TEST REPORT
IEC 62368-1
Audio/video, information and communication technology equipment
Part 1: Safety requirements

Report Number..... :	**400637, amendment No. 1 to original test report No. 396786**
Date of issue..... :	2020-06-22, original report No.396786 was issued on 2020-05-29
Total number of pages..... :	22 pages, refer to page 4 for attachments
Applicant's name..... :	GlobTek, Inc.
Address..... :	186 Veterans Dr. Northvale, NJ 07647 USA
Test specification:	
Standard ..... :	IEC 62368-1:2014 (Second Edition)
Test procedure..... :	CB Scheme
Non-standard test method ..... :	N/A
Test Report Form No. ..... :	IEC62368_1B
Test Report Form(s) Originator ..... :	UL(US)
Master TRF..... :	2014-03

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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.

General disclaimer:

The test results presented in this report relate only to the object tested.
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This Test Report, when bearing the Nemko name and logo is only valid when issued by a Nemko laboratory, or by a laboratory having special agreement with Nemko.

Test Item description ..... :	ICT/ITE Power Supply
Trade Mark ..... :	GlobTek, Inc.
Manufacturer ..... :	Same as applicant.
Model/Type reference ..... :	GT-46181-***-T** (see general product information for model designation)
Ratings ..... :	AC Input: 0.5A 100-240Vac 50-60Hz **or 50/60Hz** Output: see general product information for details

Testing procedure and testing location:			
☒	CB Testing Laboratory:	Nemko Shanghai Ltd. Shenzhen Branch	
Testing location/ address ..... :		Unit CD, Floor 2 & Floor 10, Tower 2, Kefa Road 8#, Hi-Technology Park, Nanshan District, Shenzhen, Guangdong, China	
☐	Associated CB Testing Laboratory:		
Testing location/ address..... :			
Tested by (name, function, signature) :		Jefferson Li (Project Handler)	Jefferson Li
Approved by (name, function, signature):		Jane Sun (Verificator)	Jane Sun
☐	Testing procedure: TMP/CTF Stage 1		
Testing location/ address..... :			
Tested by (name, function, signature) :			
Approved by (name, function, signature):			
☐	Testing procedure: WMT/CTF Stage 2		
Testing location/ address..... :			
Tested by (name, function, signature) :			
Witnessed by (name, function, signature):			
Approved by (name, function, signature) :			
☐	Testing procedure: SMT/CTF Stage 3 or 4		
Testing location/ address..... :			
Tested 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):

1. Photos (2 pages)

Summary of testing:

Tests performed (name of test and test clause):

Clause	Test(s)
4	General Requirements
5	Electrically-caused injury
F	Equipment markings, instructions, and instructional safeguards

Testing location:

Refer to page 3

Summary of compliance with National Differences:

List of countries addressed

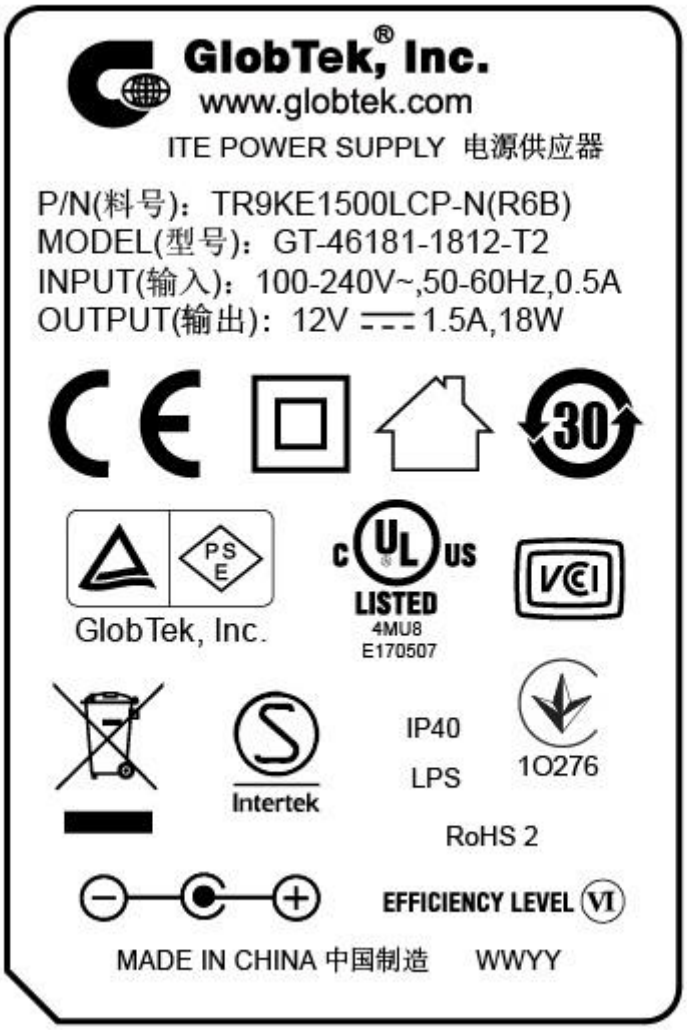
- EU countries, US and Canada, Japan and Australia / New Zealand.

