	Ref. Certif. No.
	DK-3235

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

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D'ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE

CERTIFICAT D'ESSAI OC

Product Produit	Medical Power Supply
Name and address of the applicant Nom et adresse du demandeur	BRIDGEPOWER CORP 964 GOSAEK-DONG GWONSEON-GU SUWON-SI GYEONGGI-DO 441-813 KOREA
Name and address of the manufacturer Nom et adresse du fabricant	BRIDGEPOWER CORP 964 GOSAEK-DONG GWONSEON-GU SUWON-SI GYEONGGI-DO 441-813 KOREA
Name and address of the factory Nom et adresse de l'usine Note: *When more than one factory, please report on page 2* Note: *Lorsque il y plus d'une usine, veuillez utiliser la 2ème page*	See Page 2
Ratings and principal characteristics Valeurs nominales et caractéristiques principales	See Page 2
Trademark (if any) Marque de fabrique (si elle existe)	None
Type of Manufacturer's Testing Laboratories used Type de programme du laboratoire d'essais constructeur	
Model / Type Ref. Ref. De type	See Page 2
Additional information (if necessary may also be reported on page 2) Les informations complémentaires (si nécessaire,, peuvent être indiqués sur la 2ème page	Also investigated to EN 60601-1:2006
A 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	IEC 60601-1(ed.3)
As 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 partie de ce Certificat	E302267-20110525

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme **National de Certification**

UL International Demko A/S, Lyskaer 8, P.O. Box 514, DK-2730 Herlev, Denmark, Tel: +45 44 85 65 65, info.dk@dk.ul.com
www.ul-europe.com

Signature:

Date: 2011-05-31

Jan-Erik Storgaard

Ref. Certif. No.

DK-3235

Ratings:

Rated Input; 100-240Vac, 50-60Hz, 1.0 A
Rated Output;

5Vdc, 4.0A or 7.5Vdc, 3.0A or 9Vdc, 3.0A or 12Vdc, 2.5A or 14Vdc,
2.1A or 15Vdc, 2.0A or 18Vdc, 1.67A or 24Vdc, 1.33A or 48Vdc,
0.4A or 48Vdc, 0.67A
(Rated output voltage is designated according to the model name designation system).

Models:

BP(a)030(b)(c)(e)(f) and (a)ENB1030(b)(c)(d)(e)(f)
(a) can be A to Z for family related designs.
(b) can be S for single output in model BP(a)030 series and (b) can be A to Z for design revision changes in model (a)ENB1030 series.
(c) can be 05 for 5Vdc, 07 for 7.5Vdc, 09 for 9Vdc, 12 for 12Vdc, 15 for 15Vdc, 16 for 16Vdc, 18 for 18Vdc, 24 for 24Vdc and 48 for 48Vdc output voltage.
(d) can be can be 00 thru 99 for standards output cord options ("(d)" is not provided in model BP(a)030series).
(e) can be F or N or Q or B or H or G or M or C for input plug type.
(f) can be 00 thru 99 for customer options. Not related safety concerns

PENB1030(a)(b)(c)(d)(e)
(a) can be A to Z for family related designs.
(b) can be output voltages, may be 48.
(c) can be can be 00 thru 99 for standards output cord options
(d) can be F or N or Q or B or H or G or M or C for input plug type.
(e) can be 00 thru 99 or AA to ZZ for customer options. Not related safety concerns.

Factories:

BRIDGEPOWER CORP
964 GOSAEK-DONG GWONSEON-GU
SUWON-SI GYEONGGI-DO 441-813 KOREA

WENDENG JEIL ELECTRONICS CO LTD
DONG SHOU GUANGZHOU LU KAIFA-QU
WENDENG-SHI SHANDONG CHINA

Additional information (if necessary)
Information complémentaire (si nécessaire)

UL International Demko A/S, Lyskaer 8, P.O. Box 514, DK-2730
Herlev, Denmark, Tel. +45 44 85 65 65, info.dk@dk.ul.com
www.ul-europe.com

Date: 2011-05-31

Signature:

Jan-Erik Storgaard

Test Report issued under the responsibility of:

Underwriters Laboratories

IEC 60601-1
Medical electrical equipment
Part 1: General requirements for basic safety and essential performance

