

VP Engineering Ultra Level Tech Co Ltd 4TH FL 2 LANE 235 BAU-CHIAU RD HSIN-TIEN DISTRICT NEW TAIPEI

 Subscriber:
 252060001

 PartySite:
 8846

 File No:
 E257331

 Project No:
 4788068610

PD No: 17Q08980

2017/09/15

Type: I PO Number:

Date:

10 1101

Subject: Procedure And/Or Report Material

The following material resulting from the investigation under the above numbers is enclosed.

Issue

231 TAIWAN

Date Vol Sec Pages Revised Date

2017/09/06 1 1 Add New Volume 2017/09/06 1 1 Cert of Compliance

PO: SPC PO no. EH/SPC-1707029-app

Inspections at your plant will be conducted under the supervision of MARSY MA, UL INSPECTION CENTER TAIPEI, UL INTERNATIONAL SERVICES LTD, 260 DA-YEH RD, 5TH FL, PEITOU, TAIPEI CITY, Taiwan, 112., PHONE: 2-2893-8033, FAX: 2-2897-8628, EMAIL: MARSY.MA@ul.com

Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

Please review this material and report any inaccuracies to UL's Customer Service Professionals. Contact information for all of UL's global offices can be found at http://ul.com/aboutul/locations.

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CAM File

UL INSPECTION CENTER 818



File E257331 Vol 1 Auth. Page 1 Issued: 2017-09-15 Revised: 2017-09-15

FOLLOW-UP SERVICE PROCEDURE (TYPE R)

COMPONENT - POWER SUPPLIES, MEDICAL AND DENTAL (QQHM2,QQHM8)

Manufacturer: SEE ADDENDUM FOR MANUFACTURER LOCATIONS

8846 (Party Site)

Applicant: Ultra Level Tech Co Ltd

(252060-001) 4TH FL 2 LANE 235 BAU-CHIAU RD

HSIN-TIEN DISTRICT

NEW TAIPEI 231 TAIWAN

8846 (Party Site)

Recognized Company: (252060-001)

SAME AS APPLICANT

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party and any applicable Service Terms. The UL Contracting Party for Follow-Up Services is listed on addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

UL further defines responsibilities, duties and requirements for both Manufacturers and UL representatives in the document titled, "UL Mark Surveillance Requirements" that can be located at the following web-site: http://www.ul.com/fus and in the document titled "UL and Subscriber Responsibilities" that can be located at the following website: http://www.ul.com/responsibilities. Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the applicable Service Terms, please contact UL's Customer Service at http://ul.com/aboutul/locations/, select a location and enter your request, or call the number listed for that location.

The Applicant, the specified Manufacturer(s) and any Recognized Company in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable agreement is a Global Services Agreement ("GSA") with an effective date of January 1, 2012 or later and this Follow-Up Service Procedure is issued on or after that effective date, the Applicant, the specified Manufacturer(s) and any Recognized Company will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of use of the prescribed UL Mark, acceptance of the factory inspection, or payment of the Follow-Up Service fees which will incorporate such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking here: http://www.ul.com/contracts/Terms-After-12-31-2011. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

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It is the responsibility of the Recognized Company to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

This Follow-Up Service Procedure contains information for the use of the above Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Manufacturer with the understanding that it will be returned upon request and is not to be copied in whole or in part.

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the above named Manufacturer(s) and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

UL LLC has signed below solely in its capacity as the accredited entity to indicate that this Follow-Up Service Procedure is in compliance with the accreditation requirements.

Bruce A. Mahrenholz Director North American Certification Program File E257331 Vol 1 Addendum To Page 1 Issued: 2017-09-15 Authorization Page Revised: 2017-09-15

LOCATION

(252060-001) 8846 (Party Site)
Ultra Level Tech Co Ltd

4TH FL 2 LANE 235 BAU-CHIAU RD

HSIN-TIEN DISTRICT

NEW TAIPEI

231 TAIWAN Factory ID: None

UL Contracting Party for above site is: $\hfill \mbox{\em UL AG}$

Recognized Component Marking Data Page (RCMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

RECOGNIZED COMPONENT MARKING

Products Recognized under UL's Component Recognition Service are identified by marking elements consisting of:

- The Recognized Company's identification specified in this document.
- 2. A catalog, model or other applicable product designation specified in the descriptive sections of this document.
- 3. The UL Recognized Component Mark shown below is optional unless required elsewhere in the Procedure.

