 provides for the recognition of a standard of another Member Sta which is equivalent to the relevant Irish Standard	ate	



Page 11 of 11

			aye ii ui ii
IEC62368_1B - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
0.7.0	Instand and United Kingdom		N1/A
G.7.2	Ireland and United Kingdom		N/A
	To the first paragraph the following is added:		
	A power supply cord with a conductor of 1,25 milling is allowed for equipment which is rated over 10 milling and up to and including 13 A.		
ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)		N/A
10.5.2	Germany		N/A
	The following requirement applies:		
	For the operation of any cathode ray tube intend for the display of visual images operating at an acceleration voltage exceeding 40 kV, authoriza is required, or application of type approval (Bauartzulassung) and marking.		
	Justification: German ministerial decree against ionizing radia (Röntgenverordnung), in force since 2002-07-01 implementing the European Directive 96/29/EURATOM.		
	NOTE Contact address: Physikalisch-Technische Bundesanstalt, Bundesallee 100, D-38116 Braunschweig, Tel.: Int +49-531-592-6320, Internet: http://www.ptb.de		



Product: IP Phone

Type Designation: XT-19G



## Figure 1 Overall view



Figure 2. Overall view

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and 中国国家认证认可监督管理委员会 ΕN

Accreditation Administration of the People's Republic of China: yz.cnca.cn



Product: IP Phone

Type Designation: XT-19G



Figure 3. Internal view



Figure 4. Internal view

CTC Laboratories, Inc.

1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn

EL (86)/55-2/521059 Fax. (86)/55-2/52101

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>yz.cnca.cn</u>



Product: IP Phone

Type Designation: XT-19G



Figure 5. Front view of mainboard

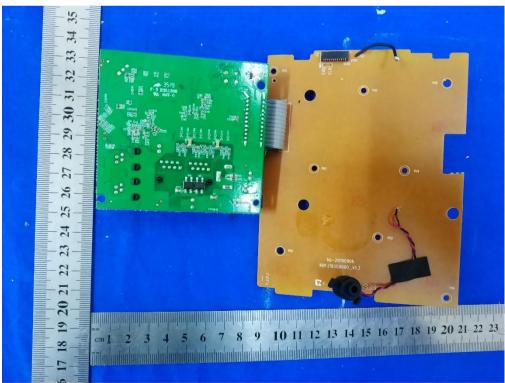


Figure 6. Rear view of mainboard

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 中国国家认证认可监督管理委员会 For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: yz.cnca.cn



Product: IP Phone

```
Type Designation: XT-19G
```

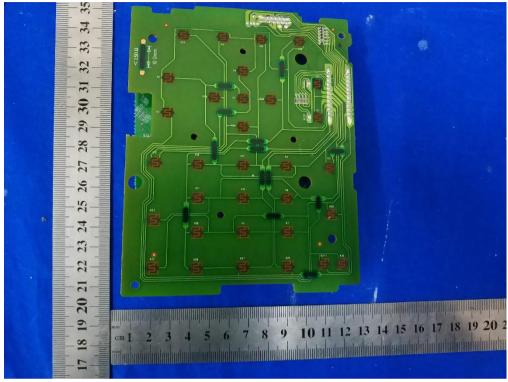


Figure 7. Front view of button board



Figure 8. View of speaker

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn 中国国家认证认可监督管理委员会 For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China: <u>vz.cnca.cn</u>



Page 5 of 6

# **Attachment 2: Photo Documentation**

Product: IP Phone

Type Designation: XT-19G



Figure 10. View of adapter

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and 中国国家认证认可监 理委员会 FN

Accreditation Administration of the People's Republic of China: yz.cnca.cn



Page 6 of 6

# **Attachment 2: Photo Documentation**

Product: IP Phone

Type Designation: XT-19G



## Figure 11. View of adapter



Figure 12. View of adapter

CTC Laboratories, Inc. 1-2/F., Building 1 and 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen 518110, Guangdong, China Tel.: (86)755-27521059 Fax.: (86)755-27521011 Http://www.sz-ctc.org.cn For anti-fake verification, please visit the official website of Certification and 中国国家认证认可监 理委员会 FN

Accreditation Administration of the People's Republic of China: yz.cnca.cn