
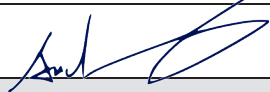




Test Report issued under the responsibility of:



TEST REPORT IEC 62368-1 Audio/video, information and communication technology equipment Part 1: Safety requirements	
Report Number :	CN22YT36 001
Date of issue	Sep.09.2022
Total number of pages	89
Name of Testing Laboratory preparing the Report	TÜV Rheinland (Shenzhen) Co., Ltd.
Applicant's name	TPV Electronics (Fujian) Co., Ltd.
Address	Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian, P.R.China
Test specification:	
Standard	IEC 62368-1:2018
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_1E
Test Report Form(s) Originator :	UL(US)
Master TRF	Dated 2022-04-14
Copyright © 2022 IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE System). All rights reserved.	
This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.	
If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.	
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	LCD MONITOR (LED backlight)	
Trade Mark(s)	AOC	
Manufacturer	Same as applicant	
Model/Type reference	AG405UXC, AG405UX, AG40***** (* can be 0-9, A-Z, a-z, -, \, /, + or blank for marketing purpose only, no technical difference.)	
Ratings	I/P: 100-240V~, 50/60Hz, 3.0A	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
<input checked="" type="checkbox"/>	CB Testing Laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.
	Testing location/ address	1601-1604, 17-18F, Tower A Building 2, Shenzhen International Innovation Valley, Dashi 1st Road, Xili Street, Xili Community, Shenzhen 518052 Nanshan District, China
	Tested by (name, function, signature)	Same as below
	Approved by (name, function, signature) ..	Same as below
<input checked="" type="checkbox"/>	Testing procedure: CTF Stage 1:	TPV Electronics (Fujian) Co., Ltd.
	Testing location/ address	Shangzheng, Yuan Hong Road Fuqing City, Fujian, P.R.China
	Tested by (name, function, signature)	Crystal Xu Project Engineer 
	Approved by (name, function, signature) ..	Anderson Wang Technical Reviewer 
<input type="checkbox"/>	Testing procedure: CTF Stage 2:	
	Testing location/ address	
	Tested by (name, function, signature)	
	Witnessed by (name, function, signature) ..	
	Approved by (name, function, signature) ..	
<input type="checkbox"/>	Testing procedure: CTF Stage 3:	
<input type="checkbox"/>	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):

- Measurement Section (7 Pages)
- National Differences (33 Pages)
- Other National Requirements (7 Pages)
- Photo documentation (6 Pages)

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

name of test	test clause number
Classification of electrical energy sources	5.2
Accessibility to electrical energy sources and safeguards (Accessibility test)	5.3.2
Maximum operating temperature test (Heating test)	5.4.1.4, 9.3, B.1.5, B.2.6
Determination of working voltage	5.4.1.8
Ball pressure test	5.4.1.10.3
Minimum Clearances/Creepage distance	5.4.2, 5.4.3
Humidity test	5.4.8
Electric strength test	5.4.9
Safeguards against capacitance discharge test	5.5.2.2
Resistance of the protective bonding system (Ground continuity test)	5.6.6
Unearthed accessible parts	5.7.4
Earthed accessible conductive part test	5.7.5
Electrical Power Source (PS) measurements for classification	6.2.2
Top Openings in Fire Enclosure	6.4.8.3.3
Bottom Openings in Fire Enclosure	6.4.8.3.4
Stability	8.6
Wall or ceiling mount loading test	8.7
Input test	Annex B.2.5
Abnormal operating and fault condition tests	Annex B.3, B.4
Test for permanence of markings	Annex F.3.10
Safeguards against entry of foreign object	Annex P.2.2
Adhesive test	Annex P.4
Limited power source test (LPS)	Annex Q.1
Steady force test, 10N, 30N, 250N	Annex T.2, T.3, T.5
Enclosure impact test	Annex T.6
Stress relief test	Annex T.8

Testing location:

- 1) All tests except Clause 5.4.1.10.3 and Clause 8.7 as described in Test Case and Measurement Sections were performed at the CTF stage 1 described on page 2.
- 2) Clause 5.4.1.10.3 and Clause 8.7 test was performed at CB Testing Laboratory described on page 2.

The EUT passed the test.

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

EU Group Differences, EU Special National Conditions, CA, DK, FR, SG, US

Explanation of used codes: CA=Canada, DK=Denmark, FR=France, SG=Singapore, US=United States of America

The product fulfils the requirements of EN IEC 62368-1:2020+ A11:2020 and BS EN IEC 62368-1:2020 + A11: 2020.