Only those components, which actually bear the Marking, should be considered as being covered under the Recognition Program. The UL Listing or Classification Mark is not authorized for use on or in connection with Recognized Components.

Recognized Component Mark



Minimum size of the Recognized Component Mark is not specified as long as it is legible. Minimum height of the registered symbol \$ shall be 3/64 inch but may be omitted if it is out of proportion to the Recognized Component Mark or not legible to the naked eye.

The manufacturer may reproduce the Mark electronically. Any decision regarding the acceptability of the manufacturer's Mark reproduction will be made at the Reviewing Office.

Recognized Component Marking Data Page (RCMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

RECOGNIZED COMPONENT MARKING

Products Recognized under UL's Component Recognition Service are identified by marking elements consisting of:

- The Recognized Company's identification specified in this document.
- 2. A catalog, model or other applicable product designation specified in the descriptive sections of this document.
- 3. The UL Recognized Component Mark shown below:
 - (A) Recognized only to Canadian safety requirements, or;
 - (B) Recognized to both U.S. and Canadian safety requirements.

Only those components, which actually bear the Marking, should be considered as being covered under the Recognition Program. The UL Listing or Classification Mark is not authorized for use on or in connection with Recognized Components.

Recognized Component Mark



Minimum size of the Recognized Component Mark is not specified as long as it is legible. Minimum height of the registered symbol \$ shall be 3/64 inch but may be omitted if it is out of proportion to the Recognized Component Mark or not legible to the naked eye.

The manufacturer may reproduce the Mark electronically. Any decision regarding the acceptability of the manufacturer's Mark reproduction will be made at the Reviewing Office.

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Models

<u>Section</u> <u>Report Date</u>

1 2017-09-06

PRL1103x-y, where x = U, F, E y = 12, 15, 24, 36, 48

PRL1103Dx-z where x = U, F, E z = 0512,1224 Issue Date: 2017-09-06 Page 1 of 25 Report Reference # E257331-V1-S1

UL TEST REPORT AND PROCEDURE

Standard: ANSI/AAMI ES60601-1 (2005/(R)2012 + A1:2012, C1:2009/(R)2012 + A2:2010/(R)2012) - Amendment 1 - Revision Date 2012/08/21. CAN/CSA-C22.2 No. 60601-1:14 - Edition 3 - Revision Date 2014/03 **Certification Type:** Component Recognition CCN: QQHM2, QQHM8 Product: Switching Power Supply Model: PRL1103x-y, where x = U, F, Ey = 12, 15, 24, 36, 48PRL1103Dx-z where x = U, F, Ez = 0512.1224See Enclosure ID 7-02 for details Rating: 100-240Vac, 47-63Hz, 5.0-2.0A O/P: For Model PRL1103x-12: 12-13.8Vdc, 25A (300W) or 12.5A (150W) For Model PRL1103x-15: 14-16Vdc, 21.43A (300W) or 10.71A (150W) For Model PRL1103x-24: 23-28Vdc, 13.04A (300W) or 6.52A (150W) For Model PRL1103x-36: 35-43Vdc, 8.57A (300W) or 4.29A (150W) For Model PRL1103x-48: 44-52Vdc, 6.82A (300W) or 3.41A (150W) For Model PRL1103Dx-0512: V1: +5Vdc, 24A, V2: +12Vdc, 13.33A, total 240W; or V1: +5Vdc, 12A, V2: +12Vdc, 6.67A, total 120W For Model PRL1103Dx-1224: V1: +12Vdc, 13.33A, V2: +24Vdc, 6.67A, total 240W; or V1: +12Vdc, 6.67A, V2: +24Vdc, 3.33A, total 120W Output condition A (300W or 240W) for unit Forced Airflow (25 CFM) or provided with built-in fan cooling condition. Output condition B (150W or 120W) for unit convection condition. (Condition B for Model with x = U only) See Enclosure ID 7-02 for details ULTRA LEVEL TECH CO LTD Applicant Name and Address: 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

Issue Date: 2017-09-06 Page 2 of 25 Report Reference # E257331-V1-S1

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.

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

Prepared by: Sun Yi Reviewed by: Zila Pi

Issue Date: 2017-09-06 Page 3 of 25 Report Reference # E257331-V1-S1

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 T est Report.

Product Description

The equipment is a switching type power supply which electronic components mounted on PWB and housed in Metal chassis for Class I medical electrical equipment.

