

UL TEST REPORT AND PROCEDURE

Standard:	UL 62368-1, 2nd Ed, 2014-12-01 (Audio/video, information and communication technology equipment Part 1: Safety requirements) CAN/CSA C22.2 No. 62368-1-14, 2nd Ed, Issued: 2014-12-01 (Audio/video, information and communication technology equipment Part 1: Safety requirements)
Certification Type:	Component Recognition
CCN:	QQJQ2, QQJQ8 (Power Supplies for Use in Audio/Video, Information and Communication Technology Equipment)
Complementary CCN:	N/A
Product:	Switching Power Supply
Model:	PRL1301xy-z (x = D or blank, y = E, F or U, and z = 05, 10, 12, 15, 18, 24, 28, 36, 48, 54, 0512, 0524 or 1224)
Rating:	See Enclosure Id. 07-01 for details.
Applicant Name and Address:	ULTRA LEVEL TECH CO LTD 4TH FL 2 LANE 235 BAU-CHIAU RD HSIN-TIEN DISTRICT NEW TAIPEI 231 TAIWAN

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared By: Elicia M. Sosa / Project Handler Reviewed By: David G. Feusier / Reviewer

Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

A. Authorization - The Authorization page may include additional Factory Identification Code markings.

B. Generic Inspection Instructions -

- i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
- ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
- iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

The product covered is an Open Frame Switching Power Supply for building-in Audio/Video, Information and Communication Technology Equipment.

Model Differences

Models PRL1301xy-z (x = D or blank, y = E, F or U, and z = 05, 10, 12, 15, 18, 24, 28, 36, 48, 54, 0512, 0524 or 1224)

"x" denotes output type "D" for dual output and blank for single output

"y" denotes enclosure shape "E" for enclosed type with end side built-in fan, "F" for enclosed top cover with a built-in fan, "U" for U chassis type

"z" denotes output voltage

Models are similar to each other except for model designation, dual output or single output, output rating, and some component differences.

Component differences as follows.

Models PRL1301y-z series, all models are similar to each other except for the construction of (T1, L7, L8) and ratings of D13, D13A, C19, C21, C24, and C25.

Models PRL1301Dy-z series, all models are similar to each other except for the construction of (T1, L7), and ratings of D13, D13A, C19, C20, C21, and C24.

Test Item Particulars

Classification of use by	To be evaluated in end-product.
Supply Connection	AC Mains
Supply % Tolerance	+10%/-10%
Supply Connection – Type	To be evaluated in end-product.
Considered current rating of protective device as part of building or equipment installation	20 A; 10 A or 12.5 A; building; equipment
Equipment mobility	for building-in
Over voltage category (OVC)	OVC II
Class of equipment	Class I
Access location	N/A

Pollution degree (PD)	PD 2
Manufacturer's specified maximum operating ambient (°C)	50°C
IP protection class	IPX0
Power Systems	TN
Altitude during operation (m)	3000 m
Altitude of test laboratory (m)	2000 m or less
Mass of equipment (kg)	approximately 1.2 kg

Technical Considerations

- ☐ The following are available from the Applicant upon request : Installation (Safety) Instructions / Manual

Engineering Conditions of Acceptability

For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

- ☐ The following product-line tests are conducted for this product : Electric Strength and Earthing Continuity
- ☐ The end-product Electric Strength Test is to be based upon a maximum working voltage of : 138 Vrms / 368 Vpk
- ☐ The following output circuits are at ES1 energy levels : Outputs
- ☐ The following output circuits are at PS3 energy levels : Outputs
- ☐ Proper bonding to the end-product main protective earthing termination is : Required
- ☐ An investigation of the protective bonding terminals has : Not Been Conducted
- ☐ The following magnetic devices (e.g. transformers or inductor) are provided with an OBJ2 insulation system with the indicated rating greater than Class A (105°C) : Transformer (T2) (Class B) and Transformers (T1, T3) (Class F)
- ☐ The need for suitable electrical enclosure (for ES safeguard), fire enclosure (for PS safeguard), mechanical enclosure (for MS safeguard), and safeguard for thermal burn injury (for TS safeguard) is to be evaluated and provided (if necessary) in end-product.
- ☐ The means of connection to the mains supply is: To be evaluated in end-product.
- ☐ The accessibility for ordinary person shall be evaluated in the end-product.
- ☐ The power supply terminals and/or connectors are: Suitable for factory wiring only.
- ☐ The equipment is defined as Class I equipment and shall be connected to protective earth in end-product.