☒ **The product fulfils the requirements of** IEC 62368-1: 2014 (Second Edition) and EN 62368-1: 2014+A11:2017

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 Certification Bodies that own these marks.

For Class II equipment:



This is a representative label. Others are same with this except model name and output rating.

Calibration	All instruments used in the tests given in this test report are calibrated and traceable to national or international standards. Further information about traceability will be given on request.
Measurement uncertainty	Measurement uncertainties are calculated for all instruments and instrument set-ups given in this report. Calculations are based on the principles given in the standard EA-4/02 (Dec. 1999), IEC Guide 115:2007 and other relevant internal Nemko-procedures. Further information about measurement uncertainties will be given on request.
Evaluation of results	If not explicitly stated otherwise in the standard, the test is passed if the measured value is equal to or below (above) the limit line, regardless of the measurement uncertainty. If the measured value is above (below) the limit line, the test is not passed - ref IEC Guide 115:2007. The instrumentation accuracy is within limits agreed by IECEE-CTL.

TEST ITEM PARTICULARS:	
Classification of use by ..... :	☒ Ordinary person ☐ Instructed person ☐ Skilled person ☒ Children likely to be present
Supply Connection..... :	☒ AC Mains ☐ DC Mains ☐ External Circuit - not Mains connected - ☐ ES1 ☐ ES2 ☐ ES3
Supply % Tolerance ..... :	☒ +10%/-10% ☐ +20%/-15% ☐ +____%/ -_____% ☐ None
Supply Connection – Type ..... :	☒ pluggable equipment type A - ☐ non-detachable supply cord ☒ appliance coupler ☐ direct plug-in ☐ mating connector ☐ pluggable equipment type B - ☐ non-detachable supply cord ☐ appliance coupler ☐ permanent connection ☐ mating connector ☐ other:_____
Considered current rating of protective device as part of building or equipment installation .....:	16A (20A for Canada and US); Installation location: ☒ building; ☒ equipment
Equipment mobility .....:	☒ movable ☐ hand-held ☒ transportable ☐ stationary ☐ for building-in ☐ direct plug-in ☐ rack-mounting ☐ wall-mounted
Over voltage category (OVC) .....:	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other: _____
Class of equipment .....:	☐ Class I ☒ Class II ☐ Class III
Access location .....:	☐ restricted access location ☒ N/A
Pollution degree (PD) .....:	☐ PD 1 ☒ PD 2 ☐ PD 3
Manufacturer's specified maxium operating ambient:	40°C
IP protection class .....:	☒ IPX0 ☐ IP__
Power Systems .....:	☒ TN ☐ TT ☒ IT - 230 V $_{L-L}$ for Norway
Altitude during operation (m) .....:	☐ 2000 m or less ☒ up to 4000 m
Altitude of test laboratory (m) .....:	☒ 2000 m or less
Mass of equipment (kg) .....:	☒ Weight Approx.: 0.133kg Dimension (W x H x D): 80 x 50 x30mm (excluding the output wires and connector)

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..... :	2020-06-03
Date (s) of performance of tests..... :	2020-06-05 to 2020-06-15
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 ☐ comma / ☒ point is used as the decimal separator.**	
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) ..... :	GlobTek, Inc. 186 Veterans Dr. Northvale, NJ 07647 USA GlobTek (Suzhou) Co., Ltd Building 4, No. 76, Jin Ling East Rd., Suzhou Industrial Park, Suzhou, JiangSu 215021, China

GENERAL PRODUCT INFORMATION:

Product Description –

Amendment No.1 report No.400637:
The original test report No.396786 was modified on 2020-06-22 to include the following changes and/or additions:
1) modify rated frequency of equipment from “50-60Hz” to “50-60Hz **or 50/60Hz**”.
2) add alternative appliance inlets (see table 4.1.2)
3) add Class II equipment (see below explanation).