Two MOPP insulations were provided between primary and secondary, one MOPP was provided between primary and PE.

Model Differences

All models are similar except for output ratings, chassis shape, main supply connection, DC Fan, Secondary winding of Transformer (T1), secondary circuit and model designation.

Model designation nomenclatures:

PRL1103x-y and PRL1103Dx-z

"x" can be U, F or E to indicate the different chassis shape.

U = U-chassis (3.2"W x 5"L x 1.5"H)

Main supply connection can be used Primary Connector or Terminal Block.

F = U-chassis (3.2"W x 5"L x 1.5"H) with fan cover.

Two fan covers.

Option 1: Fan secured under the cover (3.2"W x 5"L x 2"H);

Option 2: Fan secured upon the cover (3.2"W x 5"L x 2.23"H).

Main supply connection can be used Primary Connector or Terminal Block.

E = Enclosed chassis with a built-in fan in the front chassis (3.2"W x 6.5"L x 1.6"H).

Main supply connection can be used Appliance Inlet or Terminal Block.

"y" can be 12, 15, 24, 36 or 48 to indicate different single output rating.

"z" can be 0512, 1224 to indicate dual output rating.

Note: When x = U, the power supply can be provided with external 25 CFM forced airflow for different output ratings, see Enclosure ID 7-02 for details.

Technical Considerations

 Classification of installation and use: For built-in. Recognized power supply, installation should be considered in end use. Issue Date: 2017-09-06 Page 4 of 25 Report Reference # E257331-V1-S1

- Device type (component/sub-assembly/ equipment/ system): Component
- Intended use (Including type of patient, application location): Switching type power supply for general use with medical electrical equipment.
- Mode of operation: Continuous
- Supply connection: Primary Connector or Terminal Block or Appliance Inlet (To be evaluated in end product)
- Accessories and detachable parts included: None
- Other options include: None
- The product was investigated to the following additional standards: ANSI/AAMI ES60601-1 (2005/(R)2012 + A1:2012, C1:2009/(R)2012 + A2:2010/(R)2012) Amendment 1 Revision Date 2012/08/21 (Medical Electrical Equipment Part 1: General Requirements for Basic Safety and Essential Performance); CAN/CSA-C22.2 No. 60601-1:14 Edition 3 Revision Date 2014/03 (Medical Electrical Equipment Part 1: General Requirements for Basic Safety and Essential Performance)
- The product was not investigated to the following standards or clauses: Electromagnetic Compatibility (IEC 60601-1-2), Clause 14, Programmable Electronic Systems, Biocompatibility (ISO 10993-1)
- The degree of protection against harmful ingress of water is: Ordinary.
- The product is suitable for use in the presence of a flammable anesthetics mixture with air or oxygen or with nitrous oxide: No.

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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:

- This power supply has been judged on the basis of the required creepage and clearance in the Standards for Medical Electrical Equipment, Clause 8.9 of ANSI/AAMI ES60601-1 (2005/(R)2012 + A1:2012, C1:2009/(R)2012 + A2:2010/(R)2012) Amendment 1 Revision Date 2012/08/21 (Medical Electrical Equipment Part 1: General Requirements for Basic Safety and Essential Performance) and CAN/CSA-C22.2 No. 60601-1 (2014) (Medical Electrical Equipment Part 1: General Requirements for Basic Safety and Essential Performance) (includes National Differences for Canada) that cover the end-use product for which the component was designed.
- This power supply has been evaluated as a Class I, continuous operation, ordinary Equipment and has not been evaluated for use in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide. An additional evaluation shall be made if the power supply is intended for use in other than Class I equipment.
- This power supply was tested on a 20A branch circuit. If used on a branch circuit greater than this, additional testing may be necessary.
- The power supply was evaluated to MOPP among Primary, Secondary and Protective Earth. Two MOPP provided between Primary to Secondary, One MOPP provided between Primary and PE; see insulation diagram for details.
- Consideration shall be given to measuring the temperatures on power electronic components and transformer windings when the power supply is installed in/with the end-use equipment.
 Transformer (T1) employs a Class B (130°C) and a Class F (155°C) insulation system; (CT1, DT1, T3) employs a Class B (130°C) insulation system.
- The maximum ambient temperature of the product is 50°C for output full load.
- "Voltage or charge limitation" may need to reconsider if additional EMC filter is provided between appliance inlet/ power cord to the product.
- The following tests shall be performed in the end-product evaluation: Temperature Test, Dielectric Voltage Withstand Tests, and Leakage Current Test.
- The reference voltage for Dielectric Voltage Test in End Product: 348Vrms, 680Vpk for T1.
- This equipment is a Built-in power supply, a suitable Electrical, Mechanical or Fire enclosure must be provided as part of the end application.
- The accessibility of output connectors, insulating materials and temperatures shall be considered in the end use product.
- The Durability of Marking Test and Legibility of Markings for Label artwork will be considered in end system.
- The end-product evaluation shall ensure that the requirements related to series number and manufacturer date, Clause 7.2 are met.
- Test corner shall be considered as part of the end product evaluation.