Report Reference No.....:	E302267-20110525
Date of issue .....:	2011-05-25
Total number of pages.....:	270
CB Testing Laboratory.....:	UL Korea, Ltd.
Address .....:	#805, Manhatan Building, 36-2 Yeouido-Dong, Yeongdeungpo-Gu, Seoul 150-749, Korea
Applicant's name.....:	BRIDGEPOWER CORP
Address .....:	964 GOSAEK-DONG GWONSEON-GU SUWON-SI GYEONGGI-DO 441-813 KOREA
Test specification:	
Standard .....:	**IEC 60601-1: 2005 + CORR. 1 (2006) + CORR. 2 (2007)**
Test procedure.....:	**CB Scheme**
Non-standard test method……..:	N/A
Test Report Form No.....:	**IEC60601_1G**
Test Report Form Originator .....:	**Underwriters Laboratories Inc.**
Master TRF .....:	**Dated 2010-11**

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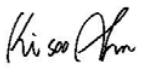
This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

Test item description ..... :	Medical Power Supply
Trade Mark ..... :	None
Manufacturer..... :	BRIDGEPOWER CORP 964 GOSAEK-DONG GWONSEON-GU SUWON-SI GYEONGGI-DO 441-813 KOREA

Model/Type reference..... :	BP(a)030(b)(c)(e)(f) and (a)ENB1030(b)(c)(d)(e)(f) (a) can be A to Z for family related designs. (b) can be S for single output in model BP(a)030 series and (b) can be A to Z for design revision changes in model (a)ENB1030 series. (c) can be 05 for 5Vdc, 07 for 7.5Vdc, 09 for 9Vdc, 12 for 12Vdc, 15 for 15Vdc, 16 for 16Vdc, 18 for 18Vdc, 24 for 24Vdc and 48 for 48Vdc output voltage. (d) can be can be 00 thru 99 for standards output cord options ("(d)" is not provided in model BP(a)030series). (e) can be F or N or Q or B or H or G or M or C for input plug type. (f) can be 00 thru 99 for customer options. Not related safety concerns PENB1030(a)(b)(c)(d)(e) (a) can be A to Z for family related designs. (b) can be output voltages, may be 48. (c) can be can be 00 thru 99 for standards output cord options (d) can be F or N or Q or B or H or G or M or C for input plug type. (e) can be 00 thru 99 or AA to ZZ for customer options. Not related safety concerns.
Ratings..... :	Rated Input; 100-240Vac, 50-60Hz, 1.0 A Rated Output; 5Vdc, 4.0A or 7.5Vdc, 3.0A or 9Vdc, 3.0A or 12Vdc, 2.5A or 14Vdc, 2.1A or 15Vdc, 2.0A or 18Vdc, 1.67A or 24Vdc, 1.33A or 48Vdc, 0.4A or 48Vdc, 0.67A (Rated output voltage is designated according to the model name designation system).

Testing procedure and testing location:		
☒ **CB Testing Laboratory:**		
Testing location/ address..... :	UL Korea, Ltd / #805, Manhatan Building, 36-2 Yeouido-Dong, Yeongdeungpo-Gu, Seoul 150-749, Korea	
☐ **Associated CB Test Laboratory:**		
Testing location/ address..... :		
Tested by (name + signature).. :	KiSoo Ahn	
Approved by (+ signature) ..... :	ChanYo Won	
☐ **Testing procedure: TMP**		
Tested by (name + signature).. :		
Approved by (+ signature) ..... :		
Testing location/ address..... :		
☐ **Testing procedure: WMT**		
Tested by (name + signature).. :		
Witnessed by (+ signature)..... :		
Approved by (+ signature) ..... :		
Testing location/ address..... :		
☐ **Testing procedure: SMT**		
Tested by (name + signature).. :		
Approved by (+ signature) ..... :		
Supervised by (+ signature) .... :		
Testing location/ address..... :		
☐ **Testing procedure: RMT**		
Tested by (name + signature).. :		
Approved by (+ signature) ..... :		
Supervised by (+ signature) .... :		
Testing location/ address..... :		

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

- Photographs (23 pages)
- Schematics + PWB (18 pages)
- Miscellaneous (7 pages)
- Marking Plate (21 pages)

Summary of testing

Tests performed (name of test and test clause):	**Testing location:**
Testing of this AC-DC Adaptor was not considered necessary based on the results of previous investigations to IEC 60601-1 Second Edition and IEC 60950-1 Second Edition.	N/A

Summary of compliance with National Differences

List of countries addressed: See Technical Consideration for details.

☒ The product fulfils the requirements of IEC 60601-1 Third Edition.

