Test Report issued under the responsibility of:

TÜVRheinland®

TEST REPORT
IEC 62368-1
Audio/video, information and communication technology equipment
Part 1: Safety requirements

Report Number ..... :	CN252QT7 001
Date of issue ..... :	2025-09-19
Total number of pages ..... :	70
Name of Testing Laboratory preparing the Report ..... :	**TÜV Rheinland (Shenzhen) Co., Ltd.**
Applicant's name ..... :	**xFusion Digital Technologies Co., Ltd.**
Address ..... :	No. 99, Longhu Inner Ring North Road, Zhengzhou Area of China (Henan) Pilot Free Trade Zone, 450000 Henan, P.R. China
Test specification:	
Standard ..... :	IEC 62368-1:2014
Test procedure ..... :	CB Scheme
Non-standard test method ..... :	N/A
TRF template used ..... :	IECEE OD-2020-F1:2021, Ed.1.4
Test Report Form No ..... :	IEC62368_1D
Test Report Form(s) Originator .. :	UL(US)
Master TRF ..... :	Dated 2022-04-14

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test Item description .....:		Server	
Trade Mark(s) .....:		∝FUSION	
Manufacturer .....:		Same as Applicant	
Model/Type reference .....:		2288 V8**********, FusionServer 2288 V8********** (where * can be 0-9, a-z, A-Z, - or Blank for marketing purpose)	
Ratings .....:		~ 100 - 127 V; 50/60 Hz; 10 A (Not for China) or ~ 200 - 220 V; 50/60 Hz; 10 A or ~ 220 - 230 V; 50/60 Hz; 10 A or ~ 230 - 240 V; 50/60 Hz; 10 A or ⎓ 240 V; 10 A	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):			
☒	**CB Testing Laboratory:**	**TÜV Rheinland (Shenzhen) Co., Ltd.**	
Testing location/ address.....:		1-5F, Block 5, No. 1100, Huanli Road, Yungu Community, Xinhu Street, Guangming District Shenzhen, China	
Tested by (name, function, signature).....:			
Approved by (name, function, signature).....:			
☐	**Testing procedure: CTF Stage 1:**		
Testing location/ address..... :			
Tested by (name, function, signature).....:			
Approved by (name, function, signature).....:			
☒	**Testing procedure: CTF Stage 2:**	**Reliability Laboratory of Shenzhen xFusion Technologies Co., Ltd.**	
Testing location/ address.....:		Room 101 & 301, Building 1, CIMC Digital Technology Industrial Park, No.1, Yile Road, Songshanhu Science & Technology Industrial Park Dongguan, Guangdong China	
Tested by (name, function, signature).....:		Qingpu Zeng Test Engineer	Zeng qing pu
Witnessed by (name, function, signature).....:		Allen Wu Project Handler	Allen Wu
Approved by (name, function, signature).....:		Jonas Xu Authorizer	Jonas Xu
☐	**Testing procedure: CTF Stage 3 :**		
☐	**Testing procedure: CTF Stage 4:**		
Testing location/ address.....:			
Tested by (name, function, signature).....:			
Witnessed by (name, function, signature).....:			
Approved by (name, function, signature).....:			
Supervised by (name, function, signature) .....:			

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

Attachment 1: National Differences (16 pages)

Attachment 2: Photo Documentation (19 pages)

Summary of testing:

Tests performed (name of test and test clause):

All applicable tests as described in Test Case and Measurement Sections were performed.

- Test samples without serial numbers.
- Load conditions used during testing see appended table B.2.5 for details.

5.2	Classification of electrical energy sources
5.3.2	Accessibility to electrical energy sources and safeguards (Accessibility test)
5.4.1.4, 9.3, B.1.5, B.2.6	Temperature measurements
5.4.9	Electric Strength test
5.6.6.2	Ground continuity test
5.7.4	Earthed accessible conductive part
5.7.5	Protective conductor current
6.2.2	Electrical power sources (PS) measurements for classification
9.2	Thermal energy source Classifications
Annex B.2.5	Input Test
Annex B.3	Simulated Abnormal operating condition tests
Annex F.3.9	Durability, legibility and permanence of markings
Annex M	Batteries
Annex Q.1	Limited Power Source
Annex T.2	Steady force test, 10N
Annex T.5	Steady force test, 250N
Annex T.6	Enclosure impact test

Testing location:

Reliability Laboratory of Shenzhen xFusion Technologies Co., Ltd.

Room 101 & 301, Building 1, CIMC Digital Technology Industrial Park, No.1, Yile Road, Songshanhu Science & Technology Industrial Park Dongguan, Guangdong China

Summary of compliance with National Differences (List of countries addressed):

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

CA=Canada, US= United states of America.

☒ **The product fulfils the requirements of EN 62368-1:2014+A11:2017**

Use of uncertainty of measurement for decisions on conformity (decision rule) :

☒ No decision rule is specified by the IEC standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").

☐ Other:… (to be specified, for example when required by the standard or client, or if national accreditation requirements apply)

Information on uncertainty of measurement:

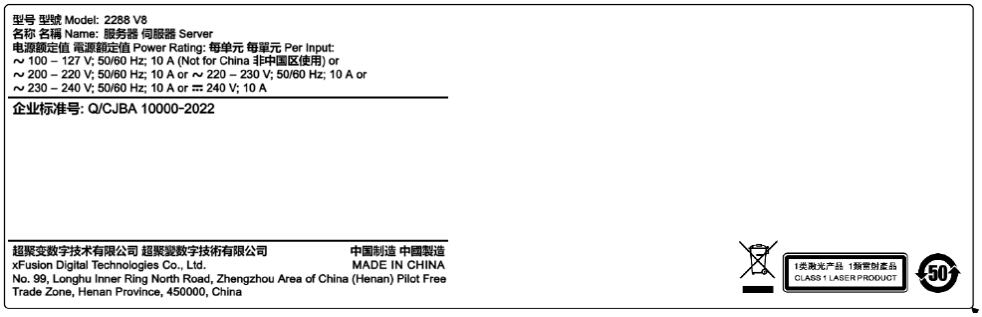
The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer.

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.

Copy of marking plate:

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



Marking label

Warning and caution marking

Remark: The model name and rating on the above label can be replaced by the others listed in this report.

TEST ITEM PARTICULARS:	
Classification of use by ..... :	☐ Ordinary person ☒ Instructed person ☒ Skilled person ☐ Children likely to be present
Supply Connection ..... :	☒ AC Mains (For AC input) ☒ DC Mains (for HVDC) ☐ External Circuit - not Mains connected - ☐ ES1 ☐ ES2 ☐ ES3
Supply % Tolerance ..... :	☒ +10%/-10% for AC input ☐ +20%/-15% ☒ +25%/ -25% for HVDC input (Declared by Manufacturer) ☐ 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:_____
Considered current rating of protective device as part of building or equipment installation..... :	16 A (20 A only for US and CA) Installation location: ☒ building; ☐ equipment
Equipment mobility..... :	☐ movable ☐ hand-held ☐ transportable ☒ stationary ☒ for building-in ☐ direct plug-in ☒ rack-mounting ☐ wall-mounted
Over voltage category (OVC) ..... :	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other: _____
Class of equipment ..... :	☒ Class I ☐ Class II ☐ Class III ☐ Class II with functional earthing ☐ Not classifed
Access location ..... :	☒ restricted access area ☐ N/A
Pollution degree (PD) ..... :	☐ PD 1 ☒ PD 2 ☐ PD 3
Manufacturer's specified maxium operating ambient..... :	35°C
IP protection class ..... :	☒ IPX0 ☐ IP
Power Systems ..... :	☒ TN (for AC input) ☒ TT (for AC input) ☐ IT - ____ V $_{L-L;}$ ☒ dc mains (For HVDC) ☐ N/A
Altitude during operation (m) ..... :	☐ 2000 m or less ☒ 3050 m
Altitude of test laboratory (m) ..... :	☒ 2000 m or less ☐ _____ m
Mass of equipment (kg) ..... :	☒ 35.5 kg Max

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 ..... :	2025-08-25
Date (s) of performance of tests..... :	2025-08-25 to 2025-08-30

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 ☐ comma / ☒ 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 ..... :	☒ **Yes** ☐ **Not applicable**

When differences exist; they shall be identified in the General product information section.

Name and address of factory (ies) ..... :	**DONGGUAN HUARONG COMMUNICATION TECHNOLOGIES CO., LTD** No.80 Zhengwei 2nd Road, Dongkeng Town, Dongguan, Guangdong, P.R. China **SHENZHEN HUAHAO MECHANICAL & ELECTRICAL CO., LTD. Dongguan Branch company** Second Floor No.738 Meijing Middle Road,Changtang Community, Da Lang Town, Dongguan City, 523779 Guangdong, P.R. China **NATIONGATE SOLUTION (M) SDN. BHD.** 2005 Tingkat Perusahaan Satu, Kawasan Perusahaan Perai, 13600 Perai, Penang, Malaysia

General product information and other remarks:

Product Description –

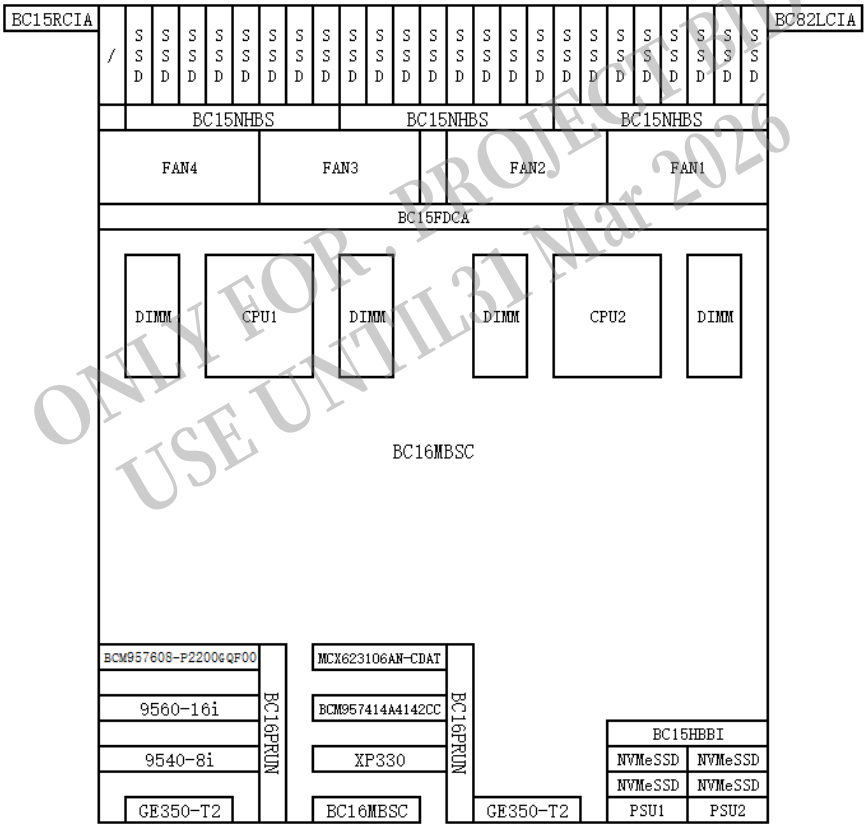
The Product is a computing server, which can be installed fewer number of hard disk drive, memory, processor, and different functional board for marketing purpose.

Unless otherwise noted in the report, the functional boards installed in the units shall be selected from the below list but not means all the functional boards listed below shall be installed in one unit.

Functional Boards		
Board full Name	**Description**	**Interfaces**
BC16MBSC	Manufactured Board, BC16MBSC, 1288 V8/2288 V8 Server motherboard, 1*1	--
BC82LCIA	Manufactured Board, TaiShan 2280 V2, BC82LCIA, Left Customer Interface, 4*2	--
BC15RCIA	Manufactured Board, 2288H V7, BC15RCIA, Right Customer Interface Board, 5*2	USB, Type-C: LPS VGA: ES1, PS1
BC15FDCA	Manufactured Board, 2288H V7, BC15FDCA, Fan Board 4*8080+/8038+, 1*3	--
BC26SMMA(BC26SMMAA)	Manufactured Board, BC26SMMAA, DC-SCM Hi1711 BMC Card, 1*1	USB, VGA: LPS; Mgmt, IOIOI: ES1, PS1
BC15NHBS	Manufactured Board, 2258 V7, BC15NHBS,8 * 2.5-inch SAS/SATA/NVMe Hard RAID HDD backplane, 1*2	--
BC15HBBI	Manufactured Board, 2288H V7, BC15HBBI, IO3 4*SAS/SATA/NVMe HDD backplane, 1*4	--
BC16PRUN	Manufactured Board, BC16PRUN, IO1/IO2 Riser1-2*x16(2*PCIe4.0x8) (Slot2/3)+1CEM(Slot1), 1*2	--
BC16NHBC	Manufactured Board, 2288 V8, BC16NHBC, 8*2.5inch SAS/SATA/NVMe 3Cage Disk Backplane, 1*2	--
BC16HBBD	Manufactured Board, 2288 V8, BC16HBBD, 8*2.5inch SAS/SATA 3Cage Disk Backplane, 1*2	--
BC16PRUL	Manufactured Board, BC16PRUL, IO1/IO2 Riser2-1*x16(1*PCIe5.0x16) (Slot3)+2CEM(Slot1/2), 1*1	--

PCIE cards		
Board full Name	Board brief Name	Interfaces
9540-8i	Other Cards, PCIE 4.0 X8-Vendor ID 1000-Device ID 10E6-1-Subvendor ID 1000-Subdevice ID 40D5-12G SAS RAID, x8 PCIe 4.0-9540-8i SAS RAID Card, SAS3808, No CacheVault, 12Gb/s SAS, 6Gb/s SATA, PCIe(NVMe), 9540-8i, Chinese doc, 1pcs bracket	N/A
9560-8i	Other Cards, PCIE 4.0 X8-Vendor ID 1000-Device ID 10E2-1-Subvendor ID 1000-Subdevice ID 4010-12G SAS RAID card, x8 PCIe 4.0-9560-8i SAS RAID Card, SAS3908, 4G CacheVault, CVPM05-12Gb/s SAS,6Gb/s SATA, PCIe (NVMe), 9560-8i, Chinese and English doc	N/A
9560-16i	Other Cards, PCIE 4.0 X8-Vendor ID 1000-Device ID 10E2-1-Subvendor ID 1000-Subdevice ID 4000-12G SAS RAID card, x8 PCIe 4.0-9560-16i SAS RAID Card, SAS3916,8G CacheVault, CVPM05-12Gb/s SAS, 6Gb/s SATA, PCIe (NVMe), 9560-16i, English doc	N/A

BC53ETHF(XC310)	Manufactured Board-JDM, Public Module, BC53ETHF, XC310 GE350-T2 OCP3.0 Ethernet Card-2*GE(I350)-Dual Port-RJ45, PCIE 2.1 x4-Vendor ID 8086-Device ID 1521-2-Subvendor ID 1f24-Subdevice ID 200b, 1*4	2*GE Class 1 Copper
CN21ITGG1	Manufactured Board, Public Module, CN21ITGG1, XP330 Ethernet Adapter, 10Gb Optical Interface (Intel X710), 2-Port, SFP+(without Optical Transceiver), PCIE 3.0 X8-Vendor ID 8086-Device ID 1572-2-Subvendor ID 1f24-Subdevice ID 2003, 1*2	2*10GE, class1 laser
BCM957608-P2200GQF00	Network Card, 200 Gigabit, 64bit, QSFP56, 2 ports, PCIE 5.0 x16-Vendor ID 14e4-Device ID 1760-2-Subvendor ID 14e4-Subdevice ID 9120, No Driver CD	2*200GE, class1 laser
MCX623106AN-CDAT	Network Card, 100GE, 64bit, QSFP56(without Optical Transceiver), 2 Ports, PCIE 4.0 x16-15b3-101d-2, No Driver CD	2*100GE, class1 laser



Test Configuration

Model Differences –

All models are the same entirely except the model's name. All the tests are performed on the model 2288 V8.

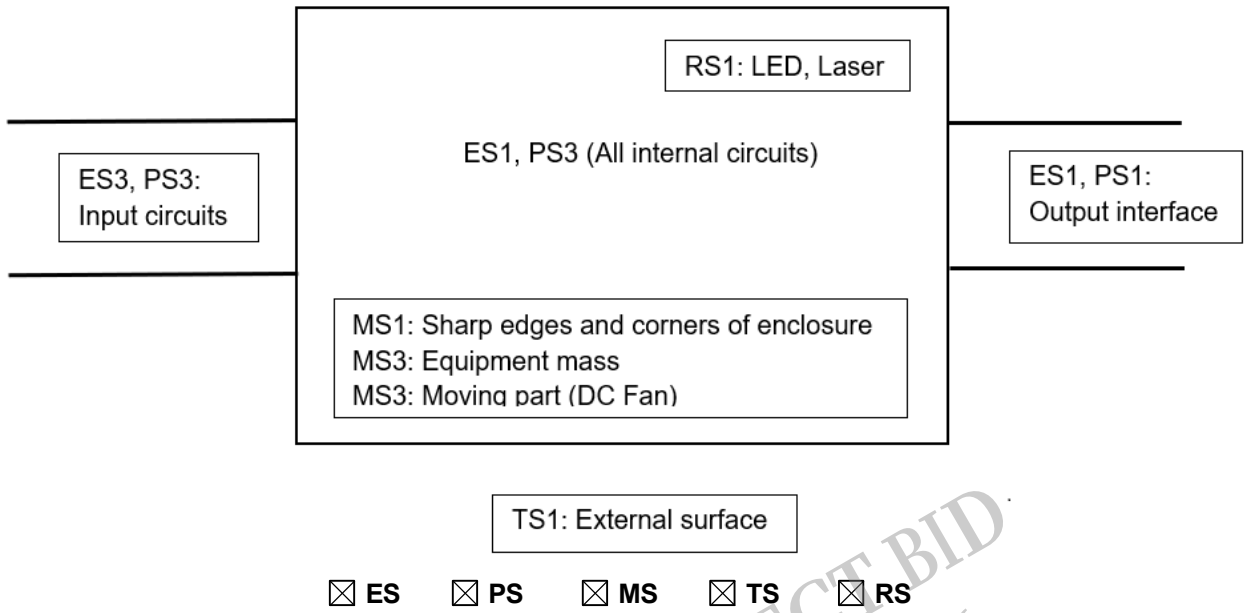
Additional application considerations – (Considerations used to test a component or sub-assembly) –

N/A

ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE:	
(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)**
Input circuits and internal circuits in the PSU	ES3
The circuit after PSU	ES1
Output Interfaces	ES1
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)**
Input circuits and internal circuits	PS3
Output Interfaces	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 component Glycol	
Source of hazardous substances	**Corresponding chemical**
N/A	None
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)**
Sharp edges and corners of enclosure	MS1
Moving part (DC Fan)	MS3
Equipment mass	MS3
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 enclosure surfaces	TS1
Radiation (Clause 10) (Note: List the types of radiation present in the product and the corresponding energy source classification.) Example: DVD – Class 1 Laser Product RS1	
Type of radiation	**Corresponding classification (RS)**
Laser module	RS1
LED indicator	RS1

ENERGY SOURCE DIAGRAM

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



OVERVIEW OF EMPLOYED SAFEGUARDS				
Clause	**Possible Hazard**			
5.1	Electrically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (ES3: Primary Filter circuit)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
Instructed/skilled	ES3: Input circuits and internal circuits in the PSU	N/A	N/A	Approved PSU use
Instructed/skilled	ES1: The circuits supplied by PSU	Earthed metal enclosure	N/A	N/A
Instructed/skilled	ES1: Output Interfaces	N/A	N/A	N/A
6.1	Electrically-caused fire			
Material part (e.g. mouse enclosure)	Energy Source (PS2: 100 Watt circuit)	Safeguards		
		Basic	Supplementary	Reinforced
Enclosure and Internal combustible material	PS3: input circuit and internal circuits	Equipment safeguards (no ignition)	See clause 6.4.6	N/A
Enclosure and Internal combustible material	PS1: Output interfaces	N/A	N/A	N/A
7.1	Injury caused by hazardous substances			
Body Part (e.g., skilled)	Energy Source (hazardous material)	Safeguards		
		Basic	Supplementary	Reinforced
N/A	N/A	N/A	N/A	N/A
8.1	Mechanically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (MS3: High Pressure Lamp)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
Instructed/skilled	MS1: Sharp edges and corners of enclosure	N/A	N/A	N/A
Instructed/skilled	MS3: DC fan	Warning label	Metal enclosure	N/A
Instructed/skilled	MS3: Mass of unit	Stationary equipment	N/A	N/A
9.1	Thermal Burn			
Body Part (e.g., Ordinary)	Energy Source (TS2)	Safeguards		
		Basic	Supplementary	Reinforced
Instructed/skilled	TS1: All 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
Instructed/skilled	RS1: Laser module and LED indicator	N/A	N/A	N/A
Supplementary Information:				
(1) See attached energy source diagram for additional details. (2) “N” – Normal Condition; “A” – Abnormal Condition; “S” Single Fault				

