

UL TEST REPORT AND PROCEDURE

Standard:	ANSI/AAMI ES60601-1 (2005 + C1:09 + A2:10)(Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance) CAN/CSA-C22.2 No. 60601-1 (2008) (Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance)
Certification Type:	Component Recognition
CCN:	QQHM2, QQHM8 (Power Supplies, Medical and Dental)
Product:	Switching Power Supply
Model:	RL0402x-yz where x = E or U; y = 03 or 05 or 12 or 18 or 24 or 36 or 48; and z = I or blank Models where x=U: RL0402U-03z RL0402U-05z RL0402U-12z RL0402U-18z RL0402U-24z RL0402U-36z RL0402U-48z Models with x=E: RL0402E-03z RL0402E-05z RL0402E-12z RL0402E-18z RL0402E-24z RL0402E-36z RL0402E-48z RL0402Dx-y where x = E or U; y = 0312 or 0324 or 0512 or 0524 or 1224 Models with x=U: RL0402DU-0312 RL0402DU-0324 RL0402DU-0512 RL0402DU-0524 RL0402DU-1224 RL0402DU-2448 Models with x=E: RL0402DE-0312 RL0402DE-0324 RL0402DE-0512 RL0402DE-0524 RL0402DE-1224
Rating:	Input: 100-240 V ac, 47-63 Hz, 6.35-3.25 A Output ratings are as follows:

Models where x=U:

2-3.3 Vdc, 60 A, 198 W max. (with fan)
2-3.3 Vdc, 45 A, 148.5 W max (without fan)

5-6Vdc, 60 A, 300 W max. (with fan)
5-6Vdc, 45 A, 225 W max (without fan)

12-15 Vdc, 33.34 A, 400 W max (with fan)
12-15Vdc, 20.84 A, 250 W max. (without fan)

16-21Vdc, 25 A, 400 W max. (with fan)
16-21Vdc, 15.63 A, 250 W max. (without fan)

22-30Vdc, 18.19 A, 400 W max. (with fan)
22-30Vdc, 11.37 A, 250 W max. (without fan)

31-41Vdc, 12.9 A, 400 W max. (with fan)
31-41Vdc, 8.07 A, 250 W max. (Without fan)

42-58Vdc, 9.53 A, 400 W max. (with fan)
42-58Vdc, 5.96 A, 250 W max. (without fan)

Models with x=E:

2-3.3Vdc, 60 A, 198 W max.

5-6Vdc, 60 A, 300 W max.

12-15Vdc, 33.34 A, 400 W max.

16-21Vdc, 25 A, 400 W max.

22-30Vdc, 18.19 A, 400 W max.

31-41Vdc, 12.9 A, 400 W max.

42-58 Vdc, 9.53 A, 400 W max.

Models with x=U:

V1:3.3Vdc, 40 A; V2:12V, 25A, 300 W max. (with fan)
V1:3.3Vdc, 30A;V2:12V, 16.7 A, 200W max. (without fan)

V1:3.3Vdc, 40 A; V2: 24V, 12.5A, 300 W max. (with fan)
V1:3.3Vdc, 30A;V2: 24V, 8.34A, 200W max. (without fan)

V1:5Vdc, 40 A; V2: 12V, 25A, 300 W max. (with fan)
V1:5Vdc, 30A;V2: 12V, 16.7A, 200W max. (without fan)

V1:5Vdc, 40 A; V2: 24V, 12.5A, 300 W max. (with fan)
V1:5Vdc, 30A;V2: 24V, 8.35A, 200W max. (without fan)

V1:12Vdc, 25 A; V2: 24V, 12.5A, 400 W max. (with fan)

V1:12Vdc, 16.67A;V2: 24V, 18.34A, 250W max. (without fan)

V1:24Vdc, 12.5 A; V2: 48V, 6.25 A, 400 W max. (with fan)
V1:24Vdc, 8.33 A;V2: 48V, 4.17 A, 250W max. (without fan)

Models with x=E:

V1:3.3Vdc, 40 A; V2: 12V, 25A, 300 W max.