For National Differences see corresponding Attachment.

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.



Note: All models rating label are similar except for type designation. Above labels are representing the other models.

Test item particulars:	
Product group	<input checked="" type="checkbox"/> end product <input type="checkbox"/> built-in component
Classification of use by	<input checked="" type="checkbox"/> Ordinary person <input checked="" type="checkbox"/> Children likely present <input type="checkbox"/> Instructed person <input type="checkbox"/> Skilled person
Supply connection	<input checked="" type="checkbox"/> AC mains <input type="checkbox"/> DC mains <input type="checkbox"/> not mains connected: <input type="checkbox"/> ES1 <input type="checkbox"/> ES2 <input type="checkbox"/> ES3
Supply tolerance	<input checked="" type="checkbox"/> +10%/-10% <input type="checkbox"/> +20%/-15% <input type="checkbox"/> + %/ - % <input type="checkbox"/> None
Supply connection – type	<input checked="" type="checkbox"/> pluggable equipment type A - <input type="checkbox"/> non-detachable supply cord <input checked="" type="checkbox"/> appliance coupler <input type="checkbox"/> direct plug-in <input type="checkbox"/> pluggable equipment type B - <input type="checkbox"/> non-detachable supply cord <input type="checkbox"/> appliance coupler <input type="checkbox"/> permanent connection <input type="checkbox"/> mating connector <input type="checkbox"/> other:
Considered current rating of protective device	<input checked="" type="checkbox"/> 20 A; Location: <input checked="" type="checkbox"/> building <input type="checkbox"/> equipment <input type="checkbox"/> N/A
Equipment mobility	<input checked="" type="checkbox"/> movable <input type="checkbox"/> hand-held <input type="checkbox"/> transportable <input type="checkbox"/> direct plug-in <input type="checkbox"/> stationary <input type="checkbox"/> for building-in <input checked="" type="checkbox"/> wall/ceiling-mounted <input type="checkbox"/> SRME/rack-mounted <input type="checkbox"/> other:
Overvoltage category (OVC)	<input type="checkbox"/> OVC I <input checked="" type="checkbox"/> OVC II <input type="checkbox"/> OVC III <input type="checkbox"/> OVC IV <input type="checkbox"/> other:
Class of equipment	<input checked="" type="checkbox"/> Class I <input type="checkbox"/> Class II <input type="checkbox"/> Class III <input type="checkbox"/> Not classified <input type="checkbox"/>
Special installation location	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> restricted access area <input type="checkbox"/> outdoor location <input type="checkbox"/>
Pollution degree (PD)	<input type="checkbox"/> PD 1 <input checked="" type="checkbox"/> PD 2 <input type="checkbox"/> PD 3
Manufacturer's specified T_{ma}	40 °C <input type="checkbox"/> Outdoor: minimum °C
IP protection class	<input checked="" type="checkbox"/> IPX0 <input type="checkbox"/> IP__
Power systems	<input checked="" type="checkbox"/> TN <input type="checkbox"/> TT <input type="checkbox"/> IT - V _{L-L} <input type="checkbox"/> not AC mains
Altitude during operation (m)	<input type="checkbox"/> 2000 m or less <input checked="" type="checkbox"/> 5000 m
Altitude of test laboratory (m)	<input checked="" type="checkbox"/> 2000 m or less <input type="checkbox"/> m
Mass of equipment (kg)	Approx. 11.96kg with base, Base weight: 2.26kg.

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 : 19.Jul.2022	
Date (s) of performance of tests..... : 29.Jul.2022 - 12.Aug.2022	
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 <input type="checkbox"/> comma / <input checked="" type="checkbox"/> point is used as the decimal separator.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC62368-1:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided..... :	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies)..... :	<ol style="list-style-type: none"> 1 TPV Electronics (Fujian) Co., Ltd. Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian, P.R. China 2 TPV Electronics (Fujian) Co., Ltd. Shangzheng, Yuan Hong Road, Fuqing City, Fujian, P.R. China 3 TPV Electronics (Fujian) Co., Ltd. Optoelectronic Park, Rongqiao Economic and Technological Development Zone, Fuqing City, 350301, Fujian, P.R. China 4 L&T Display Technology (Fujian) Ltd. Optoelectronic Park, Rongqiao Economic and Technological Development Zone, Fuqing, 350301, Fujian, P.R. China 5 TPV Display Technology (China) Co., Ltd. No. 106 Jinghai 3 Rd., BDA, 100176, Beijing, P.R. China 6 TPV Display Technology (Wuhan) Co., Ltd. Unique No. 11, Zhuankou Development District of Economic Technological Development Zone, 430056, Wuhan City, P.R. China 7 TPV Display Technology (Beihai) Co., Ltd. China Electronic Beihai Industry Park, Northeast of the Crossing Between Taiwan Road and Jilin Road, Beihai City, Guangxi, P.R. China 8 Trend Smart CE Mexico S de RL de CV Avenida Sor Juana Ines de la Cruz de 19602 Nueva Tijuana, 22435 Tijuana Baja California, MEXICO