Additional Information

Record of previously conducted tests under the CB Scheme. The IEC 62368-1:2014 (Second Edition) CB Test Certificate (Ref. Certif. No. DK-109159-UL dated 2021-01-25) and Test Report (Ref. No. 2009021-CB dated 2021-01-19) were prepared by UL International Demko A/S.

This Test Report was based on the above CB Test Certificate and Test Report and was submitted by the CB Scheme. The test results and clause verdicts of the above noted Test Report were reviewed and found to comply with the applicable UL 62368-1, 2nd Edition, 2014-12-01 (Audio/Video, Information And Communication Technology Equipment - Part 1: Safety Requirements) / CAN/CSA C22.2 No. 62368-1-14, 2nd Edition, 2014-12-01 (Audio/Video, Information And Communication Technology Equipment - Part 1: Safety Requirements). As a result the clause verdicts and test results for this Test Report were noted as N/A and were referred to the UL International Demko A/S Test Report for details. All test data has been retained in UL's files. See Enclosure Ids. 02-02 and 02-03 for details.

Additional Standards

The product fulfills the requirements of: UL 60950-1, 2nd Edition, 2019-05-09 (Information Technology Equipment - Safety - Part 1: General Requirements) / CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements) covered in Report Ref#: E201808-A20.

Markings and Instructions

Clause Title	Marking or Instruction Details
Equipment identification marking – Manufacturer identification	Listee's or Recognized companys name, Trade Name, Trademark or File Number
Equipment identification marking – model identification	Model Number
Equipment rating marking – ratings	"Input Ratings (voltage, frequency/dc, current/power)", "Output Ratings (voltage, frequency/dc, current/power)"

Special Instructions to UL Representative

Inspect the transformer(s) listed in Production Line Testing Requirements per AA1.1- (C). When the tests are conducted at other location, inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in Production Line Testing Requirements is conducted at the component manufacturer.

BD1.0	TABLE: Production-Line Testing Requirements					
BD1.1	Electric Strength Test Special Constructions – Refer to Generic Inspection Instructions, Part AC for further information.					
Model	Component	Removable parts	Test probe location	Test V rms	Test V dc	Test Time, s
PRL1301xy-z (x = D or blank, y = E, F or U, and z = 05, 10, 12, 15, 18, 24, 28, 36, 48, 54, 0512, 0524 or 1224)	Transformers (T1, T2, T3)	Transformers (T1, T2, T3)	Primary to Secondary	3000	4242	1
BD1.2	Earthing Continuity Test Exemptions – This test is not required for the following models:					
BD1.3	Electric Strength Test Exemptions – This test is not required for the following models:					
BD1.4	Electric Strength Test Component Exemptions – The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test.					
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BE1.0	Sample and Test Specifics for Follow-Up Tests at UL				
Model	Component	Material	Test	Sample (s)	Test Specifics
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Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50491240

Blatt *Sheet*
0001

Ihr Zeichen *Client Reference*
EH/SPC-2009021-app

Unser Zeichen *Our Reference*
ZTW1-JAL-CN20MGSK 001

Ausstellungsdatum *Date of Issue*
26.01.2021
(day/mo/yr)

Genehmigungsinhaber *License Holder*

Ultra Level Tech. Co., Ltd.
4F. No.2, Lane 235, Bau-Chiau Road
Hsin-Tien Dist., New Taipei City
231
Taiwan

Fertigungsstätte *Manufacturing Plant*

Refer to latest revision
of the annex list of factories

Prüfzeichen *Test Mark*



Bauart geprüft
Sicherheit
Regelmäßige
Produktions-
überwachung

www.tuv.com
ID 1111234456

Geprüft nach *Tested acc. to*
EN 62368-1:2014+A11

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Einbauschaltnetzteil (Switching Power Supply)

Bezeichnung (Type Designation) : PRL1301y-Z, PRL1301Dy-Z1 (RL)
y steht für (stands for) : U, F oder(or) E
(stands for)
z steht für (stands for) : 05, 10, 12, 15, 18, 24, 28,
36, 48 oder (or) 54
Z1 steht für (stands for) : 0512, 0524 oder (or) 1224
Nennspannung (Rated Voltage): AC 100-240V, 47-63Hz
Nennstrom (Rated Current) : 8.5A-6A (y=U)
8.5A (y= E oder (or) F)
Ausgang (Output) : siehe Aufbau-Übersicht
(see constructional dataform)
max. Betriebshöhe (max. Operating Altitude) : 3000m
max. Umgebungstemperatur (max. Ambient Temperature) : 50°C
Schutzklasse (Protection Class) : I
Verschmutzungsgrad (Pollution Degree) : 2

ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.