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

4	**GENERAL REQUIREMENTS**		**P**
4.1.1	Acceptance of materials, components and subassemblies	See appended table 4.1.2	P
4.1.2	Use of components	Components which are certified to IEC and/or national standards are used correctly within their ratings. Components not covered by IEC standards are tested under the conditions present in the equipment. See also Annex G	P
4.1.3	Equipment design and construction	Equipment is adequately designed and constructed.	P
4.1.15	Markings and instructions ..... :	See Annex F.	P
4.4.4	Safeguard robustness	See below.	P
4.4.4.2	Steady force tests..... :	(See Annex T.2, T.5)	P
4.4.4.3	Drop tests..... :		N/A
4.4.4.4	Impact tests..... :	(See Annex T.6)	P
4.4.4.5	Internal accessible safeguard enclosure and barrier tests ..... :	The external enclosure cannot be opened without a tool.	N/A
4.4.4.6	Glass Impact tests..... :	No such glass used.	N/A
4.4.4.7	Thermoplastic material tests ..... :	No such material	N/A
4.4.4.8	Air comprising a safeguard ..... :		N/A
4.4.4.9	Accessibility and safeguard effectiveness	After tests of 4.4.4.2 and 4.4.4.4, no safeguard damaged.	P
4.5	Explosion	No explosion occurs during normal/abnormal operation and single fault conditions	P
4.6	Fixing of conductors		P
4.6.1	Fix conductors not to defeat a safeguard	Conductors shall be such that displacement cannot defeat a safeguard.	P
4.6.2	10 N force test applied to ..... :	See appended table 5.4.2.2, 5.4.2.4 and 5.4.3	P
4.7	Equipment for direct insertion into mains socket - outlets	Not direct plug-in equipment	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	Coin/button cell batteries used on internal circuit; it is unlikely that children will be present	N/A
4.8.2	Instructional safeguard		N/A
4.8.3	Battery Compartment Construction		N/A
	Means to reduce the possibility of children removing the battery..... :		—

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
4.8.4	Battery Compartment Mechanical Tests ..... :		N/A
4.8.5	Battery Accessibility		N/A
4.9	Likelihood of fire or shock due to entry of conductive object..... :	(See Annex P)	P
5	**ELECTRICALLY-CAUSED INJURY**		**P**
5.2.1	Electrical energy source classifications ..... :	See below	P
5.2.2	ES1, ES2 and ES3 limits	(See appended table 5.2)	P
5.2.2.2	Steady-state voltage and current ..... :	(See appended table 5.2)	P
5.2.2.3	Capacitance limits..... :		N/A
5.2.2.4	Single pulse limits ..... :	No such single pulses generated in the EUT or applied to it.	N/A
5.2.2.5	Limits for repetitive pulses ..... :	No such repetitive pulses within the EUT	N/A
5.2.2.6	Ringing signals ..... :	No such ringing signals within the EUT	N/A
5.2.2.7	Audio signals ..... :	Not such equipment	N/A
5.3	Protection against electrical energy sources	See below	P
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	See only 4.3 and 5.3 to 5.5 which applies to protection between the accessible parts and hazardous parts of other circuits.	P
5.3.2.1	Accessibility to electrical energy sources and safeguards	Only ES1 circuit can be accessed for this product.	P
5.3.2.2	Contact requirements	No access with test probe to any ES3 circuit or parts.	P
	a) Test with test probe from Annex V ..... :	Cannot access to the ES3 circuits	P
	b) Electric strength test potential (V)..... :		N/A
	c) Air gap (mm) ..... :		N/A
5.3.2.4	Terminals for connecting stripped wire		N/A
5.4	Insulation materials and requirements		P
5.4.1.2	Properties of insulating material		P
5.4.1.3	Humidity conditioning ..... :	Approved PSU used	P
5.4.1.4	Maximum operating temperature for insulating materials ..... :	(See appended table 5.4.1.4.)	P
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 (however see 5.5.4).	N/A
5.4.1.5.3	Thermal cycling		N/A
5.4.1.6	Insulation in transformers with varying dimensions	Approved PSU used	P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
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	Approved PSU used	N/A
5.4.1.9	Insulating surfaces		N/A
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	Approved PSU used	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	Approved PSU used	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 ..... :	Approved PSU used	N/A
5.4.3.1	General		N/A
5.4.3.3	Material Group ..... :		—
5.4.4	Solid insulation	Approved PSU used	N/A
5.4.4.2	Minimum distance through insulation ..... :		N/A
5.4.4.3	Insulation compound forming solid insulation		N/A
5.4.4.4	Solid insulation in semiconductor devices		N/A
5.4.4.5	Cemented joints		N/A
5.4.4.6	Thin sheet material		N/A
5.4.4.6.1	General requirements		N/A
5.4.4.6.2	Separable thin sheet material		N/A
	Number of layers (pcs) ..... :		N/A
5.4.4.6.3	Non-separable thin sheet material		N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material..... :		N/A
5.4.4.6.5	Mandrel test		N/A
5.4.4.7	Solid insulation in wound components		N/A
5.4.4.9	Solid insulation at frequencies >30 kHz..... :		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
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) ..... :		—
5.4.6	Insulation of internal wire as part of supplementary safeguard ..... :		N/A
5.4.7	Tests for semiconductor components and for cemented joints		N/A
5.4.8	Humidity conditioning	Approved PSU used	N/A
	Relative humidity (%)..... :		—
	Temperature (°C) ..... :		—
	Duration (h) ..... :		—
5.4.9	Electric strength test ..... :	(See appended table 5.4.9)	P
5.4.9.1	Test procedure for a solid insulation type test		P
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
	Rated operating voltage U_{op} (V) ..... :		—
	Nominal voltage U_{peak} (V)..... :		—
	Max increase due to variation U_{sp} ..... :		—
	Max increase due to ageing ΔU_{sa} ..... :		—
	$U_{op}= U_{peak} + \Delta U_{sp} + \Delta U_{sa}$ ..... :		—
5.5	Components as safeguards		N/A
5.5.1	General	Approved PSU used	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

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
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		P
5.6.2	Requirement for protective conductors		P
5.6.2.1	General requirements		P
5.6.2.2	Colour of insulation		N/A
5.6.3	Requirement for protective earthing conductors	Min.16 AWG (1.0 mm^2)	P
	Protective earthing conductor size (mm^2) .....:	Metal enclosure is considered as protective bonding conductors	—
5.6.4	Requirement for protective bonding conductors		P
5.6.4.1	Protective bonding conductors		P
	Protective bonding conductor size (mm^2). .....:	Comply with 5.6.6.2	—
	Protective current rating (A) ..... :	Comply with 5.6.6.2	—
5.6.4.3	Current limiting and overcurrent protective devices	No current limiting and overcurrent protective devices in parallel with any other components.	P
5.6.5	Terminals for protective conductors	Symbol ⏚ used. In addition, the green-and-yellow wire connected to metal chassis was considered as protective bonding conductor. See also sub clause 5.6.6.	P
5.6.5.1	Requirement		P
	Conductor size (mm^2), nominal thread diameter (mm). .....:		N/A
5.6.5.2	Corrosion	Screw: Steel painted with Zn; Enclosure: Steel Nut and washer: Steel painted with Zn Conductor to be connected: Copper The max electrochemical potential is: 0.45 V	P
5.6.6	Resistance of the protective system		P
5.6.6.1	Requirements		P
5.6.6.2	Test Method Resistance (Ω).....:	(See appended table 5.6.6.2)	P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.6.7	Reliable earthing	Not permanently connected equipment	N/A
5.7	Prospective touch voltage, touch current and protective conductor current		P
5.7.2	Measuring devices and networks	Figure 4 of IEC 60990 was used in determining of the limit of ES1.	P
5.7.2.1	Measurement of touch current .....:	(See appended table 5.2 & 5.7.4)	P
5.7.2.2	Measurement of prospective touch voltage		P
5.7.3	Equipment set-up, supply connections and earth connections	Clause 4, 5.3 and 5.4 of IEC 60990:1999 applied.	P
	System of interconnected equipment (separate connections/single connection) .....:	Multiple connection.	—
	Multiple connections to mains (one connection at a time/simultaneous connections).....:	Multiple connection.	—
5.7.4	Earthed conductive accessible parts.....:	(See appended Table 5.7.4)	P
5.7.5	Protective conductor current		P
	Supply Voltage (V).....:	264 Vac	—
	Measured current (mA).....:	1.32 mA	—
	Instructional Safeguard.....:	Less than ES2 limited, no require.	N/A
5.7.6	Prospective touch voltage and touch current due to external circuits	The equipment is not connected to such external circuit.	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**		**P**
6.2	Classification of power sources (PS) and potential ignition sources (PIS)		P
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.	P
6.2.2.1	General	See the following details.	P
6.2.2.2	Power measurement for worst-case load fault... :	(See appended table 6.2.2)	P
6.2.2.3	Power measurement for worst-case power source fault..... :	(See appended table 6.2.2)	P
6.2.2.4	PS1 ..... :	(See appended table 6.2.2)	P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
6.2.2.5	PS2 ..... :	(See appended table 6.2.2)	P
6.2.2.6	PS3 ..... :	(See appended table 6.2.2)	P
6.2.3	Classification of potential ignition sources		P
6.2.3.1	Arcing PIS ..... :	(See appended table 6.2.3.1)	P
6.2.3.2	Resistive PIS ..... :	(See appended table 6.2.3.2)	P
6.3	Safeguards against fire under normal operating and abnormal operating conditions		P
6.3.1 (a)	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials ..... :	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)	P
6.3.1 (b)	Combustible materials outside fire enclosure		P
6.4	Safeguards against fire under single fault conditions		P
6.4.1	Safeguard Method	Method by control of fire spread applied, see clause 6.4.5 and 6.4.6.	P
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		N/A
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits		N/A
6.4.3.1	General		N/A
6.4.3.2	Supplementary Safeguards		N/A
	Special conditions if conductors on printed boards are opened or peeled		N/A
6.4.3.3	Single Fault Conditions ..... :		N/A
	Special conditions for temperature limited by fuse		N/A
6.4.4	Control of fire spread in PS1 circuits	No supplementary safeguard used	P
6.4.5	Control of fire spread in PS2 circuits		P
6.4.5.2	Supplementary safeguards ..... :	See 6.4.6	P
6.4.6	Control of fire spread in PS3 circuit	Compliance detailed as follows: – Printed board: rated min. V-0 – All other components: at least V-2 except for parts mounted on min. V-1 material or small parts of combustible material (with mass less than 4g) or components complying with relevant IEC standard. – All Connectors: mounted on min. V-0 printed board – Approved PSU used – Fire enclosure (metal enclosure) used.	P
6.4.7	Separation of combustible materials from a PIS	See clause 6.4.6	N/A
6.4.7.1	General ..... :		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
6.4.7.2	Separation by distance		N/A
6.4.7.3	Separation by a fire barrier		N/A
6.4.8	Fire enclosures and fire barriers	See below.	P
6.4.8.1	Fire enclosure and fire barrier material properties	Fire enclosure used	P
6.4.8.2.1	Requirements for a fire barrier	No fire barrier used	N/A
6.4.8.2.2	Requirements for a fire enclosure	Metal enclosure used as fire enclosure	P
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	See below	P
6.4.8.3.1	Fire enclosure and fire barrier openings		P
6.4.8.3.2	Fire barrier dimensions	No fire barrier used	N/A
6.4.8.3.3	Top Openings in Fire Enclosure: dimensions (mm) .....:	All openings less than 5mm in any dimension	P
	Needle Flame test		N/A
6.4.8.3.4	Bottom Openings in Fire Enclosure, condition met a), b) and/or c) dimensions (mm) .....:	No bottom openings	P
	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) .....:	No enclosure can be opened by an ordinary person	N/A
6.4.8.4	Separation of PIS from fire enclosure and fire barrier distance (mm) or flammability rating .....:	Metal enclosure and V-0 class plastic enclosure	P
6.5	Internal and external wiring		P
6.5.1	Requirements		P
6.5.2	Cross-sectional area (mm^2) .....:		—
6.5.3	Requirements for interconnection to building wiring .....:		N/A
6.6	Safeguards against fire due to connection to additional equipment		P
	External port limited to PS2 or complies with Clause Q.1	See appended table annex Q.1	P

7	**INJURY CAUSED BY HAZARDOUS SUBSTANCES**		**P**
7.2	Reduction of exposure to hazardous substances	No hazardous chemicals within the equipment.	N/A
7.3	Ozone exposure	No ozone production within the equipment.	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

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Instructional safeguard (ISO 7010) .....:		—
7.6	Batteries.....:	See annex M	P

8	MECHANICALLY-CAUSED INJURY		P
8.1	General		P
8.2	Mechanical energy source classifications	Sharp edges and corners classified as MS1. Equipment mass: MS3. DC fan blade: MS3	P
8.3	Safeguards against mechanical energy sources		P
8.4	Safeguards against parts with sharp edges and corners	Edges and corners of the enclosure are rounded.	P
8.4.1	Safeguards		N/A
8.5	Safeguards against moving parts	The fan is mechanically protected, and contact is not likely.	P
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	Fixed equipment.	N/A
8.6.1	Product classification		N/A
	Instructional Safeguard .....:		—
8.6.2	Static stability	Fixed equipment	N/A
8.6.2.2	Static stability test		N/A
	Applied Force .....:		—
8.6.2.3	Downward Force Test		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
8.6.3	Relocation stability test	Fixed equipment	N/A
	Unit configuration during 10° tilt .....:		—
8.6.4	Glass slide test		N/A
8.6.5	Horizontal force test (Applied Force).....:		N/A
	Position of feet or movable parts.....:		—
8.7	Equipment mounted to wall or ceiling	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		N/A
8.8.1	Classification		N/A
8.8.2	Applied Force .....:		N/A
8.9	Wheels or casters attachment requirements		N/A
8.9.1	Classification		N/A
8.9.2	Applied force .....:		—
8.10	Carts, stands and similar carriers	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**		**P**
9.2	Thermal energy source classifications	The equipment evaluated by temperature test (See appended Table 5.4.1.4, 6.3.2, 9.0, B.2.6)	P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
9.3	Safeguard against thermal energy sources		N/A
9.4	Requirements for safeguards		N/A
9.4.1	Equipment safeguard	No safeguard is required	N/A
9.4.2	Instructional safeguard .....:		N/A

10	**RADIATION**		**P**
10.2	Radiation energy source classification	RS1: Laser module RS1: LED indicator	P
10.2.1	General classification		P
10.3	Protection against laser radiation	RS1	N/A
	Laser radiation that exists in the equipment:		—
	Normal, abnormal, single-fault ..... :		N/A
	Instructional safeguard ..... :		—
	Tool..... :		—
10.4	Protection against visible, infrared, and UV radiation	RS1	P
10.4.1	General		P
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. :		P
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
	Equipment safeguards.....:		N/A
	Instructional safeguard for skilled person .....:		N/A
10.5.3	Most unfavourable supply voltage to give maximum radiation .....:		—

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Abnormal and single-fault condition ..... :		N/A
	Maximum radiation (pA/kg)..... :		N/A
10.6	Protection against acoustic energy sources	No such energy source	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) L_{Aeq} acoustic pressure output ..... :		—
10.6.5.2	Corded listening devices with digital input		N/A
	Maximum dB(A)..... :		—
10.6.5.3	Cordless listening device		N/A
	Maximum dB(A)..... :		—

B	**NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS**		P
B.2	Normal Operating Conditions	See the following details.	P
B.2.1	General requirements.....:	(See appended table B.2.5)	P
	Audio Amplifiers and equipment with audio amplifiers .....:	Not such equipment	N/A
B.2.3	Supply voltage and tolerances		P
B.2.5	Input test.....:	(See appended table B.2.5)	P
B.3	Simulated abnormal operating conditions		P
B.3.1	General requirements.....:	(See appended table B.3)	P
B.3.2	Covering of ventilation openings	(See appended table B.3)	P
B.3.3	D.C. mains polarity test		P
B.3.4	Setting of voltage selector .....:	No voltage selector	N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
B.3.5	Maximum load at output terminals .....:	No output terminal	N/A
B.3.6	Reverse battery polarity	No replaceable battery used	N/A
B.3.7	Abnormal operating conditions as specified in Clause E.2.	Not such equipment	N/A
B.3.8	Safeguards functional during and after abnormal operating conditions	All safeguards remained effective	P
B.4	Simulated single fault conditions		N/A
B.4.2	Temperature controlling device open or short-circuited .....:	No such device used.	N/A
B.4.3	Motor tests	Approved fan 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		N/A
B.4.4.1	Short circuit of clearances for functional insulation		N/A
B.4.4.2	Short circuit of creepage distances for functional insulation		N/A
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		N/A
B.4.7	Continuous operation of components		N/A
B.4.8	Class 1 and Class 2 energy sources within limits during and after single fault conditions		N/A
B.4.9	Battery charging under single fault conditions ....:		N/A
C	**UV RADIATION**		**N/A**
C.1	Protection of materials in equipment from UV radiation	No such UV generated from the equipment.	N/A
C.1.2	Requirements		N/A
C.1.3	Test method		N/A
C.2	UV light conditioning test		N/A
C.2.1	Test apparatus		N/A
C.2.2	Mounting of test samples		N/A
C.2.3	Carbon-arc light-exposure apparatus		N/A
C.2.4	Xenon-arc light exposure apparatus		N/A
D	**TEST GENERATORS**		**N/A**
D.1	Impulse test generators		N/A
D.2	Antenna interface test generator		N/A
D.3	Electronic pulse generator		N/A

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

E	**TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS**		**N/A**
E.1	Audio amplifier normal operating conditions		N/A
	Audio signal voltage (V)..... :		—
	Rated load impedance (Ω) ..... :		—
E.2	Audio amplifier abnormal operating conditions		N/A
F	**EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS**		**P**
F.1	General requirements		P
	Instructions – Language ..... :	English	—
F.2	Letter symbols and graphical symbols		P
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027-1.	P
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.	P
F.3	Equipment markings		P
F.3.1	Equipment marking locations	Equipment marking is located on the enclosure surface and is easily visible.	P
F.3.2	Equipment identification markings		P
F.3.2.1	Manufacturer identification ..... :	See copy of marking plate.	—
F.3.2.2	Model identification ..... :	See copy of marking plate.	—
F.3.3	Equipment rating markings	See copy of marking plate.	P
F.3.3.1	Equipment with direct connection to mains	The equipment is connected to AC mains supply.	P
F.3.3.2	Equipment without direct connection to mains		N/A
F.3.3.3	Nature of supply voltage..... :	See copy of marking plate.	—
F.3.3.4	Rated voltage..... :	See copy of marking plate.	—
F.3.3.5	Rated frequency..... :	See copy of marking plate.	—
F.3.3.6	Rated current or rated power..... :	See copy of marking plate.	—
F.3.3.7	Equipment with multiple supply connections	Each individual main supply electrical ratings are marked.	P
F.3.4	Voltage setting device	No such device used	N/A
F.3.5	Terminals and operating devices		P
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 ..... :	No such fuse used	N/A
F.3.5.4	Replacement battery identification marking..... :	No replaceable battery used	N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
F.3.5.5	Terminal marking location		P
F.3.6	Equipment markings related to equipment classification		P
F.3.6.1	Class I Equipment		P
F.3.6.1.1	Protective earthing conductor terminal	The symbol which complied with IEC 60417-5019  is marked near protective earthing conductor terminal of AC inlet.	P
F.3.6.1.2	Neutral conductor terminal	Not permanently connected equipment.	N/A
F.3.6.1.3	Protective bonding conductor terminals	Appliance inlet provided	P
F.3.6.2	Class II equipment (IEC60417-5172)	Class I equipment	N/A
F.3.6.2.1	Class II equipment with or without functional earth		N/A
F.3.6.2.2	Class II equipment with functional earth terminal marking		N/A
F.3.7	Equipment IP rating marking .....:	This equipment is classified as IP20.	—
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.	P
F.3.10	Test for permanence of markings	The label was subjected to the permanence of marking test, 15 sec. for water and 15 sec. for petroleum spirit. After each test, the marking remained legible.	P
F.4	Instructions		P
	a) Equipment for use in locations where children not likely to be present - marking		N/A
	b) Instructions given for installation or initial use	Provided in the manual.	P
	c) Equipment intended to be fastened in place	Provided in the manual.	P
	d) Equipment intended for use only in restricted access area	Provided in the manual.	P
	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		P
	g) Protective earthing conductor current exceeding ES2 limits		N/A
	h) Symbols used on equipment		P
	i) Permanently connected equipment not provided with all-pole mains switch	Not permanently connected equipment	N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	j) Replaceable components or modules providing safeguard function		P
F.5	Instructional safeguards		P
	Where “instructional safeguard” is referenced in the test report it specifies the required elements, location of marking and/or instruction		P
G	**COMPONENTS**		**P**
G.1	**Switches**		**N/A**
G.1.1	General requirements	Approved PSU used	N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.2	**Relays**		**N/A**
G.2.1	General requirements	Approved PSU used	N/A
G.2.2	Overload test		N/A
G.2.3	Relay controlling connectors supply power		N/A
G.2.4	Mains relay, modified as stated in G.2		N/A
G.3	**Protection Devices**		**N/A**
G.3.1	Thermal cut-offs	Approved PSU used	N/A
G.3.1.1a) &b)	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)		N/A
G.3.1.1c)	Thermal cut-outs tested as part of the equipment as indicated in c)		N/A
G.3.1.2	Thermal cut-off connections maintained and secure		N/A
G.3.2	Thermal links		N/A
G.3.2.1a)	Thermal links separately tested with IEC 60691	Approved PSU used	N/A
G.3.2.1b)	Thermal links tested as part of the equipment		N/A
	Aging hours (H).....:		—
	Single Fault Condition .....:		—
	Test Voltage (V) and Insulation Resistance (Ω) .:		—
G.3.3	PTC Thermistors		P
G.3.4	Overcurrent protection devices	See table 4.1.2 for details	P
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.5		N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A
G.3.5.2	Single faults conditions.....:		N/A
G.4	**Connectors**		**N/A**
G.4.1	Spacings	Approved PSU used	N/A
G.4.2	Mains connector configuration .....:		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.4.3	Plug is shaped that insertion into mains socket-outlets or appliance coupler is unlikely		N/A
G.5	**Wound Components**		**P**
G.5.1	Wire insulation in wound components.....	Approved PSU used	N/A
G.5.1.2 a)	Two wires in contact inside wound component, angle between 45° and 90°		N/A
G.5.1.2 b)	Construction subject to routine testing		N/A
G.5.2	Endurance test on wound components		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
	Time (s) ..... :		—
	Temperature (°C) ..... :		—
G.5.2.3	Wound Components supplied by mains		N/A
G.5.3	**Transformers**		**N/A**
G.5.3.1	Requirements applied (IEC61204-7, IEC61558-1/-2, and/or IEC62368-1)..... :	Approved PSU used	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**		P
G.5.4.1	General requirements	Approved DC fan used	P
	Position ..... :	Inside equipment	—
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)..... :		—