V1:3.3Vdc, 40 A; V2: 24V, 12.5A, 300 W max.

V1:5Vdc, 40 A; V2: 12V, 25A, 300 W max.

V1:5Vdc, 40 A; V2: 24V, 12.5A, 300 W max.

V1:12Vdc, 25 A; V2: 24V, 12.5A, 400 W max.

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: Jonathan Chen

Reviewed by: Conga Chen

Certificate



Certificate no.

TA 50210740 01

License Holder:

Rltech Inc.
4F., No. 156, Chingmei St.
Wen Shan Ward
Taipei 116
Taiwan

Manufacturing Plant:

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

Test report no.: ZTW1-SCL 10032470 001

Client Reference: EH/SPC-1105034-app

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

Certified Product: (Switching Power Supply)

License Fee - Units

Type Designation	: RL0402x-yz (RL)	10
x stands for	: E or U	1
y stands for	: 03, 05, 12, 18, 24, 36 or 48	1
z stands for	: blank or I	1
Rated Voltage	: AC 100-240V, 47-63Hz	
Rated Current	: 6.35A-3.25A	
Output Voltage	: see constructional dataform	
Output Current	: see constructional dataform	
max. Output Power	: see constructional dataform	
max. Ambient Temperature	: 50°C	
Protection Class	: I	

This certificate is valid for maximum 5 years.

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Appendix: 1

Licensed Test mark:



TÜV Rheinland Taiwan Ltd.

Signature

Dipl.-Ing. W. Hsu



Date of Issue

(day/mo/yr)

17/08/2011

Certificate



Certificate no.

TA 50210740 02

License Holder:

Rltech Inc.
4F., No. 156, Chingmei St.
Wen Shan Ward
Taipei 116
Taiwan

Manufacturing Plant:

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

Test report no.: ZTW1-SCL 10032470 001

Client Reference: EH/SPC-1105034-app

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

Certified Product: (Switching Power Supply)

License Fee - Units

as page 01

Addition

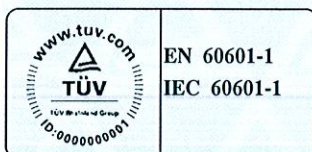
Type Designation	:1) RL0402Dx-y (RL)	1
	2) RL0402DU-2448 (RL)	1
x stands for	: E or U	1
y stands for	: 0312, 0324, 0512, 0524 or 1224	1

This certificate is valid for maximum 5 years.

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Appendix: 1

Licensed Test mark:



TÜV Rheinland Taiwan Ltd.

Signature

Dipl.-Ing. W. Hsu



Date of Issue

(day/mo/yr)

17/08/2011

Certificate



Certificate no.

TA 50210740 06

License Holder:

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

Manufacturing Plant:

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

Test report no.: ZTW1-LinPr 10032470 006

Client Reference: EH/SPC-1612019-app

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

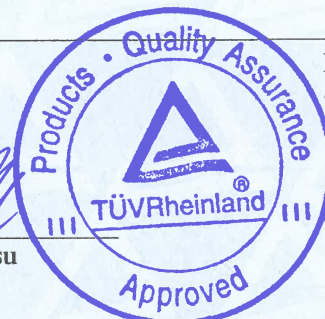
Licensed Test mark:



TÜV Rheinland Taiwan Ltd.

Signature

Dipl.-Ing. W. Hsu



Date of Issue

(day/mo/yr)
01/06/2017



Ref. Certif. No.