	<p>9 Envision Indústria de Produtos Eletrônicos Ltda. Av. Torquato Tapajós, 2236, Flores - CEP 69058-830 - Manaus/AM, Brazil</p> <p>10 TPV Technology (Thailand) Co., Ltd. No.267 Mu7, Tha Tum Sub- District, Si Maha Pho District, Prachin Buri Province, Thailand</p> <p>11 GeneTouch Corp. No. 9 Neixi Rd., Luzhu Dist., Taoyuan City, 33852, Taiwan</p> <p>12 Dixon Technologies (India) Ltd. EMC-2, Shed No. 2,4,5,6 & 7, Near Tirupati Airport, Village Govindhavaram, Munagalapalem Post, Revenue Vikruthamala, Yerpedu Mandelam, District-Chittoor, Andhra Pradesh, 517526, India</p> <p>13 Fábrica Austral de Productos Eléctricos S.A. Islas Malvinas 1180, Rio Grande (9420), Provincia de Tierra del Fuego, Antártida e Islas del Atlántico Sur, Argentina</p>
--	--

General product information and other remarks:

Product Description –

The models are LCD Monitors intended for general office use and has following features:

1. LCD Type: TFT LCD with LED backlight.
2. Building-in power board 715GD293.
3. Main board 715GD499 with HDMI x2, DP x1, USB type C x1, USB 3.0 x3, USB fast charging x1, mini USB x1 and audio ports. All data ports are optional used.
4. The internal metal chassis is considered as fire enclosure and mechanical enclosure, and the external plastic enclosure is regarded as electrical enclosure and mechanical enclosure, made of min. HB material.
5. Speakers (two sets provided).
6. Base stand (optional use): Plastic (HB or better) and metal.

Maximum declared ambient: 40°C.

Table: Definition of variable(s):

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

Note:

Other Country Differences: AU=Australia, NZ=New Zealand

Per client's request, supplement the special national conditions to present test report.

OVERVIEW OF ENERGY SOURCES AND SAFEGUARDS				
Clause	Possible Hazard			
5	Electrically-caused injury			
Class and Energy Source (e.g. ES3: Primary circuit)	Body Part (e.g. Ordinary)	Safeguards		
		B	S	R
ES3: L/N pin of appliance inlet	Ordinary	--	--	Bleeder resistors
ES3: Primary circuit	Ordinary	Air gap	Enclosure	Transformers, Photo Couplers, Y1 capacitor
ES1: DC output of power board	Ordinary	N/A	N/A	N/A
ES1: External accessible part	Ordinary	N/A	N/A	N/A
6	Electrically-caused fire			
Class and Energy Source (e.g. PS2: 100 Watt circuit)	Material part (e.g. Printed board)	Safeguards		
		B	1 st S	2 nd S
PS3: >100 watt circuit	Combustible materials inside power board and main board	Ignition not occur	Fire enclosure	--
PS2: <100 Watt circuit	All data ports on main board	Ignition not occur	Mounted on V-1 min. PCB	--
7	All circuits on main board except for USB type-C and all data ports of main board			
Class and Energy Source (e.g. Ozone)	Body Part (e.g., Skilled)	Safeguards		
		B	S	R
N/A	N/A	N/A	N/A	N/A
8	Mechanically-caused injury			
Class and Energy Source (e.g. MS3: Plastic fan blades)	Body Part (e.g. Ordinary)	Safeguards		
		B	S	R
MS3: Wall mount	Ordinary	--	--	Compliance with test 8.7.2
MS2: Equipment mass	Ordinary	--	--	Compliance with test 8.6
MS1: Sharp edges and corners	Ordinary	N/A	N/A	N/A
9	Thermal burn			
Class and Energy Source (e.g. TS1: Keyboard caps)	Body Part (e.g., Ordinary)	Safeguards		
		B	S	R
TS1: Accessible parts	Ordinary	N/A	N/A	N/A
10	Radiation			