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.5.4.6	Locked-rotor overload test for d.c. motors in secondary circuits		N/A
G.5.4.6.2	Tested in the unit		N/A
	Maximum Temperature ..... :		N/A
	Electric strength test (V) ..... :		N/A
G.5.4.6.3	Tested on the bench - Alternative test method; test time (h)..... :		N/A
	Electric strength test (V)..... :		N/A
G.5.4.7	Motors with capacitors		N/A
G.5.4.8	Three-phase motors		N/A
G.5.4.9	Series motors		N/A
	Operating voltage ..... :		—
G.6	**Wire Insulation**		N/A
G.6.1	General	Approved PSU 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	No mains supply cord provided	N/A
	Type ..... :		—
	Rated current (A)..... :		—
	Cross-sectional area (mm^2), (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

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.7.6.2.1	Test with 8 mm strand		N/A
G.8	**Varistors**		**N/A**
G.8.1	General requirements	Approved PSU used	N/A
G.8.2	Safeguard against shock		N/A
G.8.3	Safeguard against fire		N/A
G.8.3.2	Varistor overload test .....:		N/A
G.8.3.3	Temporary overvoltage.....:		N/A
G.9	**Integrated Circuit (IC) Current Limiters**		**P**
G.9.1 a)	Manufacturer defines limit at max. 5A.		P
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	No such resistor used	N/A
G.10.2	Resistor test		N/A
G.10.3	Test for resistors serving as safeguards between the mains and an external circuit consisting of a coaxial cable		N/A
G.10.3.1	General requirements		N/A
G.10.3.2	Voltage surge test		N/A
G.10.3.3	Impulse test		N/A
G.11	**Capacitor and RC units**		N/A
G.11.1	General requirements	Approved PSU used	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).....:	Approved PSU used	N/A
	Type test voltage Vini .....:		—
	Routine test voltage, Vini,b .....:		—
G.13	**Printed boards**		P
G.13.1	General requirements		P
G.13.2	Uncoated printed boards		P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.13.3	Coated printed boards		N/A
G.13.4	Insulation between conductors on the same inner surface		N/A
	Compliance with cemented joint requirements (Specify construction)..... :		—
G.13.5	Insulation between conductors on different surfaces		N/A
	Distance through insulation .....:		N/A
	Number of insulation layers (pcs) .....:		—
G.13.6	Tests on coated printed boards		N/A
G.13.6.1	Sample preparation and preliminary inspection		N/A
G.13.6.2a)	Thermal conditioning		N/A
G.13.6.2b)	Electric strength test		N/A
G.13.6.2c)	Abrasion resistance test		N/A
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		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 sc 5.4.8 – 120 hours		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 .....:		—
D1)	10,000 cycles on and off using capacitor with smallest capacitance resistor with largest resistance specified by manufacturer		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
D2)	Capacitance ..... :		—
D3)	Resistance ..... :		—
H	**CRITERIA FOR TELEPHONE RINGING SIGNALS**		N/A
H.1	General	No telephone ringing signal generated within the equipment.	N/A
H.2	Method A		N/A
H.3	Method B		N/A
H.3.1	Ringing signal		N/A
H.3.1.1	Frequency (Hz) ..... :		—
H.3.1.2	Voltage (V) ..... :		—
H.3.1.3	Cadence; time (s) and voltage (V) ..... :		—
H.3.1.4	Single fault current (mA): ..... :		—
H.3.2	Tripping device and monitoring voltage..... :		N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage complied with		N/A
H.3.2.2	Tripping device		N/A
H.3.2.3	Monitoring voltage (V) ..... :		—
J	**INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION**		**N/A**
	General requirements	Approved PSU used	N/A
K	**SAFETY INTERLOCKS**		**N/A**
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
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

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
L	**DISCONNECT DEVICES**		**P**
L.1	General requirements		**P**
L.2	Permanently connected equipment		N/A
L.3	Parts that remain energized	When appliance inlet is disconnected no hazardous voltage in the equipment.	P
L.4	Single phase equipment	The appliance inlet disconnects both poles simultaneously.	P
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	Instructional safeguard used	P
M	**EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS**		**P**
M.1	General requirements		P
M.2	Safety of batteries and their cells	Approved button cell battery used, see also appended table 4.1.2.	P
M.2.1	Requirements		P
M.2.2	Compliance and test method (identify method)... :		N/A
M.3	Protection circuits		P
M.3.1	Requirements		P
M.3.2	Tests		P
	- Overcharging of a rechargeable battery		N/A
	- Unintentional charging of a non-rechargeable battery	Provided with a chip and a protective resistor in combination to reduce the unintentional charging current.	P
	- Reverse charging of a rechargeable battery		N/A
	- Excessive discharging rate for any battery		N/A
M.3.3	Compliance ..... :	(See appended Tables and Annex M.3)	P
M.4	Additional safeguards for equipment containing secondary lithium battery		N/A
M.4.1	General		N/A
M.4.2	Charging safeguards		N/A
M.4.2.1	Charging operating limits		N/A
M.4.2.2a)	Charging voltage, current and temperature..... :		—
M.4.2.2 b)	Single faults in charging circuitry ..... :		—
M.4.3	Fire Enclosure		N/A
M.4.4	Endurance of equipment containing a secondary lithium battery		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
M.4.4.2	Preparation		N/A
M.4.4.3	Drop and charge/discharge function tests		N/A
	Drop		N/A
	Charge		N/A
	Discharge		N/A
M.4.4.4	Charge-discharge cycle test		N/A
M.4.4.5	Result of charge-discharge cycle test		N/A
M.5	Risk of burn due to short circuit during carrying		N/A
M.5.1	Requirement		N/A
M.5.2	Compliance and Test Method (Test of P.2.3)		N/A
M.6	Prevention of short circuits and protection from other effects of electric current		N/A
M.6.1	Short circuits		N/A
M.6.1.1	General requirements		N/A
M.6.1.2	Test method to simulate an internal fault		N/A
M.6.1.3	Compliance (Specify M.6.1.2 or alternative method) ..... :		N/A
M.6.2	Leakage current (mA) ..... :		N/A
M.7	Risk of explosion from lead acid and NiCd batteries		N/A
M.7.1	Ventilation preventing explosive gas concentration		N/A
M.7.2	Compliance and test method		N/A
M.8	Protection against internal ignition from external spark sources of lead acid batteries		N/A
M.8.1	General requirements		N/A
M.8.2	Test method		N/A
M.8.2.1	General requirements		N/A
M.8.2.2	Estimation of hypothetical volume V_z (m^3/s) ..... :		—
M.8.2.3	Correction factors..... :		—
M.8.2.4	Calculation of distance *d* (mm) ..... :		—
M.9	Preventing electrolyte spillage		N/A
M.9.1	Protection from electrolyte spillage		N/A
M.9.2	Tray for preventing electrolyte spillage		N/A
M.10	Instructions to prevent reasonably foreseeable misuse (Determination of compliance: inspection, data review; or abnormal testing) ..... :		P
N	**ELECTROCHEMICAL POTENTIALS**		**P**
	Metal(s) used..... :		—

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

O	**MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES**		**N/A**
	Figures O.1 to O.20 of this Annex applied ..... :	Approved PSU used	—
P	**SAFEGUARDS AGAINST ENTRY OF FOREIGN OBJECTS AND SPILLAGE OF INTERNAL LIQUIDS**		**P**
P.1	General requirements	See P.2.2	P
P.2.2	Safeguards against entry of foreign object		P
	Location and Dimensions (mm) ..... :	Openings that do not exceed 5 mm in any dimension.	—
P.2.3	Safeguard against the consequences of entry of foreign object		P
P.2.3.1	Safeguards against the entry of a foreign object		N/A
	Openings in transportable equipment		N/A
	Transportable equipment with metalized plastic parts ..... :		N/A
P.2.3.2	Openings in transportable equipment in relation to metallized parts of a barrier or enclosure (identification of supplementary safeguard) ..... :		N/A
P.3	Safeguards against spillage of internal liquids		N/A
P.3.1	General requirements		N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Safeguards effectiveness		N/A
P.4	Metallized coatings and adhesive securing parts		N/A
P.4.2 a)	Conditioning testing		N/A
	Tc (°C)..... :		—
	Tr (°C)..... :		—
	Ta (°C)..... :		—
P.4.2 b)	Abrasion testing ..... :	Not for metalized coating	N/A
P.4.2 c)	Mechanical strength testing..... :		N/A
Q	**CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING**		**P**
Q.1	Limited power sources		P
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		P
Q.1.1 c)	Overcurrent protective device limited output		N/A
Q.1.1 d)	IC current limiter complying with G.9		P
Q.1.2	Compliance and test method	(See appended table annex Q.1)	P
Q.2	Test for external circuits – paired conductor cable		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	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		N/A
R.3	Test method Supply voltage (V) and short-circuit current (A)). ..... :		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)..... :		—
	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 enclosure materials of equipment with a steady-state power exceeding 4000 W		N/A
	Samples, material ..... :		—
	Wall thickness (mm)..... :		—
	Conditioning (test condition), (°C)..... :		—

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Test flame according to IEC 60695-11-20 with conditions as set out		N/A
	After every test specimen was not consumed completely		N/A
	After fifth flame application, flame extinguished within 1 min		N/A
T	**MECHANICAL STRENGTH TESTS**		**P**
T.1	General requirements	See below.	P
T.2	Steady force test, 10 N .....:		N/A
T.3	Steady force test, 30 N .....:		N/A
T.4	Steady force test, 100 N .....:		N/A
T.5	Steady force test, 250 N .....:	(see appended table T.5)	P
T.6	Enclosure impact test	(see appended table T.6)	P
	Fall test		P
	Swing test		N/A
T.7	Drop test .....:		N/A
T.8	Stress relief test .....:		N/A
T.9	Impact Test (glass)		N/A
T.9.1	General requirements		N/A
T.9.2	Impact test and compliance		N/A
	Impact energy (J).....:		—
	Height (m) .....:		—
T.10	Glass fragmentation test .....:		N/A
T.11	Test for telescoping or rod antennas	No such antennas provided within the equipment.	N/A
	Torque value (Nm) .....:		—
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		N/A
U.3	Protective Screen .....:		N/A
V	**DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)**		**P**
V.1	Accessible parts of equipment	No access with test probes (e.g. fig. V.1) to any hazardous parts	P
V.2	Accessible part criterion	See above	P

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

4.1.2	**TABLE: List of critical components**				P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity[1]
Enclosure	Interchangeable	Interchangeable	86.1mm(H) by 447mm(W) by 798mm(D); min 1.0 mm thickness; Max dimensions of openings: 5 mm	IEC 62368-1	Tested with appliance
PCB	Interchangeable	Interchangeable	V-0, 130 ºC.	UL796 UL 94	UL
Hard disk	Interchangeable	Interchangeable	Rating: 12 V d.c., 2.45 A Max or 5 V d.c., 2 A Max	UL 62368-1	cTUVus or cULus
Laser module (optional)	Interchangeable	Interchangeable	Class 1 laser	EN/IEC 60825-1 EN/IEC 60825-2 EN/IEC 62368-1	TUV or UL
Internal wire	Interchangeable	Interchangeable	VW-1	UL 758 UL2556	UL
Battery (24010067)	EVE ENERGY CO LTD	CR2032HT	Rated: 3 V, 0.2 Ah. Max abnormal charge current: 10 mA (UL), 1 mA (IEC)	UL 1642 IEC 60086-4	UL MH28717 TUV, JPTUV-112280
(Alternative)	PANASONIC	BR2032	Rated: 3 V, 0.20 Ah. Max abnormal charge current: 5 mA	UL 1642 IEC 60086-4	UL, MH12210 DEKRA, NL-59041
IC (39070055-001)	TI	TPS2553	Rated: 2.5-6.5 V d.c., Current Limit Rating: 1.7 A	ANSI/UL 2367 IEC/EN 62368-1	UL, E169910 Certif. No. US-2406-MET
(Alternative)	RichTek	RTQ9728W	Rated: 4.5-5.5 V d.c., Current Limit Rating: 2.5 A	IEC/EN 62368-1	Nemko, 399989 Nemko Certif. No. NO112836

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

(Alternative)	Joulwatt	JW87102DFNB# TRPBF	Vin: 2.7 V d.c.-5.5 V d.c., Vout: 2.7 V d.c.-5.5 V d.c., Iout:1.547-1.853 A with RLIM=15 kohm Iout:1.164-1.426 A with RLIM=20 kohm Iout:0.449-0.591 A with RLIM=50 kohm	IEC/EN/UL 62368-1	UL, E497605 UL Certif. No. DK-99032-UL
PTC (07050055)	THINKING	KMC5S075	Rating: 16 V, 0.75 A	IEC/EN 60730-1	TUV-RH, R50143386 UL,138827
(Alternative)	LITTELFUSE	miniSMDC075	Rating: 13.2 V, 0.75 A	IEC/EN 60730-1	TUV-RH, R72091813 UL,74889
Fan (3203Y002)	AVC	DFPG0856B2UY 031	12.0 VDC, 10.7 A , Min 122.87 CFM	UL 507 EN 62368-1	UL, E158191 TUV, B 025730 00972 Rev. 07
(Alternative)	SHEN ZHEN HUNTKEY ELECTRICS CO., LTD.	FAB8056U12-PF02	12.0 VDC, 8.3 A, Min 117.4 CFM	UL 507 EN 62368-1	UL, E333267 TUV, B 072112 0083 Rev. 00

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

AC/DC power supply unit	xFusion digital technologies co., ltd.	PAC2000S12-T1	Input: ~230- 240 V; 50/60 Hz; 10 A or 240 V d.c.; 10 A; DC Output: 12.3 V d.c.; 175 A Max Total Output Power: 2148 W Max. Input: ~220- 230 V; 50/60 Hz; 10 A; DC Output: 12.3 V d.c.; 163 A Max Total Output Power: 2000 W Max. Input: ~200- 220 V; 50/60 Hz; 10 A; DC Output: 12.3 V d.c.; 146 A Max Total Output Power: 1800 W Max. Input: ~100- 127 V; 50/60 Hz; 10 A; DC Output: 12.3 V d.c.; 73 A Max Total Output Power: 900 W Max.	IEC 62368-1	TUV RH CB Report No.: CN225TZT 003 Cert. No.: JPTUV-143810-A1/M1

Supplementary information:

[1)] Provided evidence ensures the agreed level of compliance. See OD-CB2039.

Licenses are available upon requested.

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

4.8.4, 4.8.5	**TABLE: Lithium coin/button cell batteries mechanical tests**	N/A

(The following mechanical tests are conducted in the sequence noted.)

4.8.4.2 **TABLE: Stress Relief test** —

Part	Material	Oven Temperature (°C)	Comments

4.8.4.3 **TABLE: Battery replacement test** —

Battery part no. ..... : —

Battery Installation/withdrawal	Battery Installation/Removal Cycle	Comments
	1	
	2	
	3	
	4	
	5	
	6	
	8	
	9	
	10	

4.8.4.4 **TABLE: Drop test** —

Impact Area	Drop Distance	Drop No.	Observations
		1	
		2	
		3	

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 applied (s)

Supplementary information:

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

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

5.2	Table: Classification of electrical energy sources	P

5.2.2.2 – Steady State Voltage and Current conditions

No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				U (Vrms or Vpk)	I (Apk or Arms)	Hz	
1	264Va.c, 60Hz Or 300Vd.c	Input Circuit and internal circuit	Normal	264 Vac or 300 Vdc	--	--	ES3
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	
	264Va.c, 60Hz Or 300Vd.c	Interfaces (Mgmt port, VGA port, USB port, IOIOI port, Type-C port)	Normal	5.78 Vdc Max	--	--	ES1
			Abnormal	--	--	--	
			Single fault – SC/OC	--	--	--	

5.2.2.3 - Capacitance Limits

No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters		ES Class
				Capacitance, nF	Upk (V)	
			Normal			
			Abnormal			
			Single fault – SC/OC			

5.2.2.4 - Single Pulses

No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Duration (ms)	Upk (V)	Ipk (mA)	
			Normal				
			Abnormal				
			Single fault – SC/OC				

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

5.2.2.5 - Repetitive Pulses

No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Off time (ms)	Upk (V)	Ipk (mA)	
			Normal				
			Abnormal				
			Single fault – SC/OC				

Test Conditions:

Normal –

Abnormal -

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

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

5.4.1.4, 6.3.2, 9.0, B.2.6	**TABLE: Temperature measurements**					P
	Supply voltage (V) ..... :	90 V a.c. /50 Hz	139.7 V a.c. /50 Hz	90 V a.c. /50 Hz	139.7 V a.c. /50 Hz	—
	Ambient T_{min} (°C) ..... :	--	--	--	--	—
	Ambient T_{max} (°C) ..... :	--	--	--	--	—
	Tma (°C) ..... :	--	--	35	35	—
Maximum measured temperature T of part/at:		T (°C)				Allowed T_{max} (°C)
1.Ambient		24.2	24.7	35.0	35.0	--
2.Battery surface on BC16MBSC board		42.9	42.9	53.7	53.2	100
3.Heat sink of CPU1 on BC16MBSC board		43.7	43.9	54.5	54.2	130
4.Heat sink of CPU2 on BC16MBSC board		49.7	50.0	60.5	60.3	130
5.Heat sink of U13 on XC310 board		39.5	39.7	50.3	50.0	130
6.Heat sink of U6162 on BC26SMMAA board		35.9	36.1	46.7	46.4	130
7.Heat sink of U51 on 9540-8i board		40.2	40.4	51.0	50.7	130
8.Heat sink of U26 on 9560-16i board		45.9	46.0	56.7	56.3	130
9.Heat sink of U1206 on BCM957608-P2200GQF00 board		40.1	40.2	50.9	50.5	130
10.Heat sink of HS1 on XP330 board		32.6	32.8	43.4	43.1	130
11.Heat sink of U2002 on BCM957414A4142CC board		37.7	37.9	48.5	48.2	130
12.Heat sink of U7 on MCX623106AN-CDAT board		44.8	45.0	55.6	55.3	130
13.DC input connector J9703 on BC16MBSC board		32.2	32.4	43.0	42.7	85
14.DC input connector J9002 on BC16MBSC board		48.6	48.4	59.4	58.7	85
15.Heat sink of U17 on BC15NHBS board		27.0	27.3	37.8	37.6	130
16.FAN enclosure		25.9	26.2	36.7	36.5	Reference
17.AC inlet of PSU		39.7	38.0	50.5	48.3	70
18.L1301 Core of PSU		38.8	38.6	49.6	48.9	130
19.Transformer T1.1 Core of PSU		45.7	45.3	56.5	55.6	130
20.Transformer T1.1 Winding of PSU		49.3	49.3	60.1	59.6	130
21.Transformer T1.2 Core of PSU		49.8	50.7	60.6	61.0	130
22.Transformer T1.2 Winding of PSU		51.0	51.2	61.8	61.5	130
Accessible part temperature:						
1.Ambient		25.0	25.0			
23.Metal handle of PAC2000S12-T1 (>1s~ <10s)		39.9	39.2	-	-	60
24.Button of PAC2000S12-T1 (>1s~ <10s)		43.0	41.6	-	-	77

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

25.Metal enclosure of EUT (>1s~ <10s)	35.2	34.9	-	-	60
26.Enclosure of EUT near openings ventilation	36.7	36.5	-	-	60

Supplementary information:

Temperature T of winding:	t_1 (°C)	R_1 (Ω)	t_2 (°C)	R_2 (Ω)	T (°C)	Allowed T_{max} (°C)	Insulation class
--	--	--	--	--	--	--	--

Supplementary information:

Supplementary information:

Note 1: Tma should be considered as directed by appliable requirement

Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)