DE 2-021901

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT
(IECEE) CB SCHEMESYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D'ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OCCB TEST CERTIFICATE
CERTIFICAT D'ESSAI OCProduct
Produit

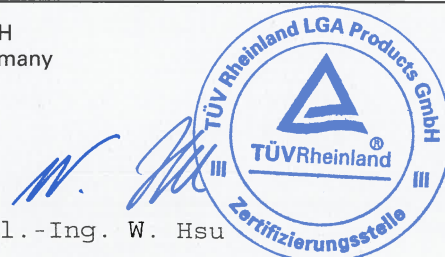
Switching Power Supply

Name and address of the applicant
Nom et adresse du demandeurUltra Level Tech. Co., Ltd.
4F. No.2, Lane 235, Bau-Chiau Road
Hsin-Tien Dist., New Taipei City, Taiwan 231Name and address of the manufacturer
Nom et adresse du fabricantUltra Level Tech. Co., Ltd.
4F. No.2, Lane 235, Bau-Chiau Road
Hsin-Tien Dist., New Taipei City, Taiwan 231Name and address of the factory
Nom et adresse de l'usineUltra Level Tech. Co., Ltd.
4F. No.2, Lane 235, Bau-Chiau Road
Hsin-Tien Dist., New Taipei City, Taiwan 231Note: When more than one factory, please report on page 2
Note: Lorsque il y plus d'une usine, veuillez utiliser la 2^{ème} pageRatings and principal characteristics
Valeurs nominales et caractéristiques principalesAC 100-240V; 47-63Hz; 6.35-3.25A; Class I;
for output ratings refer to test report page 10Trade mark (if any)
Marque de fabrique (si elle existe)

RL

Model/type Ref.
Ref. de typeRL0402DU-2448
RL0402x-yz (x=E or U; y=03,05,12,18,24,36,48; z=blank or I)
RL0402Dx-y (x=E or U; y=0312,0324,0512,0524,1224); in the
model names, x denotes the cooling options and metal chassis
construction, y denotes o/p rating, z for marketing purposeAdditional information (if necessary may also be
reported on page 2)
Les Information complémentaire (si nécessaire,
peuvent être indiqués sur la 2^{ème} page)Models differ in model name, output ratings, construction of
the main transformer T1 and the optionally used appliance
inlet, terminal blocks, connectors or inlet; for details see
test reportA sample of the product was tested and found
to be in conformity with
Un échantillon de ce produit a été essayé et a été
considéré conforme à la**PUBLICATION** **EDITION**
IEC 60601-1:2005+A1
for national deviations see test reportAs shown in the Test Report Ref. No. which forms part
of this Certificate
Comme indiqué dans le Rapport d'essais numéro de
référence qui constitue une partie de ce Certificat

50070027 001

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme National de CertificationTÜV Rheinland LGA Products GmbH
Tillystraße 2 · 90431 Nürnberg, Germany
Phone + 49 221 806-1371
Fax + 49 221 806-3935
Mail: cert-validity@de.tuv.com
Web: www.tuv.com

Date: 01.06.2017

Signature:

Dipl.-Ing. W. Hsu

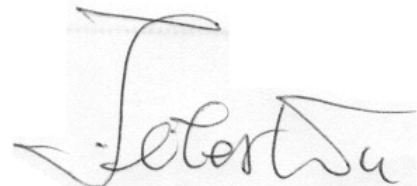
VERIFICATION OF COMPLIANCE

Issue Date: July 21 , 2021
Applicant: ULTRA LEVEL TECH. CO., LTD.
Address: 4F, No. 2, Lane 235, Bau-Chiau Rd., Hsin-Tien Dist., New Taipei City, Taiwan.
Manufacturer: ULTRA LEVEL TECH. CO., LTD.
Address: 4F, No. 2, Lane 235, Bau-Chiau Rd., Hsin-Tien Dist., New Taipei City, Taiwan.
Contact Information: Web: www.ultralevel.com.tw
TEL#: 886-2-29180118
E-mail#: fiona@ultralevel.com.tw
Product: Switching Power Supply
Brand Name/Trade Mark: N/A
Model/Type: 1) RL0402x-yz (x= E,U ; y=03, 05, 12, 18, 24, 36, 48 ; z=blank or I)
2) RL0402Dx-y (x= E,U ; y=0312, 0324, 0512, 0524, 1224, 2448)
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. : T210505N01-E, dated on July 21, 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