Issue Date: 2017-09-06 Page 6 of 25 Report Reference # E257331-V1-S1

- PE Terminal Marking shall be evaluated in Class I end product applications.
- Overcurrent releases of adequate breaking capacity must be employed in the end product.

Additional Information

Following Clauses were not evaluated by Underwriters Laboratories Inc., suitable evidence of compliance should exist as required by national or regional regulations.

- Clause 11.7: Biocompatibility
- Clause 10.5, 17: Electromagnetic Compatibility
- Clause 12.2: Usability

US/CANADA deviations were provided in Enclosure - National Differences.

Additional Standards

ANSI/AAMI ES60601-1 (2005/(R)2012 + A1:2012, C1:2009/(R)2012 + A2:2010/(R)2012) - Amendment 1 - Revision Date 2012/08/21.CAN/CSA-C22.2 No. 60601-1:14 - Edition 3 - Revision Date 2014/03

Markings and instructions Clause Title Marking or Instruction Details Company identification Classified or Recognized company's name, Trade name, Trademark or File Model Model number Voltage range, ac/dc, phases if more than single phase **Supply Connection** Alternating current Direct current Supply Frequency Rated frequency range in hertz Power Input Amps, VA, or Watts Output Rated output voltage, power and frequency. **Fuses** Ratings (current and voltage) and type. (located adjacent to fuse OR as a diagram inside enclosure) Special Instructions to UL Representative N/A

Production-Line Testing Requirements							
Test Exemptions - The following models are exempt from the indicated test							
Model	Grounding Continuity	Dielectric Voltage Withstand	Patient Circuit Dielectric Voltage Withstand				
All models	No exemption	No exemption	Exemption				
<u>Solid-State Component Test Exemptions</u> - The following solid-state components may be disconnected from the remainder of the circuitry during either Dielectric Voltage Withstand Test:							
Component							
N/A							

Issue Date: 2017-09-06 Page 7 of 25 Report Reference # E257331-V1-S1

Sample and Test Specifics for Follow-Up Tests at UL						
The following tests shall be conducted in accordance with the Generic Inspection Instructions						
Plastic Enclosure or Part	Test	Sample(s)	Test Specifics			
N/A	N/A	N/A	N/A			

Certificate



Certificate no.

TA 50233409 01

License Holder:

Ultra Level Tech. Co., Ltd. Hsin-Tien Dist., New Taipei City 231 Taiwan

Manufacturing Plant:

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

Client Reference: EH/SPC-1203061-app

Test report no.: ZTW1-LinPr 10036366 001

Tested to:

IEC 60601-1:2005

EN 60601-1:2006

Certified Product: (Switching Power Supply)

License Fee - Units

Type Designation x stands for

: PRL1103x-y (RL)

10

y stands for

: U, E or F : 12, 15, 24, 36 or 48 : AC 100-240V, 47-63Hz 1 1

Rated Voltage Rated Current

: 5-2A

Output Voltage Output Current

: see constructional dataform : see constructional dataform max. Output Power : see constructional dataform : see constructional dataform

max. Ambient Temperature: 50°C

Protection Class

This certificate is valid for maximum 5 years.

12

Appendix: 1

Licensed Test mark:

EN 60601-1 IEC 60601-1 TÜV Rheinland Taiwan Ltd.

Signature

TÜVRheinland

pproved

Dipl.-Ing. W. Hsu

Date of Issue (day/mo/yr) 20/07/2012

TÜV Rheinland Taiwan Ltd., 11fl., No. 758, Sec. 4, Bade Road, Songshan Dist., Taipei City 105, Taiwan, R.O.C.- Tel (02) 2172-7000 - Fax (02) 2528-0018

Certificate



Certificate no.