This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifizierungsstelle



Dipl.-Ing. F. Stoezel

Anlage Fertigungsstättenliste
/Attachment List of Factories



R 50491240 0001

1 Ultra Level Tech. Co., Ltd.
4F. No.2, Lane 235, Bau-Chiau Road
Hsin-Tien Dist., New Taipei City
231
Taiwan

TÜVRheinland

Dieser Anhang ersetzt den Vorgänger vom/
This annex replaces the previous annex dated

Datum / Date 26.01.2021

Zertifizierungsstelle
/ Certification Body

A handwritten signature in blue ink, appearing to be "F. Stoelzel".

Dipl.-Ing. F. Stoelzel



**IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE)
CB SCHEME**

CB TEST CERTIFICATE

Product

Switching Power Supply

Name and address of the applicant

ULTRA LEVEL TECH CO., LTD.
4TH FL 2 LANE 235 BAU-CHIAU RD HSIN-TIEN DISTRICT
NEW TAIPEI, 231 TAIWAN

Name and address of the manufacturer

ULTRA LEVEL TECH CO., LTD.
4TH FL 2 LANE 235 BAU-CHIAU RD HSIN-TIEN DISTRICT
NEW TAIPEI, 231 TAIWAN

Name and address of the factory

Ultra Level Tech. Co., Ltd.
4F, No. 2, Lane 235, Bau-Chiau Road, Hsin-Tien Dist. New
Taipei City, 231
Taiwan

Note: When more than one factory, please report on page 2

☐ Additional Information on page 2

Ratings and principal characteristics

Input:
100-240 Vac, 47-63 Hz, 8.5A- 6 A for y= U;
100-240 Vac, 47-63 Hz, 8.5 A Max. for y = E or F
Output: See test report for details.

Trademark / Brand (if any)



Type of Customer's Testing Facility (CTF) Stage used

Model / Type Ref.

PRL1301xy-z
See Page 2

Additional information (if necessary may also be reported on page 2)

Additionally evaluated to EN 62368-1:2014/A11:2017; National Differences specified in the CB Test Report.

☐ Additional Information on page 2

A sample of the product was tested and found to be in conformity with

IEC 62368-1:2014

As shown in the Test Report Ref. No. which forms part of this Certificate

2009021-CB issued on 2021-01-19

This CB Test Certificate is issued by the National Certification Body



UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA

UL (Denko), Borupvang 5A DK-2750 Ballerup, DENMARK

UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN

UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2021-01-25

Signature:

Jan-Erik Storgaard



Ref. Certif. No.

DK-109159-UL

Model Details:

PRL1301xy-z (x = D or blank, y = E, F or U, and z = 05, 10, 12, 15, 18, 24, 28, 36, 48, 54, 0512, 0524 or 1224)

Additional information (if necessary)



☐ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA

☒ UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK

☐ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN

☐ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2021-01-25

Signature:

Jan-Erik Storgaard



VERIFICATION OF COMPLIANCE

This Verification of Compliance is hereby issued to the product designated below.

Product	Switching Power Supply
Model	PRL1301x-y (x=E, F or U; y=05, 10, 12, 15, 18, 24, 28, 36, 48 or 54)PRL1301Dx-y (x=E, F or U; y=0512, 0524 or 1224)
Brand	N/A
Applicant	ULTRA LEVEL TECH. CO., LTD. 4F, No. 2, Lane 235, Bau-Chiau Road, Hsin-Tien Dist., New Taipei City 231, Taiwan R.O.C.
Manufacturer	ULTRA LEVEL TECH. CO., LTD. 4F, No. 2, Lane 235, Bau-Chiau Road, Hsin-Tien Dist., New Taipei City 231, Taiwan R.O.C.
Applicable Standard(s)	EN 55032: 2012+AC: 2013, Class B EN 61000-3-2: 2014, EN 61000-3-3: 2013 EN 55024: 2010 IEC 61000-4-2: 2008, IEC 61000-4-3: 2010, IEC 61000-4-4: 2012 IEC 61000-4-5: 2014, IEC 61000-4-6: 2013, IEC 61000-4-8: 2009 IEC 61000-4-11: 2004
Reference No.	T170427N02-E
Test Laboratory	Compliance Certification Services Inc. Tainan Laboratory No.8, Jiucengling, Xinhua Dist., Tainan City 712, Taiwan (R.O.C.) http://www.ccsrf.com service@ccsrf.com

This device has been tested and found to comply with the stated standard, which is required by the Council Directive of 2014/30/EU. The test results are indicated in the test report and are applicable only to the tested sample identified in the report.

Jeter Wu / Assistant Manager
Tainan Lab
Date: August 22, 2017