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

5.4.1.4, 6.3.2, 9.0, B.2.6	**TABLE: Temperature measurements**					P
	Supply voltage (V) ..... :	180 V a.c. /50 Hz	242 V a.c. /50 Hz	180 V a.c. /50 Hz	242 V a.c. /50 Hz	—
	Ambient T_{min} (°C) ..... :	--	--	--	--	—
	Ambient T_{max} (°C) ..... :	--	--	--	--	—
	Tma (°C) ..... :	--	--	35	35	—
Maximum measured temperature T of part/at:		T (°C)				Allowed T_{max} (°C)
1.Ambient		24.0	24.4	35.0	35.0	--
2.Battery surface on BC16MBSC board		43.0	43.4	54.0	54.0	100
3.Heat sink of CPU1 on BC16MBSC board		44.0	44.2	55.0	54.8	130
4.Heat sink of CPU2 on BC16MBSC board		49.8	50.3	60.8	60.9	130
5.Heat sink of U13 on XC310 board		39.7	40.0	50.7	50.6	130
6.Heat sink of U6162 on BC26SMMAA board		36.0	36.5	47.0	47.1	130
7.Heat sink of U51 on 9540-8i board		40.4	40.7	51.4	51.3	130
8.Heat sink of U26 on 9560-16i board		46.1	46.4	57.1	57.0	130
9.Heat sink of U1206 on BCM957608-P2200GQF00 board		40.2	40.4	51.2	51.0	130
10.Heat sink of HS1 on XP330 board		32.5	33.0	43.5	43.6	130
11.Heat sink of U2002 on BCM957414A4142CC board		37.7	38.1	48.7	48.7	130
12.Heat sink of U7 on MCX623106AN-CDAT board		44.8	45.2	55.8	55.8	130
13.DC input connector J9703 on BC16MBSC board		32.2	32.5	43.2	43.1	85
14.DC input connector J9002 on BC16MBSC board		51.0	51.4	62.0	62.0	85
15.Heat sink of U17 on BC15NHBS board		27.2	27.6	38.2	38.2	130
16.FAN enclosure		26.0	26.2	37.0	36.8	Reference
17.AC inlet of PSU		39.8	39.2	50.8	49.8	70
18.L1301 Core of PSU		38.4	38.9	49.4	49.5	130
19.Transformer T1.1 Core of PSU		46.3	46.9	57.3	57.5	130
20.Transformer T1.1 Winding of PSU		55.9	56.7	66.9	67.3	130
21.Transformer T1.2 Core of PSU		54.6	55.5	65.6	66.1	130
22.Transformer T1.2 Winding of PSU		58.2	58.9	69.2	69.5	130
Accessible part temperature:						
1.Ambient		25.0	25.0	--	--	--
23.Metal handle of PAC2000S12-T1 (>1s~ <10s)		41.8	41.4	--	--	60
24.Button of PAC2000S12-T1 (>1s~ <10s)		44.8	44.0	--	--	77
25.Metal enclosure of EUT (>1s~ <10s)		35.3	35.3	--	--	60

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

26.Enclosure of EUT near openings ventilation	36.7	36.5	--	--	60
Supplementary information:					

Temperature T of winding:	t_1 (°C)	R_1 (Ω)	t_2 (°C)	R_2 (Ω)	T (°C)	Allowed T_{max} (°C)	Insulation class
--	--	--	--	--	--	--	--

Supplementary information:

Supplementary information:

Note 1: Tma should be considered as directed by appliable requirement

Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)

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

5.4.1.4, 6.3.2, 9.0, B.2.6	**TABLE: Temperature measurements**					P
	Supply voltage (V) ..... :	198 V a.c. /50 Hz	253 V a.c. /50 Hz	198 V a.c. /50 Hz	253 V a.c. /50 Hz	—
	Ambient T_{min} (°C) ..... :	--	--	--	--	—
	Ambient T_{max} (°C) ..... :	--	--	--	--	—
	Tma (°C) ..... :	--	--	35	35	—
Maximum measured temperature T of part/at:		T (°C)				Allowed T_{max} (°C)
1.Ambient		24.0	23.7	35.0	35.0	--
2.Battery surface on BC16MBSC board		43.0	43.1	54.0	54.4	100
3.Heat sink of CPU1 on BC16MBSC board		43.9	43.9	54.9	55.2	130
4.Heat sink of CPU2 on BC16MBSC board		50.0	49.8	61.0	61.1	130
5.Heat sink of U13 on XC310 board		39.7	39.6	50.7	50.9	130
6.Heat sink of U6162 on BC26SMMAA board		36.0	36.0	47.0	47.3	130
7.Heat sink of U51 on 9540-8i board		40.4	40.4	51.4	51.7	130
8.Heat sink of U26 on 9560-16i board		46.1	46.0	57.1	57.3	130
9.Heat sink of U1206 on BCM957608-P2200GQF00 board		40.2	40.0	51.2	51.3	130
10.Heat sink of HS1 on XP330 board		32.6	32.7	43.6	44.0	130
11.Heat sink of U2002 on BCM957414A4142CC board		37.7	37.7	48.7	49.0	130
12.Heat sink of U7 on MCX623106AN-CDAT board		44.8	44.8	55.8	56.1	130
13.DC input connector J9703 on BC16MBSC board		32.3	32.2	43.3	43.5	85
14.DC input connector J9002 on BC16MBSC board		51.1	51.2	62.1	62.5	85
15.Heat sink of U17 on BC15NHBS board		27.2	27.2	38.2	38.5	130
16.FAN enclosure		26.0	26.0	37.0	37.3	Reference
17.AC inlet of PSU		39.4	39.3	50.4	50.6	70
18.L1301 Core of PSU		38.6	38.7	49.6	50.0	130
19.Transformer T1.1 Core of PSU		46.5	47.0	57.5	58.3	130
20.Transformer T1.1 Winding of PSU		56.1	57.1	67.1	68.4	130
21.Transformer T1.2 Core of PSU		54.8	55.6	65.8	66.9	130
22.Transformer T1.2 Winding of PSU		58.4	59.1	69.4	70.4	130
Accessible part temperature:						
1.Ambient		25.0	25.0	--	--	--
23.Metal handle of PAC2000S12-T1 (>1s~ <10s)		41.8	41.9	--	--	60
24.Button of PAC2000S12-T1 (>1s~ <10s)		44.4	44.6	--	--	77
25.Metal enclosure of EUT (>1s~ <10s)		35.3	35.6	--	--	60

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

26.Enclosure of EUT near openings ventilation	37.1	37.4	--	--	60
Supplementary information:					

Temperature T of winding:	t_1 (°C)	R_1 (Ω)	t_2 (°C)	R_2 (Ω)	T (°C)	Allowed T_{max} (°C)	Insulation class
--	--	--	--	--	--	--	--

Supplementary information:

Supplementary information:

Note 1: Tma should be considered as directed by appliable requirement

Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)

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

5.4.1.4, 6.3.2, 9.0, B.2.6	**TABLE: Temperature measurements**					P
	Supply voltage (V) ..... :	207 V a.c. /50 Hz	264 V a.c. /50 Hz	207 V a.c. /50 Hz	264 V a.c. /50 Hz	—
	Ambient T_{min} (°C) ..... :	--	--	--	--	—
	Ambient T_{max} (°C) ..... :	--	--	--	--	—
	Tma (°C) ..... :	--	--	35	35	—
Maximum measured temperature T of part/at:		T (°C)				Allowed T_{max} (°C)
1.Ambient		24.1	24.2	35.0	35.0	--
2.Battery surface on BC16MBSC board		43.2	43.4	54.1	54.2	100
3.Heat sink of CPU1 on BC16MBSC board		44.1	44.6	55.0	55.4	130
4.Heat sink of CPU2 on BC16MBSC board		49.9	50.7	60.8	61.5	130
5.Heat sink of U13 on XC310 board		39.9	40.2	50.8	51.0	130
6.Heat sink of U6162 on BC26SMMAA board		36.1	36.6	47.0	47.4	130
7.Heat sink of U51 on 9540-8i board		40.6	41.1	51.5	51.9	130
8.Heat sink of U26 on 9560-16i board		46.2	46.8	57.1	57.6	130
9.Heat sink of U1206 on BCM957608-P2200GQF00 board		40.3	40.4	51.2	51.2	130
10.Heat sink of HS1 on XP330 board		32.6	33.2	43.5	44.0	130
11.Heat sink of U2002 on BCM957414A4142CC board		37.7	38.5	48.6	49.3	130
12.Heat sink of U7 on MCX623106AN-CDAT board		44.8	45.9	55.7	56.7	130
13.DC input connector J9703 on BC16MBSC board		32.2	32.8	43.1	43.6	85
14.DC input connector J9002 on BC16MBSC board		51.0	51.8	61.9	62.6	85
15.Heat sink of U17 on BC15NHBS board		27.3	27.8	38.2	38.6	130
16.FAN enclosure		26.0	26.4	36.9	37.2	Reference
17.AC inlet of PSU		39.2	39.0	50.1	49.8	70
18.L1301 Core of PSU		38.5	39.1	49.4	49.9	130
19.Transformer T1.1 Core of PSU		46.5	47.2	57.4	58.0	130
20.Transformer T1.1 Winding of PSU		56.1	56.8	67.0	67.6	130
21.Transformer T1.2 Core of PSU		54.9	55.8	65.8	66.6	130
22.Transformer T1.2 Winding of PSU		58.4	59.0	69.3	69.8	130
Accessible part temperature:						
1.Ambient		25.0	25.0	--	--	--
23.Metal handle of PAC2000S12-T1 (>1s~ <10s)		41.8	41.4	--	--	60
24.Button of PAC2000S12-T1 (>1s~ <10s)		44.2	44.1	--	--	77
25.Metal enclosure of EUT (>1s~ <10s)		35.4	36.0	--	--	60

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

26.Enclosure of EUT near openings ventilation	37.0	37.6	--	--	60
Supplementary information:					

Temperature T of winding:	t_1 (°C)	R_1 (Ω)	t_2 (°C)	R_2 (Ω)	T (°C)	Allowed T_{max} (°C)	Insulation class
--	--	--	--	--	--	--	--

Supplementary information:

Supplementary information:

Note 1: Tma should be considered as directed by appliable requirement

Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)

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

5.4.1.4, 6.3.2, 9.0, B.2.6	**TABLE: Temperature measurements**					P
	Supply voltage (V) ..... :	180 V d.c.	300 V d.c	180 V d.c.	300 V d.c	—
	Ambient T_{min} (°C) ..... :	--	--	--	--	—
	Ambient T_{max} (°C) ..... :	--	--	--	--	—
	Tma (°C) ..... :	--	--	35	35	—
Maximum measured temperature T of part/at:		T (°C)				Allowed T_{max} (°C)
1.Ambient		24.7	24.9	35.0	35.0	--
2.Battery surface on BC16MBSC board		44.1	43.9	54.4	54.0	100
3.Heat sink of CPU1 on BC16MBSC board		45.0	45.1	55.3	55.2	130
4.Heat sink of CPU2 on BC16MBSC board		51.0	51.1	61.3	61.2	130
5.Heat sink of U13 on XC310 board		40.8	40.8	51.1	50.9	130
6.Heat sink of U6162 on BC26SMMAA board		37.2	37.1	47.5	47.2	130
7.Heat sink of U51 on 9540-8i board		41.5	41.6	51.8	51.7	130
8.Heat sink of U26 on 9560-16i board		47.2	47.3	57.5	57.4	130
9.Heat sink of U1206 on BCM957608-P2200GQF00 board		40.8	40.9	51.1	51.0	130
10.Heat sink of HS1 on XP330 board		33.5	33.7	43.8	43.8	130
11.Heat sink of U2002 on BCM957414A4142CC board		38.8	38.9	49.1	49.0	130
12.Heat sink of U7 on MCX623106AN-CDAT board		45.6	45.9	55.9	56.0	130
13.DC input connector J9703 on BC16MBSC board		33.1	33.1	43.4	43.2	85
14.DC input connector J9002 on BC16MBSC board		52.2	52.2	62.5	62.3	85
15.Heat sink of U17 on BC15NHBS board		28.2	28.3	38.5	38.4	130
16.FAN enclosure		26.7	26.8	37.0	36.9	Reference
17.AC inlet of PSU		41.3	40.4	51.6	50.5	70
18.L1301 Core of PSU		39.2	39.3	49.5	49.4	130
19.Transformer T1.1 Core of PSU		47.5	47.4	57.8	57.5	130
20.Transformer T1.1 Winding of PSU		57.1	57.0	67.4	67.1	130
21.Transformer T1.2 Core of PSU		56.7	56.6	67.0	66.7	130
22.Transformer T1.2 Winding of PSU		59.4	59.4	69.7	69.5	130
Accessible part temperature:						
1.Ambient		25.0	25.0	--	--	--
23.Metal handle of PAC2000S12-T1 (>1s~ <10s)		42.4	41.4	--	--	60
24.Button of PAC2000S12-T1 (>1s~ <10s)		45.5	44.2	--	--	77
25.Metal enclosure of EUT (>1s~ <10s)		35.9	35.8	--	--	60

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

26.Enclosure of EUT near openings ventilation	37.5	37.4	--	--	60

Supplementary information:

Temperature T of winding:	t_1 (°C)	R_1 (Ω)	t_2 (°C)	R_2 (Ω)	T (°C)	Allowed T_{max} (°C)	Insulation class
--	--	--	--	--	--	--	--

Supplementary information:

Supplementary information:

Note 1: Tma should be considered as directed by appliable requirement

Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)

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

Supplementary information:

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

Supplementary information:

5.4.2.2, 5.4.2.4 and 5.4.3	**TABLE: Minimum Clearances/Creepage distance**						N/A
Clearance (cl) and creepage distance (cr) at/of/between:	Up (V)	U r.m.s. (V)	Frequency (kHz)[1]	Required cl (mm)	cl (mm)[2]	Required[3] cr (mm)	cr (mm)

Supplementary information:

Note 1: Only for frequency above 30 kHz

Note 2: See table 5.4.2.4 if this is based on electric strength test

Note 3: Provide Material Group

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

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

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

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

5.4.9	**TABLE: Electric strength tests**		**P**
Test voltage applied between:	Voltage shape (AC, DC)	Test voltage (V)	Breakdown Yes / No
Basic/supplementary:			
AC/HVDC input to PE	DC	2500	No
Reinforced:			
AC/HVDC to DC output	DC	4000	No
Supplementary information:			

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

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

5.6.6.2	TABLE: Resistance of protective conductors and terminations			P
Accessible part	Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)
Farthest part between earthing terminal to main PE	32	2	0.29	0.009
Farthest part between earthing terminal to main PE	40	2	0.32	0.008
Supplementary information:				

5.7.2.2, 5.7.4	TABLE: Earthed accessible conductive part	P
Supply voltage ..... :	264Vac/ 60Hz	—
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)
Earthed metal Enclosure	1	2.02 mA
	2*	0.01 mA peak (open N) 3.24 mA peak (open PE and N)
	3	
	4	
	5	

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

	6	
	8	

Supplementary Information:
Test with 2 PSUs

Notes:
[1] Supply voltage is the anticipated maximum Touch Voltage
[2] Earthed neutral conductor [Voltage differences less than 1% or more]
[3] Specify method used for measurement as described in IEC 60990 sub-clause 4.3
[4] IEC60990, sub-clause 6.2.2.7, Fault 7 not applicable.
[5] (*) IEC60990, sub-clause 6.2.2.2 is not applicable if switch or disconnect device (e.g., appliance coupler) provided.

6.2.2	Table: Electrical power sources (PS) measurements for classification				P
Source	Description	Measurement	Max Power after 3 s	Max Power after 5 s*)	PS Classification
Input and internal circuit	Normal	Power (W) :	--	--	PS3 (Declared)
		V_A (V) :	--	--	
		I_A (A) :	--	--	
**Interfaces	Normal	Power (W) :	5.78 Max	5.78 Max	PS1
		V_A (V) :	--	--	
		I_A (A) :	--	--	

(*) Measurement taken only when limits at 3 seconds exceed PS1 limits
(**) Approved Limit IC used.

6.2.3.1	Table: Determination of Potential Ignition Sources (Arcing PIS)			P
Location	Open circuit voltage After 3 s (Vp)	Measured r.m.s current (Irms)	Calculated value (V_p x I_{rms})	Arcing PIS? Yes / No
All circuit	--	--	--	Yes

Supplementary information:

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

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

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

Supplementary Information:
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, or (b) under single fault conditions has either a power exceeding 100 W measured immediately after the introduction of the fault if electronic circuits, regulators or PTC devices are used, or has an available power exceeding 15 W measured 30 s after introduction of the fault.

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

B.2.5	**TABLE: Input test**							P
U (V)	Hz	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
90 V a.c	50	9.11	--	--	--	--	--	Max. normal load with input 1
90 V a.c	50	8.72	--	--	--	--	--	Max. normal load with input 2
100 V a.c	50	8.16	Per input: 10	--	--	--	--	Max. normal load with input 1
100 V a.c	50	7.75	Per input: 10	--	--	--	--	Max. normal load with input 2
127 V a.c	50	6.35	Per input: 10	--	--	--	--	Max. normal load with input 1
127 V a.c	50	5.94	Per input: 10	--	--	--	--	Max. normal load with input 2

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

139.7 V a.c.	50	5.71	--	--	--	--	--	Max. normal load with input 1
139.7 V a.c.	50	5.41	--	--	--	--	--	Max. normal load with input 2
180 V a.c.	50	8.59	--	--	--	--	--	Max. normal load
198 V a.c.	50	7.79	--	--	--	--	--	Max. normal load
200 V a.c.	50	7.73	10	--	--	--	--	Max. normal load
207 V a.c.	50	7.45	--	--	--	--	--	Max. normal load
220 V a.c.	50	6.99	10	--	--	--	--	Max. normal load
230 V a.c.	50	6.69	10	--	--	--	--	Max. normal load
240 V a.c.	50	6.41	10	--	--	--	--	Max. normal load
242 V a.c.	50	6.36	--	--	--	--	--	Max. normal load
253 V a.c.	50	6.23	--	--	--	--	--	Max. normal load
264 V a.c.	50	5.98	--	--	--	--	--	Max. normal load
90 V a.c	60	9.11	--	--	--	--	--	Max. normal load with input 1
90 V a.c	60	8.72	--	--	--	--	--	Max. normal load with input 2
100 V a.c	60	8.16	Per input: 10	--	--	--	--	Max. normal load with input 1
100 V a.c	60	7.75	Per input: 10	--	--	--	--	Max. normal load with input 2
127 V a.c	60	6.35	Per input: 10	--	--	--	--	Max. normal load with input 1
127 V a.c	60	5.94	Per input: 10	--	--	--	--	Max. normal load with input 2
139.7 V a.c.	60	5.71	--	--	--	--	--	Max. normal load with input 1
139.7 V a.c.	60	5.41	--	--	--	--	--	Max. normal load with input 2
180 V a.c.	60	8.59	--	--	--	--	--	Max. normal load
198 V a.c.	60	7.79	--	--	--	--	--	Max. normal load
200 V a.c.	60	7.73	10	--	--	--	--	Max. normal load
207 V a.c.	60	7.45	--	--	--	--	--	Max. normal load
220 V a.c.	60	6.99	10	--	--	--	--	Max. normal load
230 V a.c.	60	6.69	10	--	--	--	--	Max. normal load
240 V a.c.	60	6.41	10	--	--	--	--	Max. normal load

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

242 V a.c.	60	6.36	--	--	--	--	--	Max. normal load
253 V a.c.	60	6.23	--	--	--	--	--	Max. normal load
264 V a.c.	60	5.98	--	--	--	--	--	Max. normal load
180 V d.c.	DC	8.61	--	--	--	--	--	Max. normal load
240 V d.c.	DC	6.39	10	--	--	--	--	Max. normal load
288 V d.c.	DC	5.09	--	--	--	--	--	Max. normal load
Supplementary information:								
Equipment may be have rated current or rated power or both. Both should be measured								

B.3	**TABLE: Abnormal operating condition tests**							P
Ambient temperature (°C) .....:							25	—
Power source for EUT: Manufacturer, model/type, output rating ..:								—
Component No.	Abnormal Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation
All openings	Blocked	264 V a.c	116 mins	-	5.18 to 0.48		(1) L1301 Core of PSU: 72.8°C (2) Transformer T1.1 Core of PSU: 78.6°C (3) Transformer T1.1 Winding of PSU: 85.9°C (4) Transformer T1.2 Core of PSU: 85.2°C (5) Transformer T1.2 Winding of PSU: 85.2°C (6) Metal handle of PSU (at ambient is 25°C): 56.8°C (7) Button of PSU (at ambient is 25°C): 58.8°C (8) Metal enclosure of EUT near openings ventilation (at ambient is 25°C): 44.7°C (9) Enclosure of EUT near openings venti lation (at ambient is 25°C): 49.4°C	When monitoring temperature of EUT reached highest, EUT was protected. The temperature reduce until thermal equilibrium. No hazards. NC,NB, NT touch voltage: 0 V (All Ports)

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

B.3	TABLE: Abnormal operating condition tests							P
Ambient temperature (°C) .....:							25	—
Power source for EUT: Manufacturer, model/type, output rating ..:								—
Component No.	Abnormal Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation
All openings	Blocked	300Vd.c	104 mins		4.42 to 0.75		(1) L1301 Core of PSU: 70.5°C (2) Transformer T1.1 Core of PSU: 77.0°C (3) Transformer T1.1 Winding of PSU: 85.0°C (4) Transformer T1.2 Core of PSU: 85.2°C (5) Transformer T1.2 Winding of PSU: 85.1°C (6) Metal handle of PSU (at ambient is 25°C): 48.7°C (7) Button of PSU (at ambient is 25°C): 53.4°C (8) Metal enclosure of EUT near openings ventilation (at ambient is 25°C): 44.7°C (9) Enclosure of EUT near openings venti lation (at ambient is 25°C): 48.0°C	When monitoring temperature of EUT reached highest, EUT was protected. The temperature reduce until thermal equilibrium. No hazards. NC,NB, NT touch voltage: 0 V (All Ports)
DC input polarity	Reversed	300 Vd.c	15 mins	--	--	--	--	EUT can normal work. No hazards. NC, NT, NB.