TA 50233409 02

License Holder:

Ultra Level Tech. Co., Ltd. Hsin-Tien Dist., New Taipei City 231 Taiwan

Manufacturing Plant:

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

Client Reference: EH/SPC-1203061-app

Test report no.: ZTW1-LinPr 10036366 001

Tested to:

IEC 60601-1:2005 EN 60601-1:2006

Certified Product: (Switching Power Supply)

License Fee - Units

1

1

as page 01

Addition

Type Designation

: PRL1103Dx-z (RL)

x stands for

: U, E or F

z stands for

: 0512 or 1224

This certificate is valid for maximum 5 years.

Appendix: 1

3

Licensed Test mark:



EN 60601-1 IEC 60601-1 TÜV Rheinland Taiwan Ltd.

Signature

TÜVRheinland

Pproveo

(day/mo/yr) 20/07/2012

Date of Issue

Dipl.-Ing. W. Hsu

TÜV Rheinland Taiwan Ltd., 11fl., No. 758, Sec. 4, Bade Road, Songshan Dist., Taipei City 105, Taiwan, R.O.C.- Tel (02) 2172-7000 - Fax (02) 2528-0018

Certificate



Certificate no.

TA 50233409 05

License Holder:

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

Taiwan

Manufacturing Plant:

Ultra Level Tech. Co., Ltd. Hsin-Tien Dist., New Taipei City 231

Taiwan

Test report no.: ZTW1-LinPr 10036366 005

Client Reference: EH/SPC-07072047-PRL1

Tested to:

IEC 60601-1:2005+A1

EN 60601-1:2006+A11+A1+A12

Certified Product: (Switching Power Supply)

License Fee - Units

as page 01

Change

Test Requirement

: see above

This certificate is valid for maximum 5 years.

Appendix: 1

Licensed Test mark:

EN 60601-1 IEC 60601-1 TÜVRheinland CERTIFIED

TÜV Rheinland Taiwan Ltd.

Signature

Dipl.-Ing. W. Hsu

Approved

Date of Issue (day/mo/yr) 22/09/2017

TÜV Rheinland Taiwan Ltd., 11fl., No. 758, Sec. 4, Bade Road, Songshan Dist., Taipei City 105, Taiwan, R.O.C.- Tel (02) 2172-7000 - Fax (02) 2528-0018



DE 2-022328

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

CB TEST CERTIFICATE

Product

Name and address of the applicant

Name and address of the manufacturer

Name and address of the factory

Ratings and principal characteristics

Trademark (if any)

Customer's Testing Facility (CTF) Stage used

Model / Type Ref.

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

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

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

Switching Power Supply

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

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

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

AC 100-240V; 47-63Hz; 5-2A; Class I; for output ratings refer to test report page 10

RL

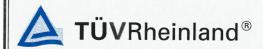
N/A

PRL1103x-y, PRL1103Dx-z (x = U, E or F to denote the cooling options and metal chassis construction; y = 12, 15, 24, 36 or 48 and z = 0512or 1224 to denote the output rating) Models differ in model name, o/p construction, o/p circuits/ PCB and chassis, construction of the main transformer T1, optionally used appliance inlet and terminal blocks or connectors; for details see test report

IEC 60601-1:2005+A1 for national deviations see test report

50092763 001

This CB Test Certificate is issued by the National Certification Body



TÜV Rheinland LGA Products GmbH Tillystraße 2 · 90431 Nürnberg, Germany Phone + 49 221 806-1371

+ 49 221 806-3935 Mail: cert-validity@de.tuv.com

Web: www.tuv.com

Signature:

Dipl.-Ing. W. Hau

and LGA Products

TÜVRheinland

Date:

22.09.2017



Test Report issued under the responsibility of:



IEC 60601-1 Medical electrical equipment

Part 1: General requirements for basic safety and essential performance

Report Reference No...... 50092763 001

Date of issue September 6th, 2017

Total number of pages 115

CB Testing Laboratory...... TÜV Rheinland Taiwan, Taichung Laboratory

428, Taiwan

City, 231 Taiwan

Test specification:

A1:2012

(or IEC 60601-1: 2012 reprint)

Test procedure...... CB Scheme

Non-standard test method.....: None

Test Report Form No...... IEC60601_1K

 Test Report Form Originator:
 UL(US)