Copy of marking plate -

Refer to Attachment titled Marking Plate for copy

GENERAL INFORMATION	
Test item particulars (see also Clause 6):	
Classification of installation and use ..... :	Hand-held or Portable
Device type (component/sub-assembly/ equipment/ system) ..... :	Component power supply
Intended use (Including type of patient, application location) ..... :	To supply regulated power.
Mode of operation ..... :	Continuous
Supply connection ..... :	Appliance inlet or Direct Plug-in type
Accessories and detachable parts included ..... :	None
Other options include ..... :	None
Testing	
Date of receipt of test item(s) ..... :	N/A
Dates tests performed ..... :	N/A
Possible test case verdicts:	
- test case does not apply to the test object .....:	N/A
- test object does meet the requirement .....:	Pass (P)
- test object was not evaluated for the requirement..... :	N/E
- test object does not meet the requirement .....:	Fail (F)
Abbreviations used in the report:	
- normal condition .....: N.C.	- single fault condition..... : S.F.C.
- means of Operator protection .....: MOOP	- means of Patient protection ..... : MOPP

General remarks:

"(see Attachment #)" refers to additional information appended to the report.

"(see appended table)" refers to a table appended to the report.

The tests 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 testing laboratory.

List of test equipment must be kept on file and available for review.

Additional test data and/or information provided in the attachments to this report.

Throughout this report a ☐ comma / ☒ point is used as the decimal separator.

Manufacturer's Declaration per sub-clause 6.2.5 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)..... :

BRIDGEPOWER CORP

964 GOSAEK-DONG GWONSEON-GU
SUWON-SI GYEONGGI-DO 441-813 KOREA

WENDENG JEIL ELECTRONICS CO LTD

DONG SHOU GUANGZHOU LU KAIFA-QU
WENDENG-SHI SHANDONG CHINA

General product information:

Products are component power supplies intended to be used as part of Medical Electrical Equipment. This AC Input Power Supply provide MOOP isolation from Primary to Secondary and/or MOOP isolation from Primary to Earth. It contains the mains transformer with UL Recognized Insulation System.

This product is the AC-DC Adaptor of the switching type power supply, which electronic components are mounted on PWB and housed in plastic enclosure and provided with appliance inlet. In addition, some series of power supply are the direct plug-in units. See "Model Differences" for details.

Model Differences

The BP series is the basic model. Model ENB series is identical to the basic model BP series except for the model type designations. Model PENB series is identical to the basic model BP series except for the model designations and the output connector type with RJ45, and has a rated output 48Vdc, 0.67A or 48Vdc, 0.4A only.

The below information is nomenclature detail for BP(a)030(b)(c)(e)(f) and (a)ENB1030(b)(c)(d)(e)(f):

(a) can be A to Z for family related designs.

(b) can be S for single output in model BP(a)030 series and (b) can be A to Z for design revision changes in model (a)ENB1030 series.

(c) can be 05 for 5Vdc, 07 for 7.5Vdc, 09 for 9Vdc, 12 for 12Vdc, 15 for 15Vdc, 16 for 16Vdc, 18 for 18Vdc, 24 for 24Vdc and 48 for 48Vdc output voltage.

(d) can be can be 00 thru 99 for standards output cord options ("(d)" is not provided in model BP(a)030series).

(e) can be F or N or Q or B or H or G or M or C for input plug type. See Enclosure-Photographs for each plug-type configuration

F-Class I appliance inlet type: IEC60320-C14

Q-Class II appliance inlet type: IEC60320-C18

N-Class II appliance inlet type: IEC60320-C8

B or C-Class I & Class II direct-plug-in for North America, China, Japan and Argentina (Changeable Direct plug- in type is only used for Class II)

H-Class I & Class II direct-plug-in for Australia (AS/NZS 3112)

G-Class I & Class II direct-plug-in for British (BS 1364)

M-Class I & Class II direct-plug-in for European (CEE /16)] & Korea.

(f) can be 00 thru 99 for customer options.

The below information is nomenclature detail for PENB1030(a)(b)(c)(d)(e);

(a) can be A to Z for family related designs.

(b) can be output voltages, may be 48.

(c) can be can be 00 thru 99 for standards output cord options

(d) can be F or N or Q or B or H or G or M or C for input plug type.

F-Class I appliance inlet type: IEC60320-C14

Q-Class II appliance inlet type: IEC60320-C18

N-Class II appliance inlet type: IEC60320-C8