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

B.3	TABLE: Abnormal operating condition tests							P
Ambient temperature (°C) .....:							25	—
Power source for EUT: Manufacturer, model/type, output rating ..:								—
Component No.	Abnormal Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation
Fan	Disconnected	264 V a.c	126 mins	-	5.18 to 0.45	--	(1) L1301 Core of PSU: 60.5°C (2) Transformer T1.1 Core of PSU: 62.0°C (3) Transformer T1.1 Winding of PSU: 71.1°C (4) Transformer T1.2 Core of PSU: 68.4°C (5) Transformer T1.2 Winding of PSU: 70.3°C (6) Metal handle of PSU (at ambient is 25°C): 41.5°C (7) Button of PSU (at ambient is 25°C): 44.2°C (8) Metal enclosure of EUT near openings ventilation (at ambient is 25°C): 39.5°C (9) Enclosure of EUT near openings venti lation (at ambient is 25°C): 36.6°C	When monitoring temperature of EUT reached highest, EUT was protected. The temperature reduce until thermal equilibrium. No hazards. NC,NB, NT touch voltage: 0 V (All Ports)

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

B.3	TABLE: Abnormal operating condition tests							P
Ambient temperature (°C) .....:							25	—
Power source for EUT: Manufacturer, model/type, output rating ..:								—
Component No.	Abnormal Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation
Fan	Disconnected	300 V d.c	131 mins	-	4.42→0.71	--	(1) L1301 Core of PSU: 59.9°C (2) Transformer T1.1 Core of PSU: 61.8°C (3) Transformer T1.1 Winding of PSU: 70.6°C (4) Transformer T1.2 Core of PSU: 67.3°C (5) Transformer T1.2 Winding of PSU: 69.9°C (6) Metal handle of PSU (at ambient is 25°C): 41.0°C (7) Button of PSU (at ambient is 25°C): 44.3°C (8) Metal enclosure of EUT near openings ventilation (at ambient is 25°C): 39.6°C (9) Enclosure of EUT near openings venti lation (at ambient is 25°C): 37.0°C	When monitoring temperature of EUT reached highest, EUT was protected. The temperature reduce until thermal equilibrium. No hazards. NC, NB, NT
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. NC Cheesecloth remained intact NT Tissue paper remained intact NB No indication of dielectric breakdown after 60 seconds Touch Temperature Limited: 80°C								

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

B.4	**TABLE: Fault condition tests**								N/A
Ambient temperature (°C) .....:									—
Power source for EUT: Manufacturer, model/type, output rating .:									—
Component No.	Fault Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation	
--	--	--	--	--	--	--	--	--	
Supplementary information:									
NC Cheesecloth remained intact NT Tissue paper remained intact NB No indication of dielectric breakdown after 60 seconds Touch Temperature Limited: 80°C									

Annex M.3	**TABLE: Batteries**									P
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?..... :								No		--
	Non-rechargeable batteries			Rechargeable batteries						
	Discharging		Un-intentional charging	Charging		Discharging		Reversed charging		
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	
Max. current during normal condition	--	--	0 mA	--	--	--	--	--	--	
Max. current during fault condition	--	--	3.3 mA ((D2 Pin 1-Pin 3 SC)	--	--	--	--	--	--	
Test results:										Verdict
- Chemical leaks										P
- Explosion of the battery										P
- Emission of flame or expulsion of molten metal										P
- Electric strength tests of equipment after completion of tests										P
Supplementary information:										
S/C: Short circuit										

Annex M.4	**Table: Additional safeguards for equipment containing secondary lithium batteries**			N/A
Battery/Cell	Test conditions	Measurements	Observation	

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

No.		U	I (A)	Temp (C)	
	Normal				
	Abnormal				
	Single fault –SC/OC				
	Normal				
	Abnormal				
	Single fault – SC/OC				
Supplementary Information:					

Battery identification	Charging at T_{lowest} (°C)	Observation	Charging at $T_{highest}$ (°C)	Observation
Supplementary Information:				

Annex Q.1	**TABLE: Circuits intended for interconnection with building wiring (LPS)**					P
Note: Measured UOC (V) with all load circuits disconnected:						
Output Circuit	Components	U_{oc} (V)	I_{sc} (A)		S (VA)	
			Meas.	Limit	Meas.	Limit
VGA of BC26SMMAA	Normal	4.68	1.02	8	3.04	100
USB of BC26SMMAA	Normal	5.02	1.29	8	5.86	100
USB of BC15RCIA	Normal	5.03	1.24	8	5.52	100
Type-C of BC15RCIA	Normal	5.05	0.52	8	2.53	100
Supplementary Information:						
Approved current limiter used.						

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

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

Top enclosure of EUT near input part	Metal	Min 1.0	250	5	Enclosure remained intact, no crack/ opening developed. Internal ES3 were not accessible after test. No insulation breakdown.
Right side enclosure of EUT near input part	Metal	Min 1.0	250	5	Enclosure remained intact, no crack/ opening developed. Internal ES3 were not accessible after test. No insulation breakdown.
Front side enclosure of EUT near input part	Metal	Min 1.0	250	5	Enclosure remained intact, no crack/ opening developed. Internal ES3 were not accessible after test. No insulation breakdown.
Supplementary information:					

T.6, T.9	**TABLE: Impact tests**				**P**
Part/Location	Material	Thickness (mm)	Vertical distance (mm)	Observation	
Top enclosure of EUT near input part	Metal	Min.1.0	1300	All safeguards remain effective	
Right side enclosure of EUT near input part	Metal	Min.1.0	1300	All safeguards remain effective	
Front enclosure of EUT near input part	Metal	Min.1.0	1300	All safeguards remain effective	
Supplementary information:					

T.7	**TABLE: Drop tests**			**N/A**
Part/Location	Material	Thickness (mm)	Drop Height (mm)	Observation
Supplementary information:				

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

T.8	**TABLE: Stress relief test**				**N/A**
Part/Location	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observation
Supplementary information:					

List of test equipment used:

Clause	Measurement / testing	Testing / measuring equipment / material used, (Equipment ID)	Range used	Last Calibration date	Calibration due date
5.2	Classification of electrical energy sources	Thermometer and Hygrometer	35ºC,75% RH	2024/11/15	2025/11/14
		AC & DC Power Supply	300 V a.c.,17 A; 400 V d.c., 30 A	2025/1/20	2026/1/19
		Low difference Voltage probe	0-40V	2025/4/27	2026/4/26
		Digital Scope	500Mhz	2025/05/08	2026/05/07
5.4.1.4, 6.3.2, 9.0, B.2.6	Temperature measurements	Thermometer and Hygrometer	35ºC, 75% RH	2024/11/15	2025/11/14
		AC & DC Power Supply	300 V a.c.,17 A; 400 V d.c., 30 A	2025/1/20	2026/1/19
		Temperature Rise Recorder	200ºC	2024/11/14	2025/11/13
5.4.9	Electric Strength test	Thermometer and Hygrometer	35ºC,75% RH	2024/11/15	2025/11/14
		Electrical Strength Tester	AC10 kV, 50mA, 70 s DC 10 kV, 5 mA, 70 s	2025/1/20	2026/1/19
5.6.6.2	Ground continuity test	Thermometer and Hygrometer	35ºC,75% RH	2024/11/15	2025/11/14
		Earthing continuity tester	12 V, 60 A	2025/1/20	2026/1/19
		AC & DC Power Supply	300 V a.c.,17 A; 400 V d.c.,30 A	2025/1/20	2026/1/19
5.7.4	Earthed accessible conductive part	Thermometer and Hygrometer	35ºC,75% RH	2024/11/15	2025/11/14
		AC & DC Power Supply	300 V a.c.,17 A; 400 V d.c.,30 A	2025/1/20	2026/1/19
		Digital Scope	500Mhz	2025/05/08	2026/05/07
		Touch current network	IEC 60990 Fig5	2024/11/13	2025/11/12
		Digital Multimeter	750 V a.c.,10 A; 1000 V d.c.,10 A	2024/11/13	2025/11/12
6.2.2	Electrical power sources (PS) measurements for classification	Thermometer and Hygrometer	35ºC, 75% RH	2024/11/15	2025/11/14
		Stopwatch	7h	2024/11/13	2025/11/12
		AC & DC Power Supply	300 V a.c., 17 A; 400 V d.c., 30 A	2025/1/20	2026/1/19
		DC Load	100 V, 60 A, 300W	2024/11/12	2025/11/11
Annex B.2.5	Input Test	Thermometer and Hygrometer	35ºC, 75% RH	2024/11/15	2025/11/14
		AC & DC Power Supply	300 V a.c.,17 A; 400 V d.c.,30 A	2025/1/20	2026/1/19
		Power Meter	600 V, 20 A	2024/11/12	2025/11/11
Annex B.3 & B.4	Simulated Abnormal operating condition tests & simulated single fault conditions	Thermometer and Hygrometer	35ºC, 75% RH	2024/11/15	2025/11/14
		AC & DC Power Supply	300 V a.c., 17 A; 400 V d.c., 30 A	2025/1/20	2026/1/19
		Temperature Rise Recorder	200ºC	2024/11/14	2025/11/13
Annex M	Batteries	Thermometer and Hygrometer	35ºC, 75% RH	2024/11/15	2025/11/14
		AC & DC Power Supply	300 V a.c.,17 A; 400 V d.c., 30 A	2025/1/20	2026/1/19
		Digital Multimeter	750 V a.c.,10 A; 1000 V d.c., 10 A	2024/11/13	2025/11/12
Annex	Limited Power	Thermometer and Hygrometer	35ºC, 75% RH	2024/11/15	2025/11/14

Q.1	Source	AC & DC Power Supply	300 V a.c., 17 A; 400 V d.c., 30 A	2025/1/20	2026/1/19
		DC Load	100 V, 60 A, 300W	2024/11/12	2025/11/11
		Stop watch	7h	2024/11/13	2025/11/12
Annex T.5	Steady force test, 250N	Thermometer and Hygrometer	35ºC,75% RH	2024/11/15	2025/11/14
		Push-Pull Scale	500N	2024/11/13	2025/11/12
		Stopwatch	7h	2024/11/13	2025/11/12
Annex T.6	Enclosure impact test	Thermometer and Hygrometer	35ºC,75% RH	2024/11/15	2025/11/14
		Steel Tape	5M	2024/11/23	2025/11/22
		Steel Ball	0.5 kg, Φ50 mm	2025/5/27	2026/5/26

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT
IEC 62368-1
EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES
(Audio/video, information and communication technology equipment - Part 1: Safety requirements)

Differences according to.....: EN 62368-1:2014+A11:2017

Attachment Form No.....: EU_GD_IEC62368_1D_II

Attachment Originator .....: Nemko AS

Master Attachment.....: Date 2021-02-04

	CENELEC COMMON MODIFICATIONS (EN)	P
	Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62368-1:2014 are prefixed "Z".	P
CONTENTS	**Add** the following annexes: Annex ZA (normative) Normative references to international publications with their corresponding European publications Annex ZB (normative) Special national conditions Annex ZC (informative) A-deviations Annex ZD (informative) IEC and CENELEC code designations for flexible cords	P
	Delete all the "country" notes in the reference document (IEC 62368-1:2014) according to the following list:	P

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 national conditions, see Annex ZB.		P
1	**Add** the following note: NOTE Z1 The use of certain substances in electrical and electronic equipment is restricted within the EU: see Directive 2011/65/EU.		P

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
4.Z1	**Add** the following new subclause after 4.9: To protect against excessive current, short-circuits and earth faults in circuits connected to an a.c. **mains**, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c): 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 to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation; c) it is permitted for **pluggable equipment type B** or **permanently connected equipment**, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions. If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for **pluggable equipment type A** the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.		P
5.4.2.3.2.4	**Add** the following to the end of this subclause: The requirement for interconnection with **external circuit** is in addition given in EN 50491-3:2009.		N/A
10.2.1	Add the following to [c] and [d] in table 39: For additional requirements, see 10.5.1.		N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
10.5.1	**Add** the following after the first paragraph: *For RS 1 compliance is checked by measurement 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.* 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 cm², at any point 10 cm from the outer surface of the apparatus.* *Moreover, the measurement shall be made under 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.* *For RS1, the dose-rate shall not exceed 1 µSv/h taking account of the background level.* NOTE Z2 These values appear in Directive 96/29/Euratom of 13 May 1996.	Added	N/A
10.6.1	**Add** the following paragraph to the end of the subclause: EN 71-1:2011, 4.20 and the related tests methods and measurement distances apply.	Added	N/A
10.Z1	**Add** the following new subclause after 10.6.5. **10.Z1 Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz** The amount of non-ionizing radiation is regulated by European Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz). For intentional radiators, ICNIRP guidelines should be taken into account for Limiting Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz). For hand-held and body-mounted devices, attention is drawn to EN 50360 and EN 50566	Added. To be evaluated in the end product/equipment only.	N/A
G.7.1	**Add** the following note: NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in Annex ZD.	Added	N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

Bibliography	**Add** the following standards: **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.		P
ZB	**ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)**		P
4.1.15	**Denmark, Finland, Norway** and **Sweden** To the end of the subclause the following is added: **Class I pluggable equipment type A** intended for connection to other equipment or a network shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and **accessible** parts, have a marking stating that the equipment shall be connected to an earthed **mains** socket-outlet. The marking text in the applicable countries shall be as follows: In **Denmark**: “Apparatets stikprop skal tilsluttes en stikkontakt med jord som giver forbindelse til stikproppens jord.” In **Finland**: "Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan" In **Norway**: “Apparatet må tilkoples jordet stikkontakt” In **Sweden**: “Apparaten skall anslutas till jordat uttag”		P
4.7.3	**United Kingdom** 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		N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
5.2.2.2	**Denmark** After the 2nd paragraph add the following: A warning (marking **safeguard**) for high **touch current** is required if the **touch current** exceeds the limits of 3,5 mA a.c. or 10 mA d.c.		N/A
5.4.11.1 and Annex G	**Finland and Sweden** To the end of the subclause the following is added: For separation of the telecommunication network from earth the following is applicable: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either • 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. 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 and creepage distances do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition • passes the tests and inspection criteria of 5.4.8 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 5.4.9 shall be performed using 1,5 kV), and • is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5kV. 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 having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testing, is tested with 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; 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.		N/A
5.5.2.1	**Norway** 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).		N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
5.5.6	**Finland, Norway** and **Sweden** To the end of the subclause the following is added: Resistors used as **basic safeguard** or bridging **basic insulation** in **class I pluggable equipment type A** shall comply with G.10.1 and the test of G.10.2.		P
5.6.1	**Denmark** **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. *Justification:* In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.		P
5.6.4.2.1	**Ireland and United Kingdom** After the indent for **pluggable equipment type A**, the following is added: – the **protective current rating** is taken to be 13 A, this being the largest rating of fuse used in the **mains** plug.		P
5.6.5.1	To the second paragraph the following is added: 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^2 to 1,5 mm^2 in cross-sectional area.	Added.	N/A
5.7.5	**Denmark** To the end of the subclause the following is added: The installation instruction shall be affixed to the equipment if the **protective conductor current** exceeds the limits of 3,5 mA a.c. or 10 mA d.c.		N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
5.7.6.1	**Norway and Sweden** 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: “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)” 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 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 medföra risk för brand. För att undvika detta skall vid anslutning av apparaten till kabel-TV nät galvanisk isolator finnas mellan apparaten och kabel-TV nätet.”.		N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

5.7.6.2	**Denmark** To the end of the subclause the following is added: 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 .	See for 5.2.2.2 above.	N/A
B.3.1 and B.4	**Ireland and United Kingdom** The following is applicable: To protect against excessive currents and short-circuits in the primary circuit of **direct plug-in equipment**, tests according to Annexes B.3.1 and B.4 shall be conducted using an external miniature circuit breaker complying with EN 60898-1, Type B, rated 32A. If the equipment does not pass these tests, suitable protective devices shall be included as an integral part of the **direct plug-in equipment**, until the requirements of Annexes B.3.1 and B.4 are met	Not direct plug-in equipment	N/A
G.4.2	**Denmark** To the end of the subclause the following is added: Supply cords of single phase appliances having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1:2011. CLASS I EQUIPMENT provided with socket-outlets with 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 provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a. If a single-phase equipment having a RATED CURRENT 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 DKA 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 1-7a *Justification:* Heavy Current Regulations, Section 6c		N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
G.4.2	**United Kingdom** To the end of the subclause the following is added: The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16, and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.	Not direct plug-in equipment	N/A
G.7.1	**United Kingdom** 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 'standard plug' in accordance with the Plugs and Sockets etc (Safety) Regulations 1994, Statutory Instrument 1994 No. 1768, unless exempted by those regulations. NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.		N/A
G.7.1	**Ireland** 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 State which is equivalent to the relevant Irish Standard		N/A
G.7.2	**Ireland and United Kingdom** To the first paragraph the following is added: A power supply cord with a conductor of 1,25 mm^2 is allowed for equipment which is rated over 10 A and up to and including 13 A.		P

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)		N/A
10.5.2	**Germany** The following requirement applies: For the operation of any cathode ray tube intended for the display of visual images operating at an acceleration voltage exceeding 40 kV, authorization is required, or application of type approval (Bauartzulassung) and marking. *Justification:* German ministerial decree against ionizing radiation (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		N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT

IEC 62368-1

U.S.A. AND CANADA NATIONAL DIFFERENCES

(Audio/video, information and communication technology equipment – Part 1: Safety requirements)

Differences according to.....:	CSA/UL 62368-1:2014
TRF template used:.....:	IECEE OD-2020-F3, Ed. 1.1
Attachment Form No.....:	US_CA_ND_IEC62368_1D
Attachment Originator .....:	UL(US)
Master Attachment.....:	Dated 2021-02-04

IEC 62368-1 - US and Canadian National Differences Special National Conditions based on Regulations and Other National Differences			
1.1	All equipment is to be designed to allow installation according to the National Electrical Code (NEC), ANSI/NFPA 70, the Canadian Electrical Code (CEC), Part I, CAN/CSA C22.1, and when applicable, the National Electrical Safety Code, IEEE C2. Also, for such equipment marked or otherwise identified, installation is allowed per the Standard for the Protection of Information Technology Equipment, ANSI/NFPA 75.	In accordance with the National Electrical Code (NEC) and the Canadian Electrical Code (CEC) part 1 CAN/CSA C22.1, ANSI/NFPA 70, and unless marked or otherwise identified, the Standard for Electronic Computer/Data-Processing Equipment, ANSI/NFPA 75.	P
1.4	Additional requirements apply to some forms of power distribution equipment, including sub-assemblies.	Considered.	P
4.1.17	For lengths exceeding 3.05 m, external interconnecting flexible cord and cable assemblies are required to be a suitable cable type (e.g., DP, CL2) specified in the NEC.		N/A
	For lengths 3.05 m or less, external interconnecting flexible cord and cable assemblies that are not types specified in the NEC generally are required to have special construction features and identification markings.		N/A
4.8	Lithium coin / button cell batteries have modified special construction and performance requirements.		N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
5.6.3	Protective earthing conductors comply with the minimum conductor sizes in Table G.5, except as required by Table G.7ADV.1 for cord connected equipment, or Annex DVH for permanently connected equipment		N/A
5.7.7	Equipment intended to receive telecommunication ringing signals complies with a special touch current measurement tests.		N/A
6.5.1	PS3 wiring outside a fire enclosure complies with single fault testing in B.4, or be current limited per one of the permitted methods.	No such parts.	N/A
Annex F (F.3.3.8)	Output terminals provided for supply of other equipment, except mains, supply are marked with a maximum rating or references to which equipment it is permitted to be connected.		N/A
Annex G (G.7.1)	Permanent connection of equipment to the mains supply by a power supply cord is not permitted, except for certain equipment, such as ATMs.		N/A
Annex G (G.7.3)	Power supply cords are required to have attachment plugs rated not less than 125 percent of the rated current of the equipment.		N/A
	Flexible power supply cords are required to be compatible with Article 400 of the NEC, and Tables 11 and 12 of the CEC.		N/A
Annex G (G.7.5)	Minimum cord length is required to be 1.5 m, with certain constructions such as external power supplies allowed to consider both input and output cord lengths into the requirement. Power supply cords are required to be no longer than 4.5 m in length if used in ITE Rooms.		N/A
Annex H.2	Continuous ringing signals under normal operating conditions up to 16 mA only are permitted if the equipment is subjected to special installation and performance restrictions.		N/A
Annex H.4	For circuits with other than ringing signals and with voltages exceeding 42.4 V_{peak} or 60 V d.c., the maximum acceptable current through a 2000 ohm resistor (or greater) connected across the voltage source with other loads disconnected is 7.1 mA peak or 30 mA d.c. under normal operating conditions.		N/A
Annex M	Battery packs for stationary applications comply with special component requirements.		N/A
Annex DVA (1)	Equipment intended for use in spaces used for environmental air are subjected to special flammability requirements for heat and visible smoke release.	The equipment not intended to be used within such environments.	N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
	For ITE room applications, automated information storage systems with combustible media greater than 0.76 m^3 (27 cu ft) have a provision for connection of either automatic sprinklers or a gaseous agent extinguishing system with an extended discharge.	Not such equipment.	N/A
	Consumer products designed or intended primarily for children 12 years of age or younger are subject to additional requirements in accordance with U.S. & Canadian Regulations.		N/A
	Baby monitors additionally comply with ASTM F2951, Consumer Safety Specification for Baby Monitors.		N/A
Annex DVA (5.6.3)	For Pluggable Equipment Type A, the protection in the installation is assumed to be 20A.		P
Annex DVA (6.3)	The maximum quantity of flammable liquid stored in equipment complies with NFPA 30.		N/A
Annex DVA (6.4.8)	For ITE room applications, enclosures with combustible material measuring greater than 0.9 m^2 (10 sq ft) or a single dimension greater than 1.8 m (6 ft) have a flame spread rating of 50 or less. For equipment with the same dimensions for other applications, an external surface that is not a fire enclosure requires a min. flammability classification of V-1.	No such application.	N/A
Annex DVA (10.3.1)	Equipment with lasers meets the U.S. Code of Federal Regulations 21 CFR 1040 (and the Canadian Radiation Emitting Devices Act, REDR C1370).	To be evaluated during national approval	N/A
Annex DVA (10.5.1)	Equipment that produces ionizing radiation complies with the U.S. Code of Federal Regulations, 21 CFR 1020 (and the Canadian Radiation Emitting Devices Act, REDR C1370).	No such parts.	N/A
Annex DVA (F.3.3.3)	Equipment for use on a.c. mains supply systems with a neutral and more than one phase conductor (e.g. 120/240 V, 3-wire) require a special marking format for electrical ratings. Additional considerations apply for voltage ratings that exceed the attachment cap rating or are lower than the “Normal Operating Condition” in Table 2 of CAN/CSA C22.2 No. 235.”		N/A
Annex DVA (F.3.3.5)	Equipment identified for ITE (computer) room installation is marked with the rated current	Not such application.	N/A
Annex DVA (G.1)	Vertically-mounted disconnect switches and circuit breakers have the "on" position indicated by the handle in the up position	No such parts.	N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Annex DVA (G.3.4)	Suitable NEC/CEC branch circuit protection rated at the maximum circuit rating is required for all standard supply outlets and receptacles (such as supplied in power distribution units) if the supply branch circuit protection is not suitable.		N/A
Annex DVA (G.4.2)	Equipment with isolated ground (earthing) receptacles complies with NEC 250.146(D) and CEC 10-112 and 10-906(8).	No such parts.	N/A
Annex DVA (G.4.3)	Where a fuse is used to provide Class 2 or Class 3 current limiting, it is not operator-accessible unless it is non- interchangeable.	No such parts.	N/A
Annex DVA (G.5.3)	Power distribution transformers distributing power at 100 volts or more, and rated 10 kVA or more, require special transformer overcurrent protection.	No such parts.	N/A
Annex DVA (G.5.4)	Motor control devices are required for cord-connected equipment with a mains-connected motor if the equipment is rated more than 12 A, or if the equipment has a nominal voltage rating greater than 120 V, or if the motor is rated more than 1/3 hp (locked rotor current over 43 A).	No such parts.	N/A
Annex DVA (Annex M)	For ITE room applications, equipment with battery systems capable of supplying 750 VA for five minutes have a battery disconnect means that may be connected to the ITE room remote power-off circuit.	Not such application.	N/A
Annex DVA (Q)	Wiring terminals intended to supply Class 2 outputs according to the NEC or CEC Part 1are marked with the voltage rating and “Class 2” or equivalent; marking is located adjacent to the terminals and visible during wiring.		N/A
Annex DVB (1)	Additional requirements apply for equipment used for entertainment purposes intended for installation in general patient care areas of health care facilities.	Not such application.	N/A
Annex DVC (1)	Additional requirements apply for equipment intended for mounting under kitchen cabinets.	Not such application.	N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Annex DVE (4.1.1)	Some equipment, components, sub-assemblies and materials associated with the risk of fire, electric shock, or personal injury have component or material ratings in accordance with the applicable national (U.S. and Canadian) component or material requirements. Components required to comply include: appliance couplers, attachment plugs, battery back-up systems, battery packs, circuit breakers, communication circuit accessories, connectors (used for current interruption of non-LPS circuits), power supply cords, direct plug-in equipment, electrochemical capacitor modules (energy storage modules with ultra-capacitors), enclosures (outdoor), flexible cords and cables, fuses (branch circuit), ground-fault current interrupters, interconnecting cables, data storage equipment, printed wiring, protectors for communications circuits, receptacles, surge protective devices, vehicle battery adapters, wire connectors, and wire and cables.	UL approved components used. See appended table 4.1.2.	P
Annex DVH	Equipment for permanent connection to the main6s supply is subjected to additional requirements.	The equipment is not permanently connected equipment.	N/A
Annex DVH (DVH.1)	Wiring methods (terminals, leads, etc.) used for the connection of the equipment to the mains are in accordance with the NEC/CEC.		N/A
Annex DVH (DVH.3.2)	Terminals for permanent wiring, including protective earthing terminals, are suitable for U.S./Canadian wire gauge sizes, rated 125 percent of the equipment rating, and are specially marked when specified.		N/A
Annex DVH (DVH.3.2)	Wire binding screws are not permitted to attach conductors larger than 10 AWG (5.3 mm^2).		N/A
Annex DVH (DVH.4)	Permanently connected equipment is required to have a suitable wiring compartment and wire bending space.		N/A
Annex DVH (DVH 5.5)	Equipment connected to a centralized d.c. power system, and having one pole of the DC mains input terminal connected to the main protective earthing terminal in the equipment, complies with special earthing, wiring, marking and installation instruction requirements.		N/A
Annex DVI (6.7)	Equipment intended for connection to telecommunication network outside plant cable is required to be protected against overvoltage from power line crosses.		N/A