 Master TRF
 2015-11

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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	Switchir	ng Power Supply	
Trade Mark	RL		
Manufacturer Same a		s applicant	
		03x-y, PRL1103Dx-z E, F; y = 12, 15, 24, 36, 48; z = 0512 or 1224)	
Ratings:	Input:	AC.100-240V, 47-63Hz, 5 - 2A	
	Output:	Refer to page 10	
Tacting procedure and tacting location			
Testing procedure and testing location:			
☐ CB Testing Laboratory:		David on the action and	
Testing location/ address		Same as on the cover page.	
Associated CB Testing Laboratory:			
Testing location/ address:			
Tested by (name, function, signature):		Price Lin, Engineer	
Approved by (name, function, signate		Jon S.C. Lin, Technical Certifier	~
☐ Testing procedure: CTF Stage 1	•	<u> </u>	
Testing location/ address			
Tested by (name, function, signature			<u> </u>
Approved by (name, function, signature):			
Approved by (name, function, signature)	u16/		
☐ Testing procedure: CTF Stage 2:			
Testing location/ address:			
Tested by (name, function, signature):		
Witnessed by (name, function, signate	ure):		
Approved by (name, function, signature):			
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):			

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

- Photo Documentation (10 pages);
- Technical Documentation (9 pages);
- Measurement Section (12 pages)

Summary of testing

Tests performed (name of test and test clause):

All applicable tests as described throughout this test report and in the Measurement Section were performed.

- Tests were performed on models below to represent the other models.
 - For model with single output: PRL1103U-12, PRL1103U-48, PRL1103E-12, PRL1103E-48, PRL1103F-12 and PRL1103F-48
 - For model with dual output: PRL1103DU-0512, PRL1103DU-1224, PRL1103DE-0512, PRL1103DE-1224, and PRL1103DF-0512.
- If not otherwise specified, PRL1103U-y and PRL1103DU-z tests were performed with external forced air-flow. For the tests with conventional cooling, the output load is 50% of rated load.
- The maximum specified operational ambient temperature is +50°C.
- The test samples were pre-production without serial number. The models used for testing as representative for the whole series of models are described in the attached test data tables.

Testing location:

All tests as described within this test report and as described in the Measurement Section were performed at the laboratory described on page 2.

Summary of compliance with National Differences

List of countries addressed:

N/A

☐ The product fulfils the requirements of EN 60601-1: 2006 + A11: 2011 + A1: 2013 + A12: 2014

Ref. No. VTN0209A/2021

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VERIFICATION OF COMPLIANCE

Issue Date: July 16, 2021

Applicant: ULTRA LEVEL TECH CO., LTD.

Address: 4F, No.2, Lane 235, Bau-Chiau Road, Hsin-Tien District, New

Taipei City 231, Taiwan, R.O.C.

Manufacturer: ULTRA LEVEL TECH CO., LTD.

Address: 4F, No.2, Lane 235, Bau-Chiau Road, Hsin-Tien District, New

Taipei City 231, Taiwan, R.O.C.

Contact Information: Web: <u>www.ultralevel.com.tw</u>

TEL#: 886-2-29180118

E-mail#: fiona@ultralevel.com.tw

Product: Switching Power Supply

Brand Name/Trade Mark: N/A

Model/Type: PRL1103x-y (x = U, F or E; y= 12, 15, 24, 36 or 48)

PRL1103Dx-y (x = U, F or E; y = 0512 or 1224)

Added Model(s): N/A

Applicable Standards: EN 60601-1-2: 2015+A1: 2021

EN 55011: 2016+A1: 2017+A11: 2020 (Class B)

EN 61000-3-2: 2014

EN 61000-3-3: 2013+A1: 2019

IEC 61000-4-2: 2008 IEC 61000-4-3: 2020 IEC 61000-4-4: 2012;

IEC 61000-4-5: 2014 +A1: 2017 IEC 61000-4-6: 2013+C1: 2015

IEC 61000-4-8: 2009

IEC 61000-4-11: 2020+C1: 2020

Test Laboratory: Compliance Certification Services Inc.

Tainan Lab

No.8, Jiucengling, Xinhua Dist., Tainan City, Taiwan

Test Report No.: T210629N03-E, dated on July 16, 2021

Conclusion:

Based upon a review of the Test Report(s), the tested sample of the product mentioned above is deemed to comply with the requirements of the above standards.

Note: This verification is only valid for the product and configuration described and in conjunction with the test report as detailed above.

Authorised Signatory:

Compliance Certification Services Inc.

Jeter Wu Manager

FM-023A-R01

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