IEC62368_1D - ATTACHMENT			
Clause	Requirement + Test	Result - Remark	Verdict
Annex DVJ (10.6.1)	Equipment connected to a telecommunication and cable distribution networks and supplied with an earphone intended to be held against, or in the ear is required to comply with special acoustic pressure requirements.		N/A

Produkte

Products

ANLAGE 2 zum Prüfbericht-Nr.: CN252QT7 001
APPENDIX 2 to Test Report No.:

FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

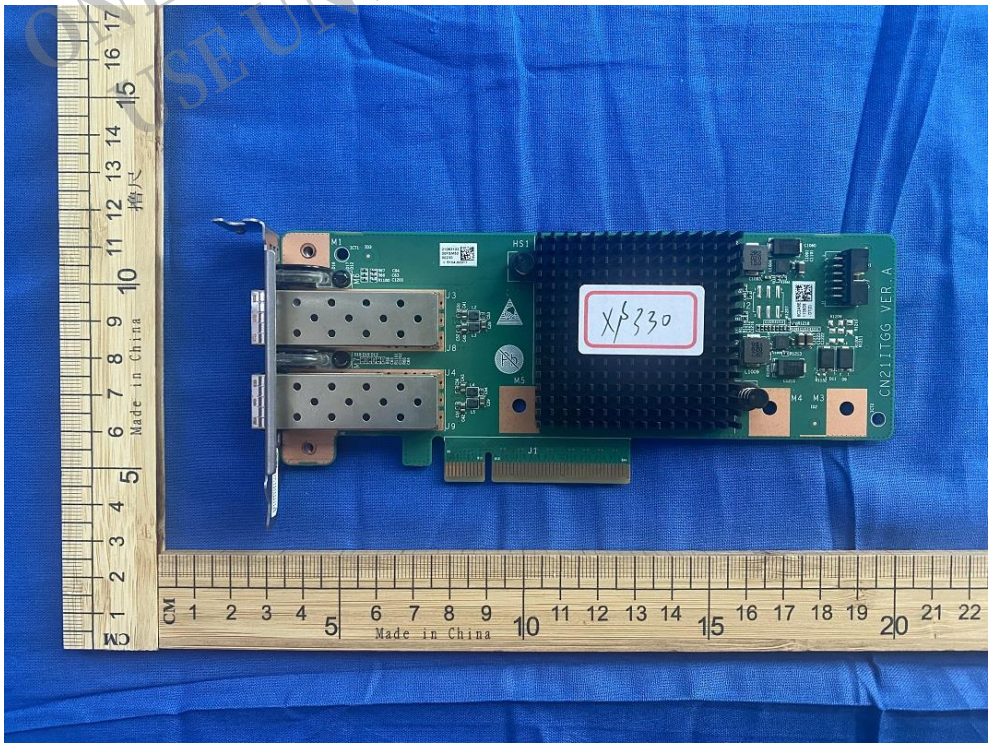
Bild / Picture 1: External view

Bild / Picture 2: External view

FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 3: Internal view

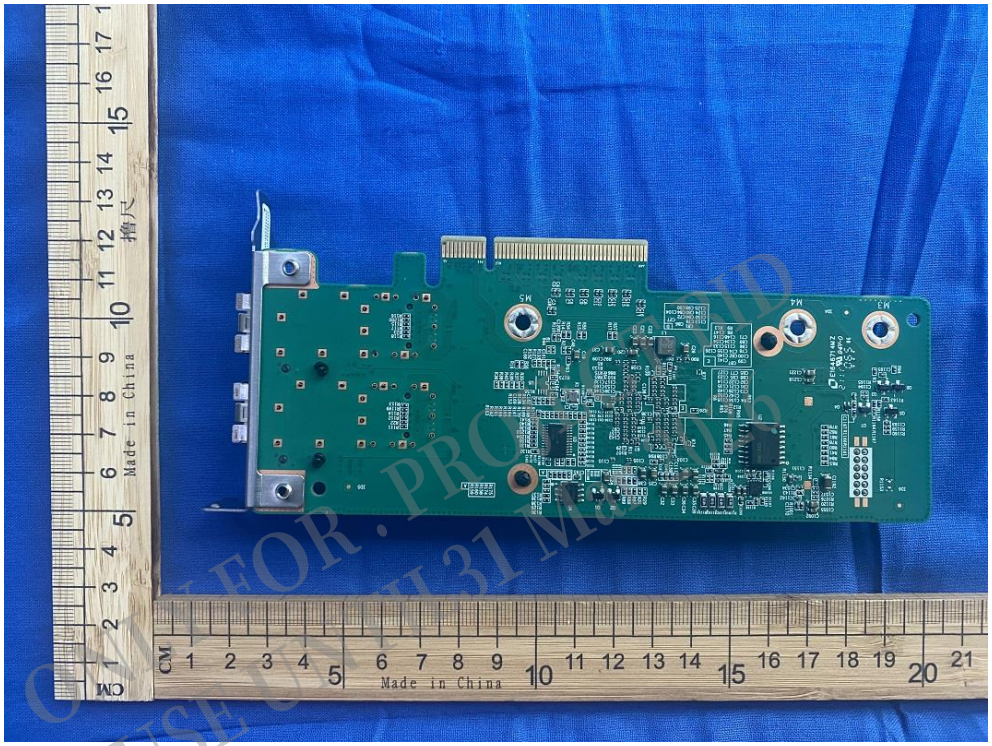
Bild / Picture 4: CN21ITGG (CN21ITGG1) top view



ANLAGE 2 zum Prüfbericht-Nr.: CN252QT7 001
APPENDIX 2 to Test Report No.:

FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 5: CN21ITGG (CN21ITGG1) bottom view



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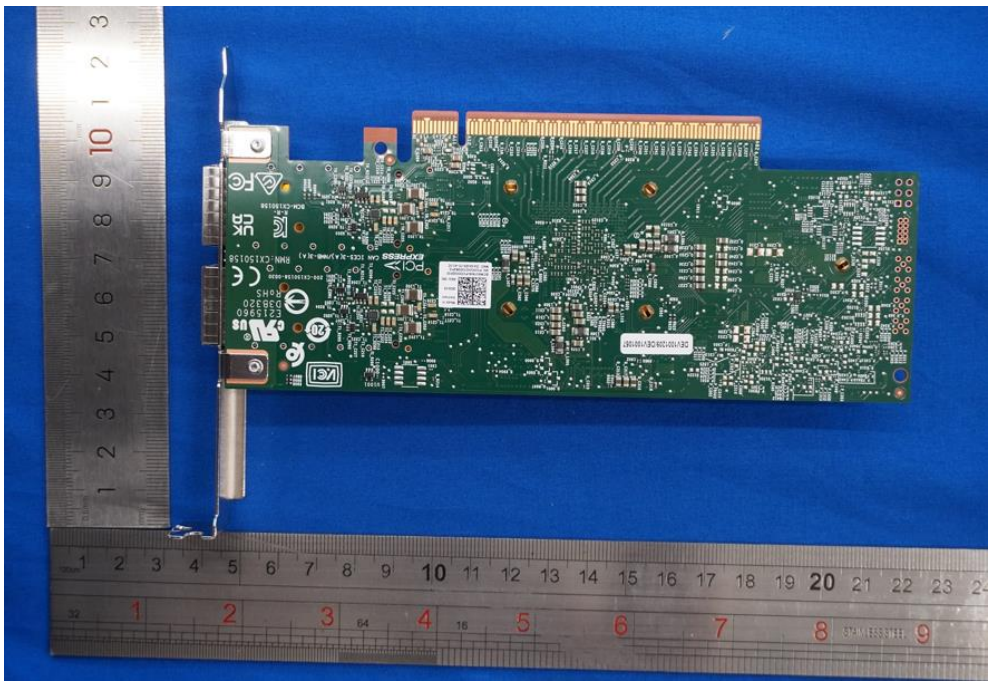


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 7: BCM957608-P2200GQF00-1

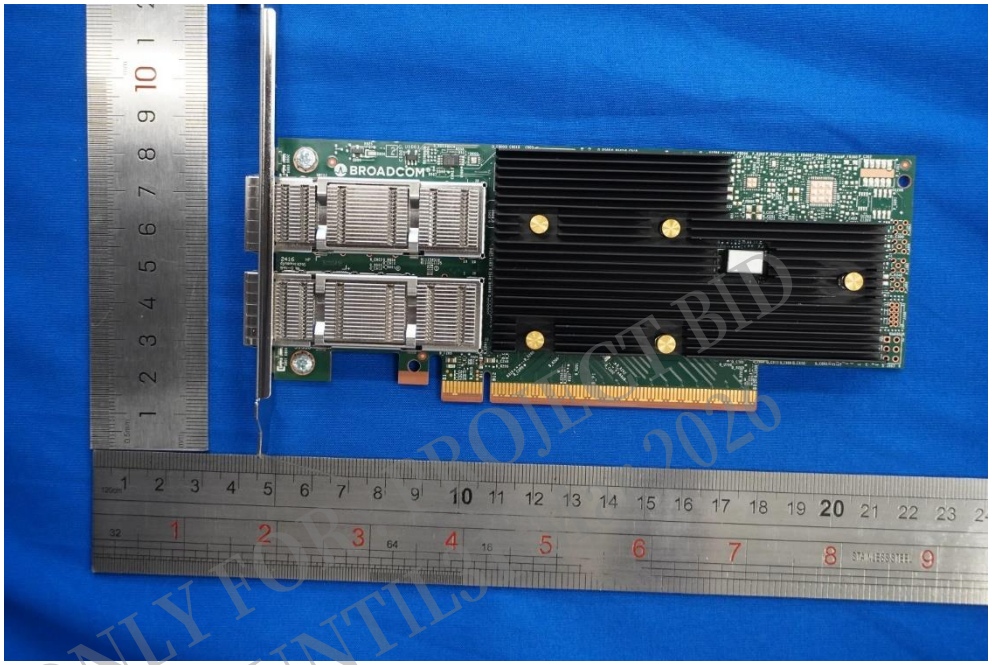


Bild / Picture 8: BC82LCIA top view

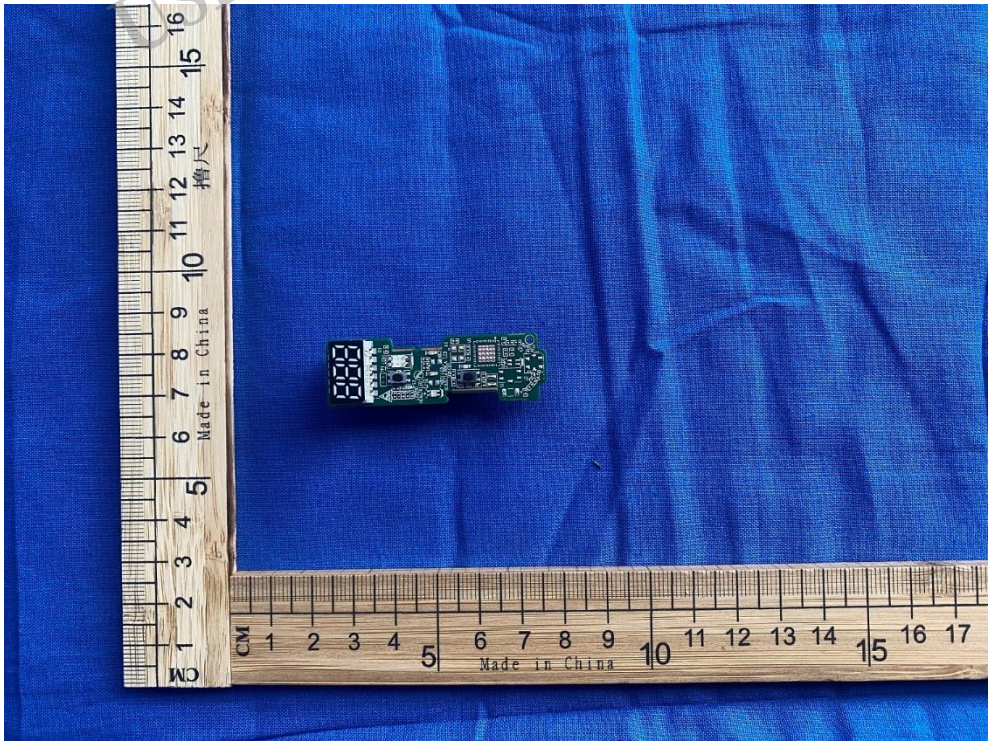


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 9: BC82LCIA bottom view

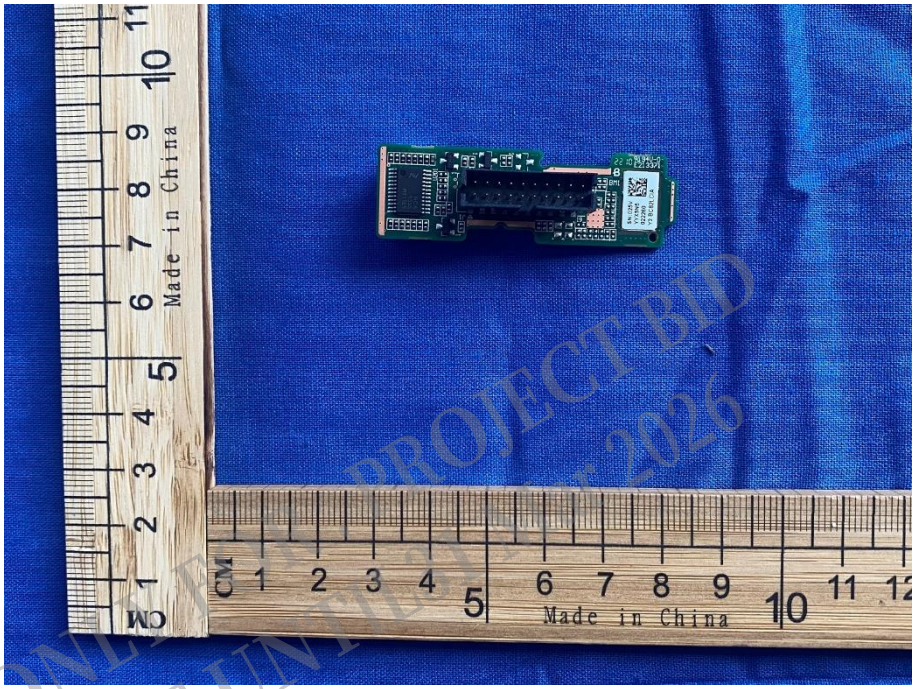
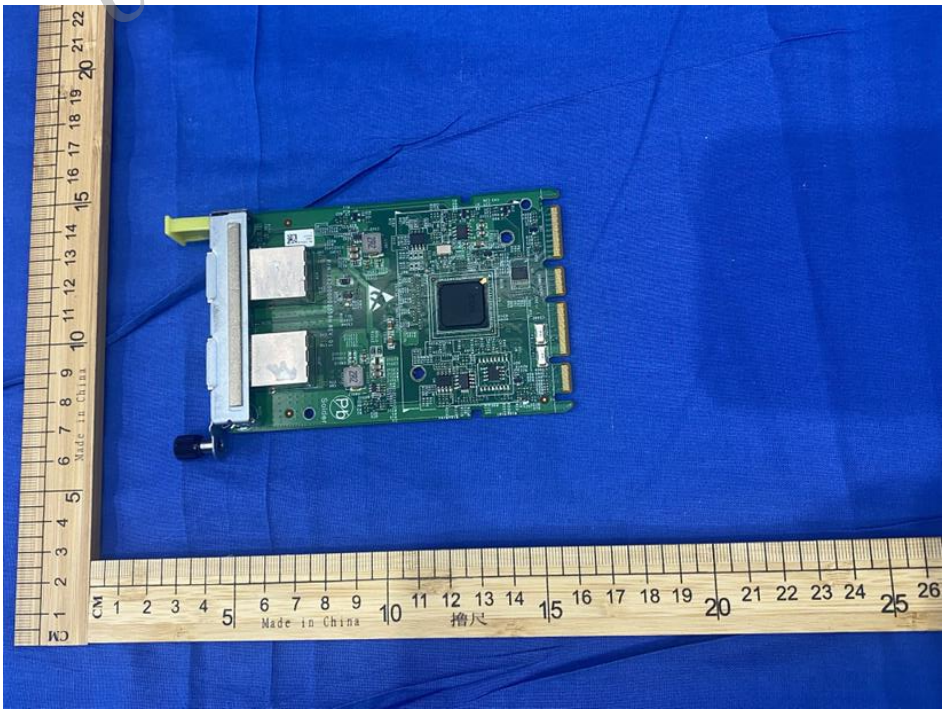


Bild / Picture 10: BC53ETHF top view



ANLAGE 2 zum Prüfbericht-Nr.: CN252QT7 001
APPENDIX 2 to Test Report No.:

FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 11: BC53ETHF bottom view

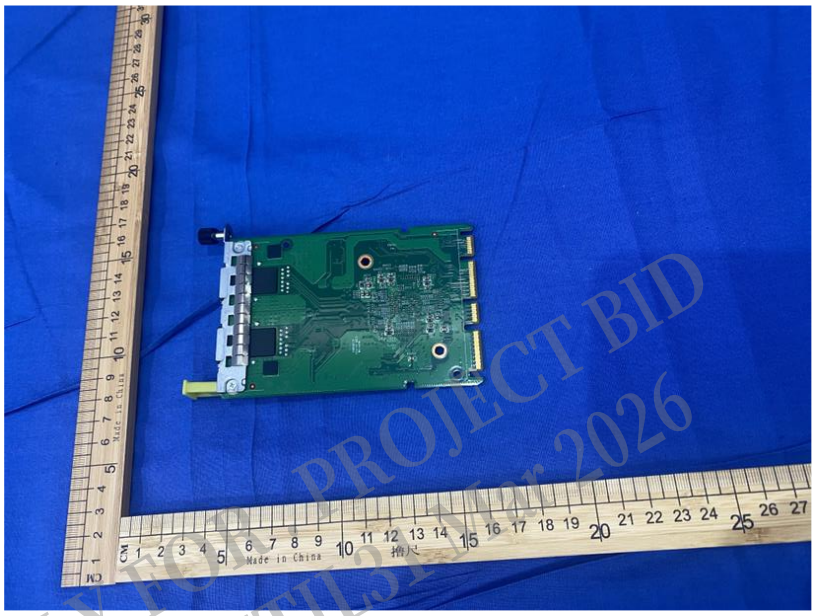
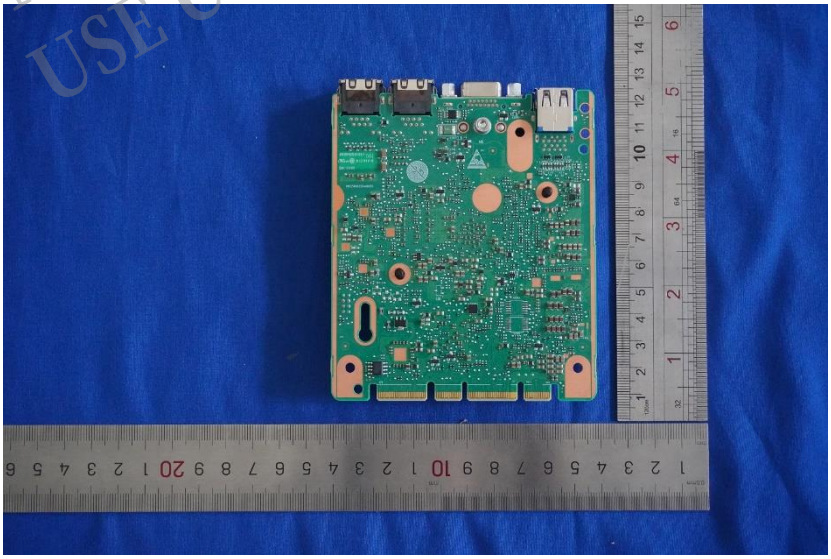


Bild / Picture 12: BC26SMMA-2



ANLAGE 2 zum Prüfbericht-Nr.: CN252QT7 001
APPENDIX 2 to Test Report No.:

FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 13: BC26SMMA-1

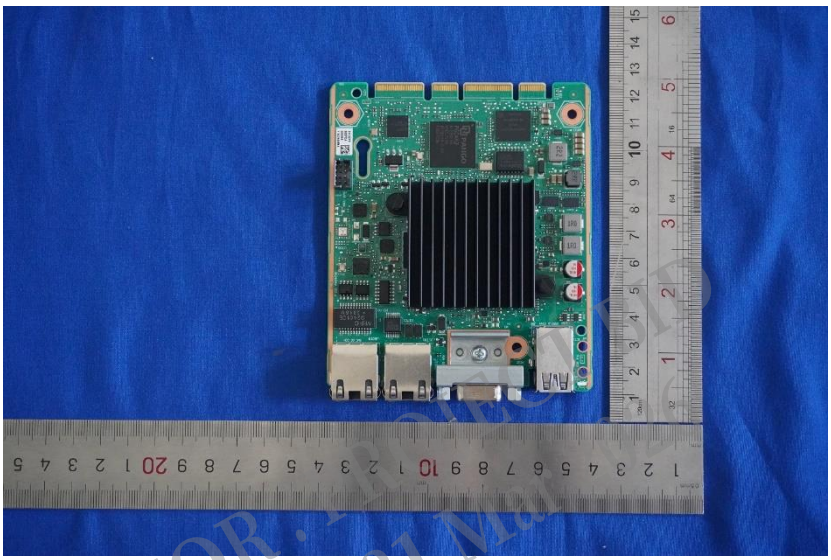


Bild / Picture 14: BC16PRUN-2

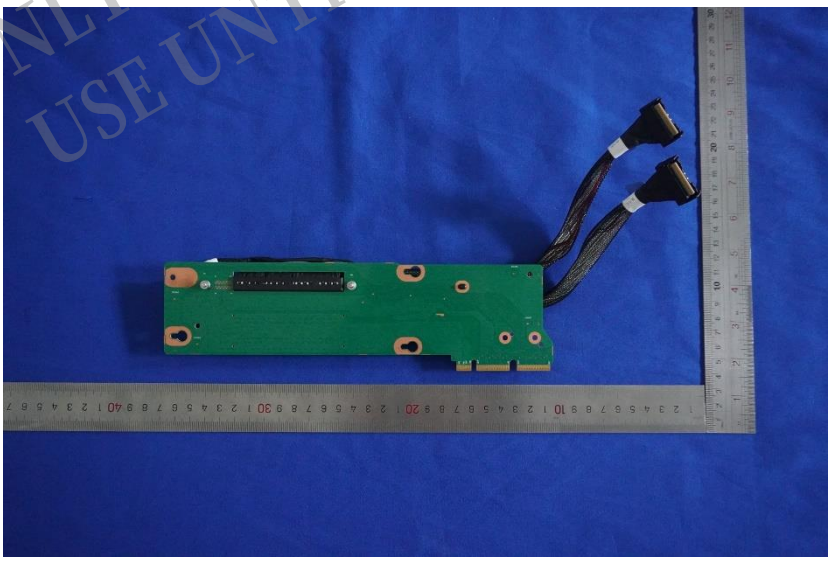


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 15: BC16PRUN-1

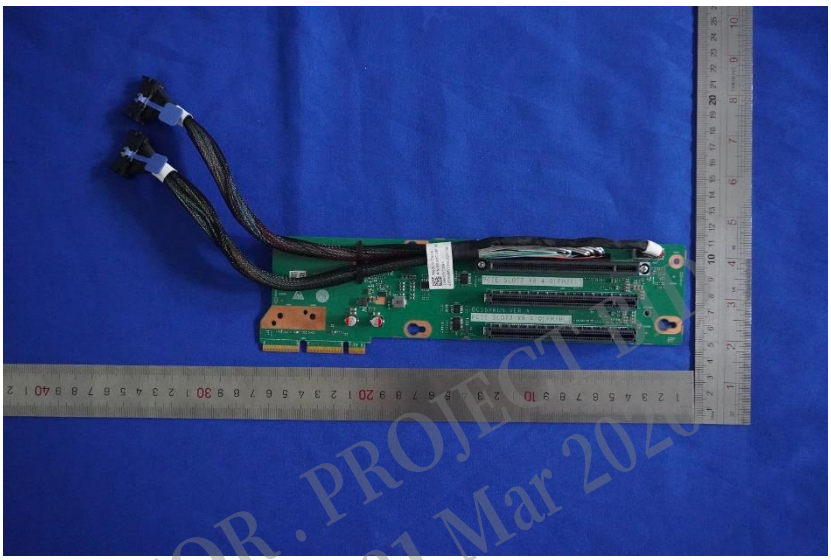


Bild / Picture 16: BC16PRUL-2

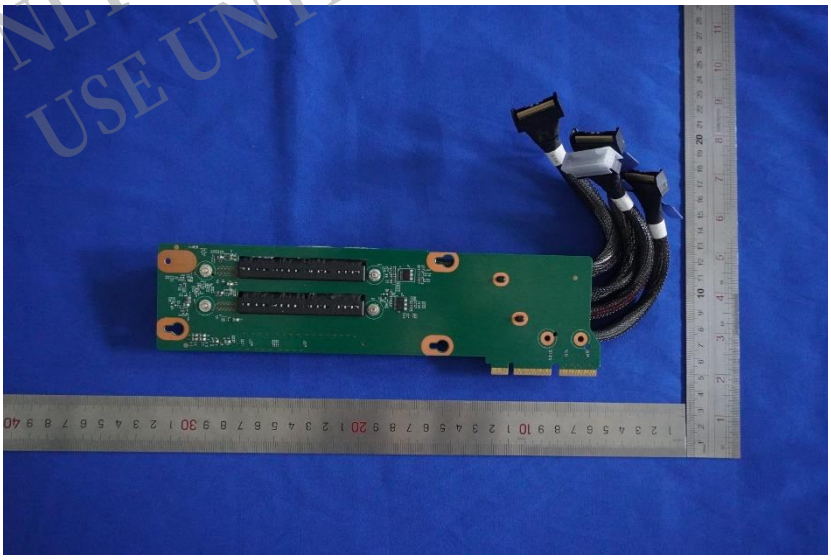


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 17: BC16PRUL-1

Bild / Picture 18: BC16NHBC-2

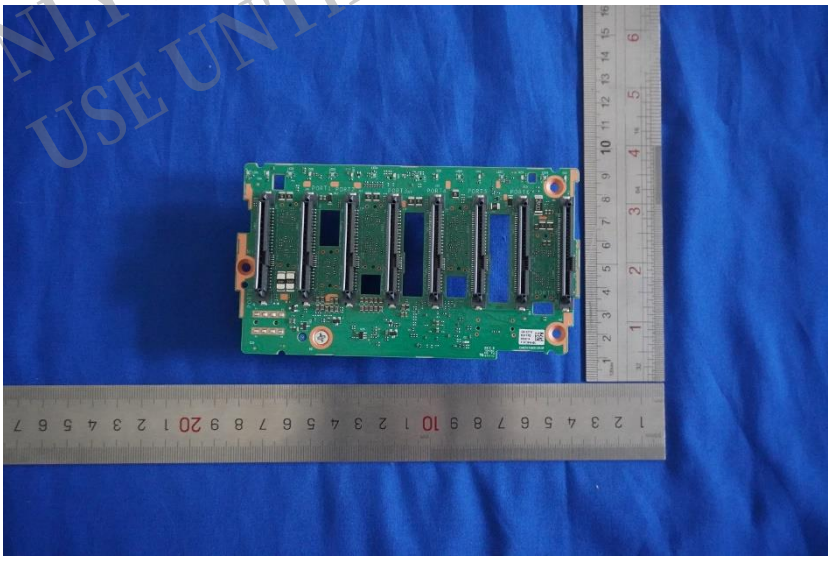


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 19: BC16NHBC-1

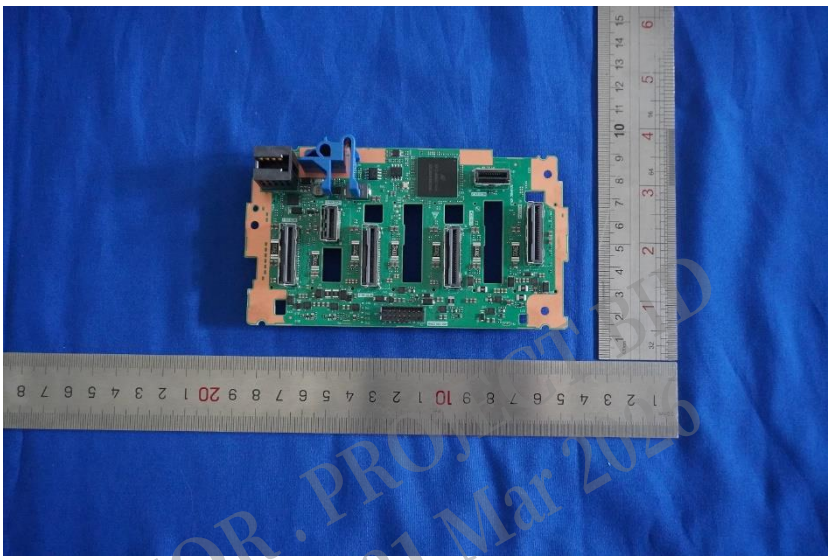


Bild / Picture 20: BC16MBSC-2

FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 21: BC16MBSC-1

Bild / Picture 22: BC16HBBD-2

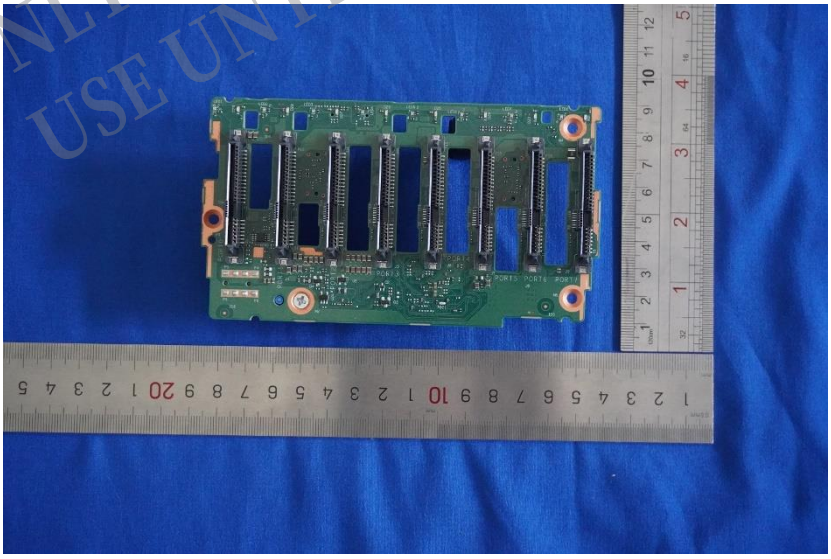


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 23: BC16HBBD-1

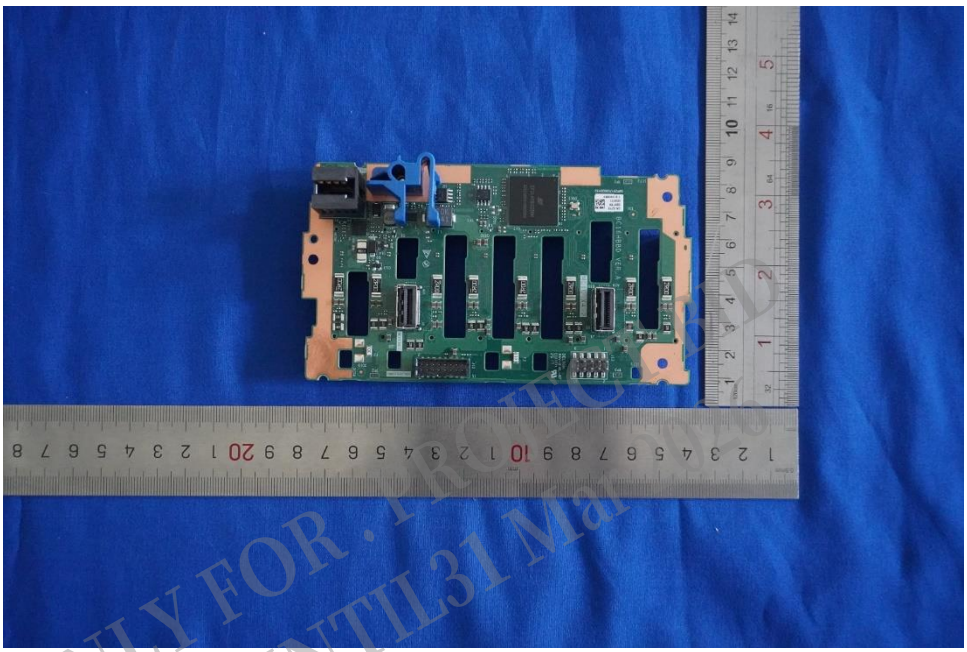


Bild / Picture 24: BC15RCIA top view

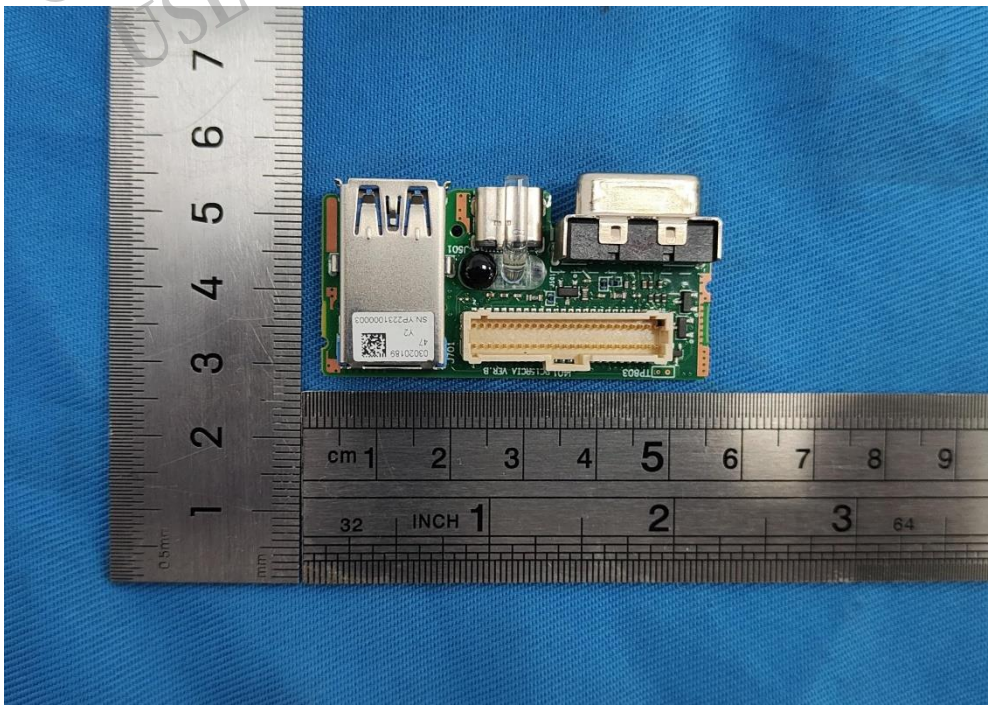


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 25: BC15NHBS-2

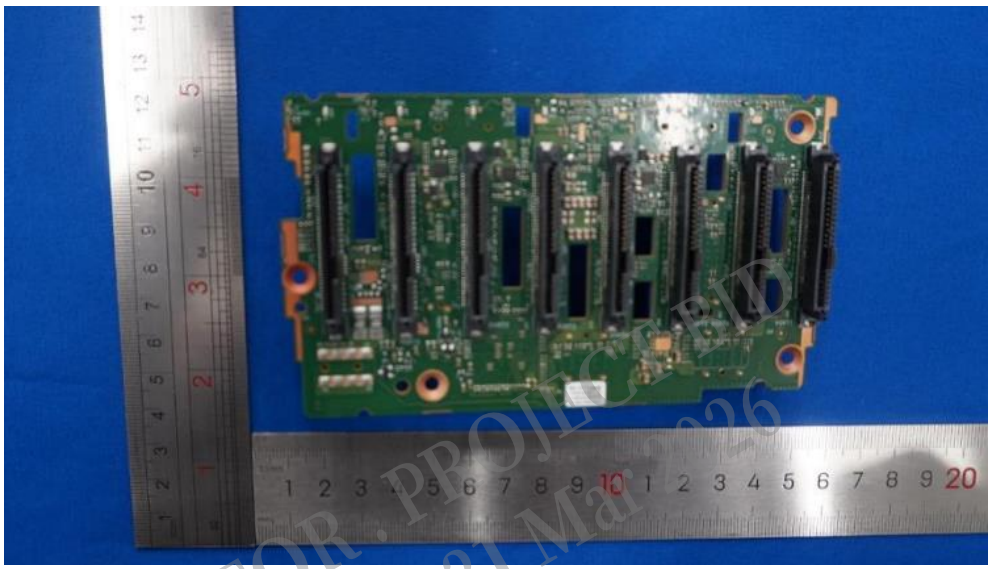


Bild / Picture 26: BC15NHBS-1

FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 27: BC15HBBI top view

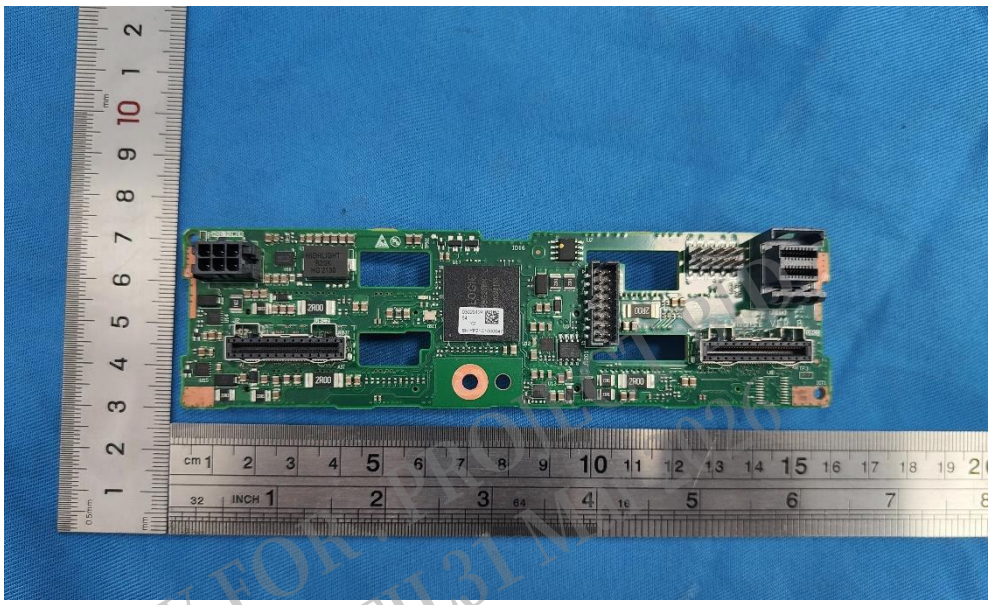


Bild / Picture 28: BC15HBBI bottom view

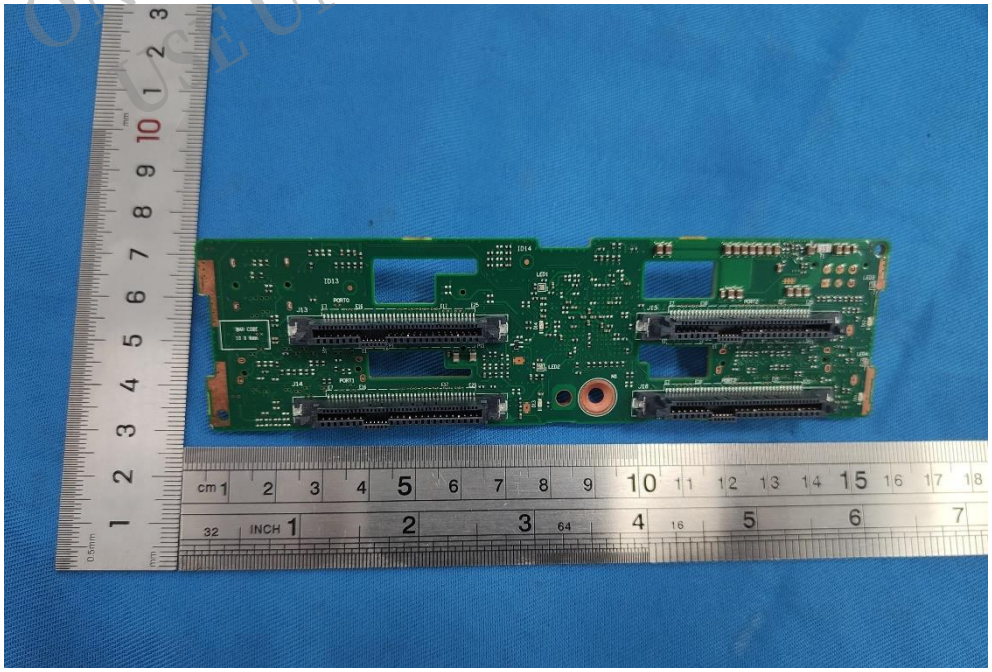


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 29: BC15FDCA top view

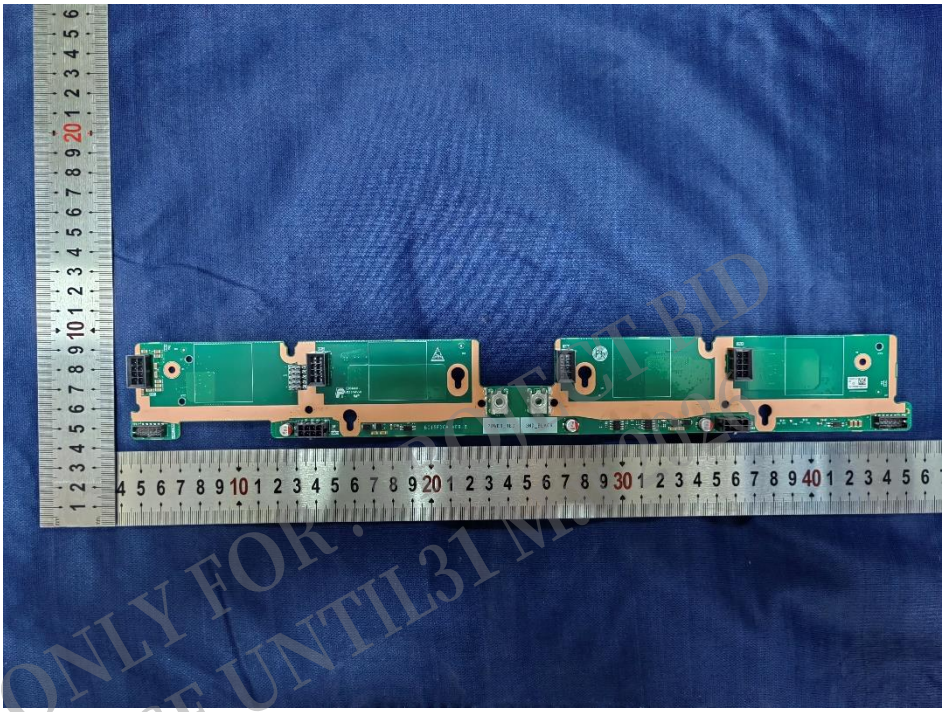


Bild / Picture 30: BC15FDCA bottom view

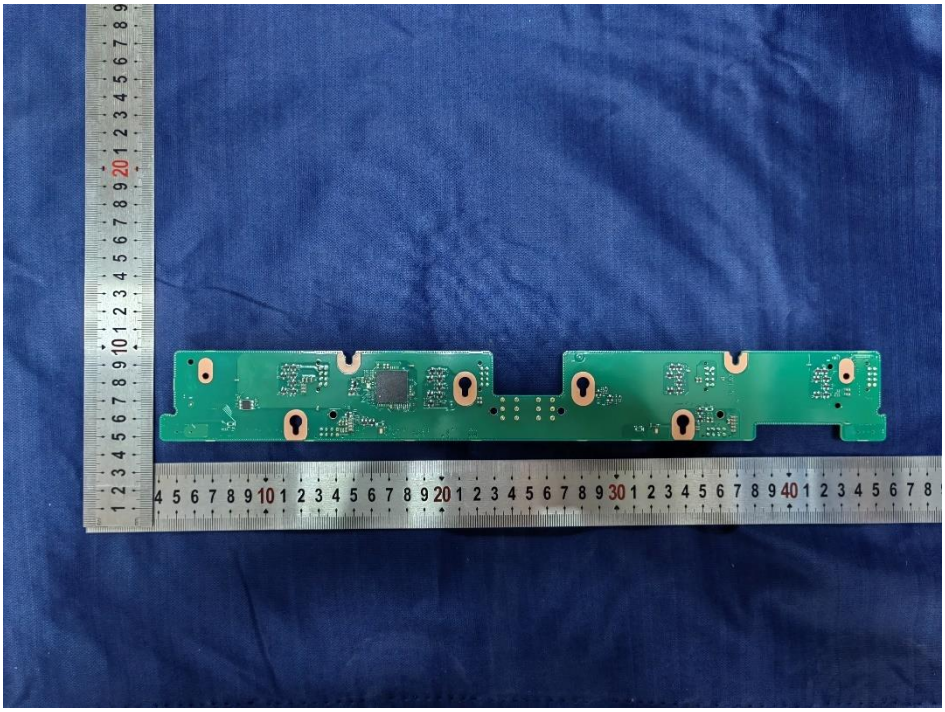


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 31: 9560-16i top view

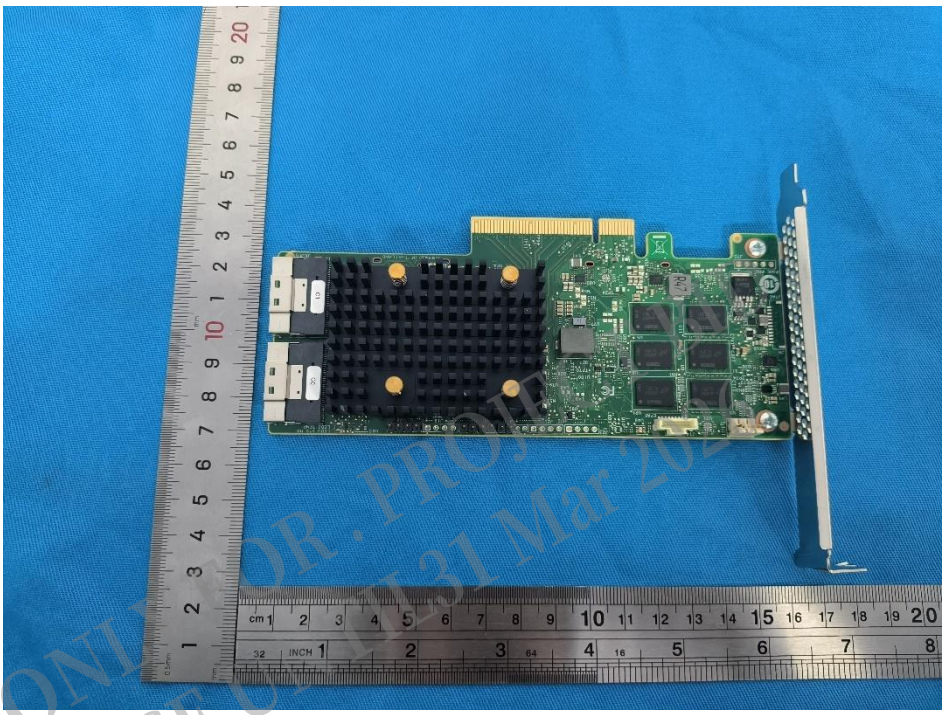


Bild / Picture 32: 9560-16i bottom view

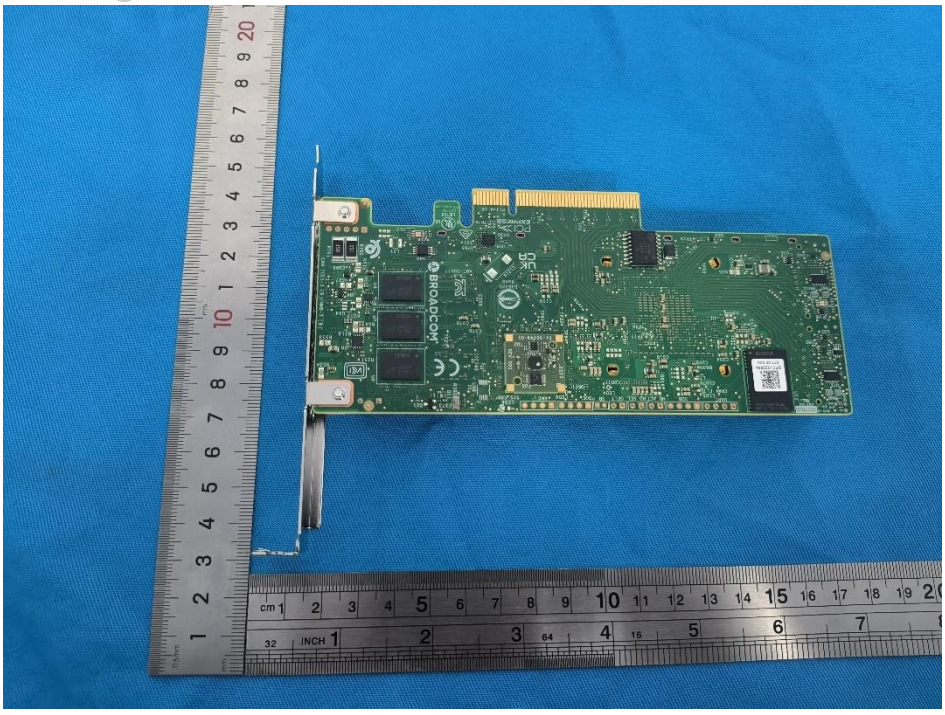


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 33: 9560-8i top view

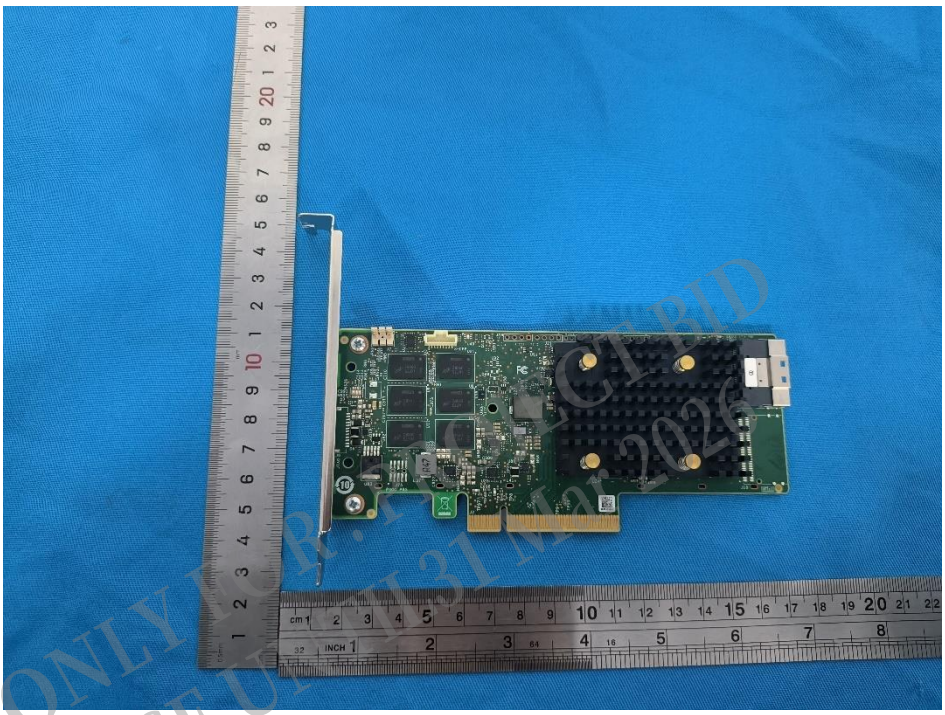


Bild / Picture 34: 9560-8i bottom view

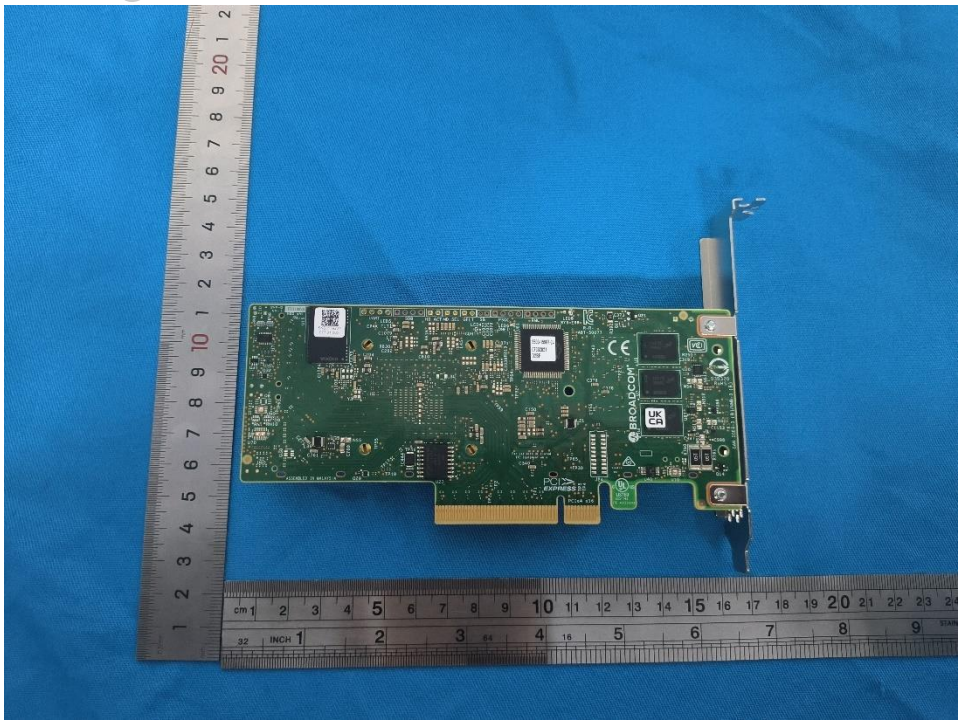


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 35: (9540-8i)05-50134-03 top view

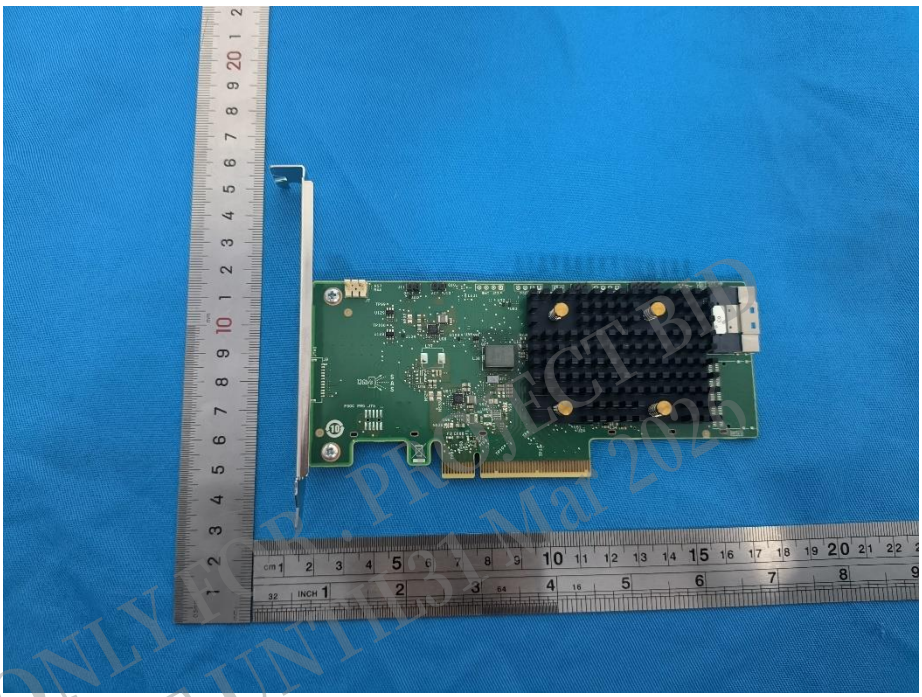


Bild / Picture 36: (9540-8i)05-50134-03 bottom view

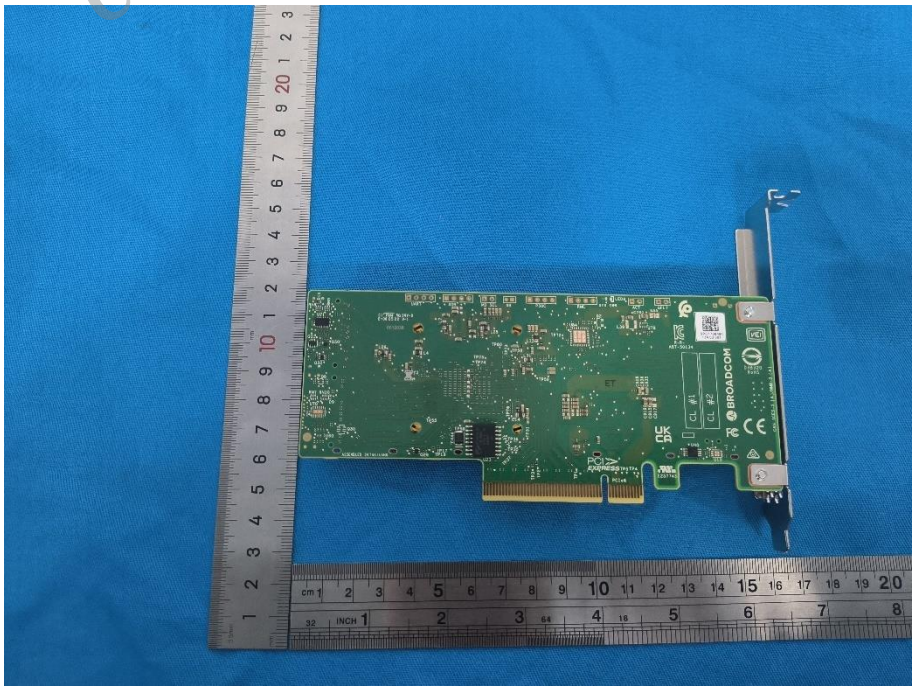


FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Bild / Picture 37: PAC2000S12-T1 view

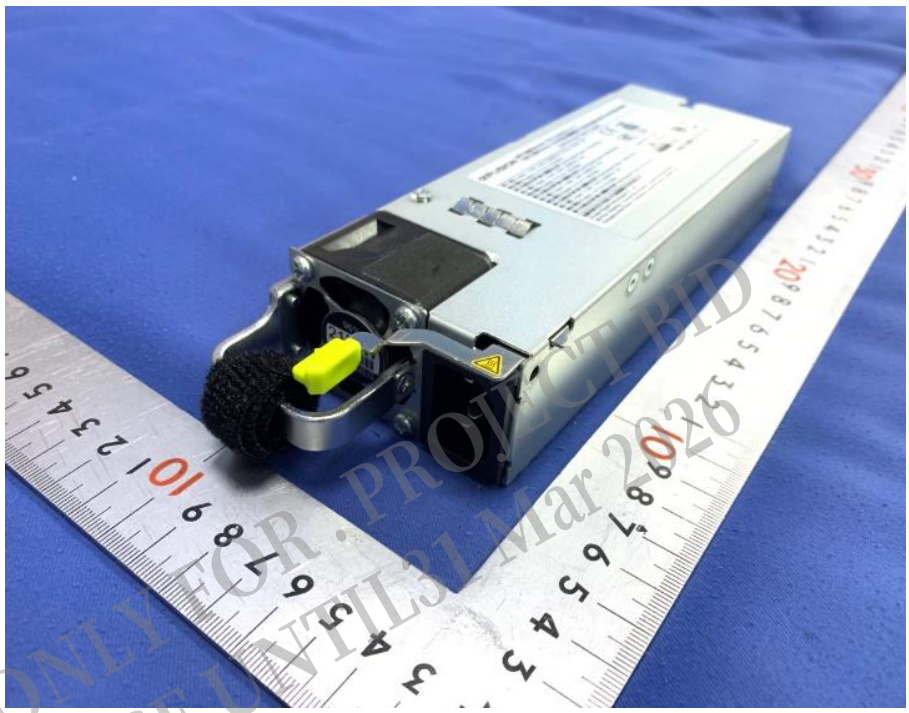


Bild / Picture 38: PAC2000S12-T1 view