Class II equipment is same with Class I equipment except remove of protective conductor and change of inlet type. This update re-evaluated those clauses and information related to the changes from Class I equipment to Class II equipment.

Project history:		
Nemko Report/ Order No.:	Modification to the appliances:	Changes/ Modifications in clause(s):
396786, 2020-05-29	Main test report.	N/A
400637, 2020-06-22	1) modify rated frequency of equipment from “50-60Hz” to “50-60Hz **or 50/60Hz**”. 2) add alternative appliance inlets (see table 4.1.2) 3) add Class II equipment.	General product information, Cl. 4, 5, F, Table 4.1.2.

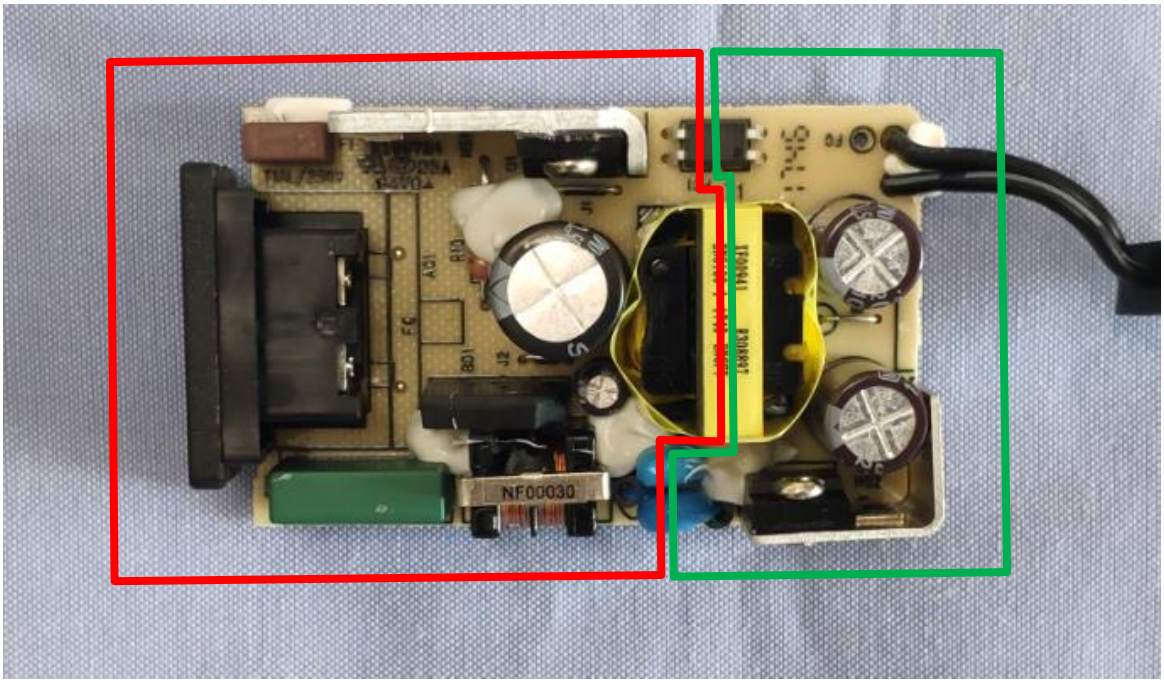
Model Differences –

<u>Explanation of model designation GT-46181-*-T**:</u>**
The 1st “*” denotes the rated output wattage, with a maximum value of "18",
The 2nd “*” denotes the standard rated output voltage designation, with a value of "05", "09", "12", "15",
The 3rd “*” is optional deviation, subtracted from standard output voltage, which can be “-0.1” to “-3.9” with interval of 0.1, or blank to indicate no voltage different,
The 2nd and 3rd together denote the output voltage, with a range of 5-15Vdc
The 4th “*” can be 3, 3A or 2, 3 means C14 inlet type, 3A means C6 inlet type, 2 means C8 inlet type.
The last “*” denote any six character = 0-9 or A-Z or ()[] or – or blank for marketing purposes.

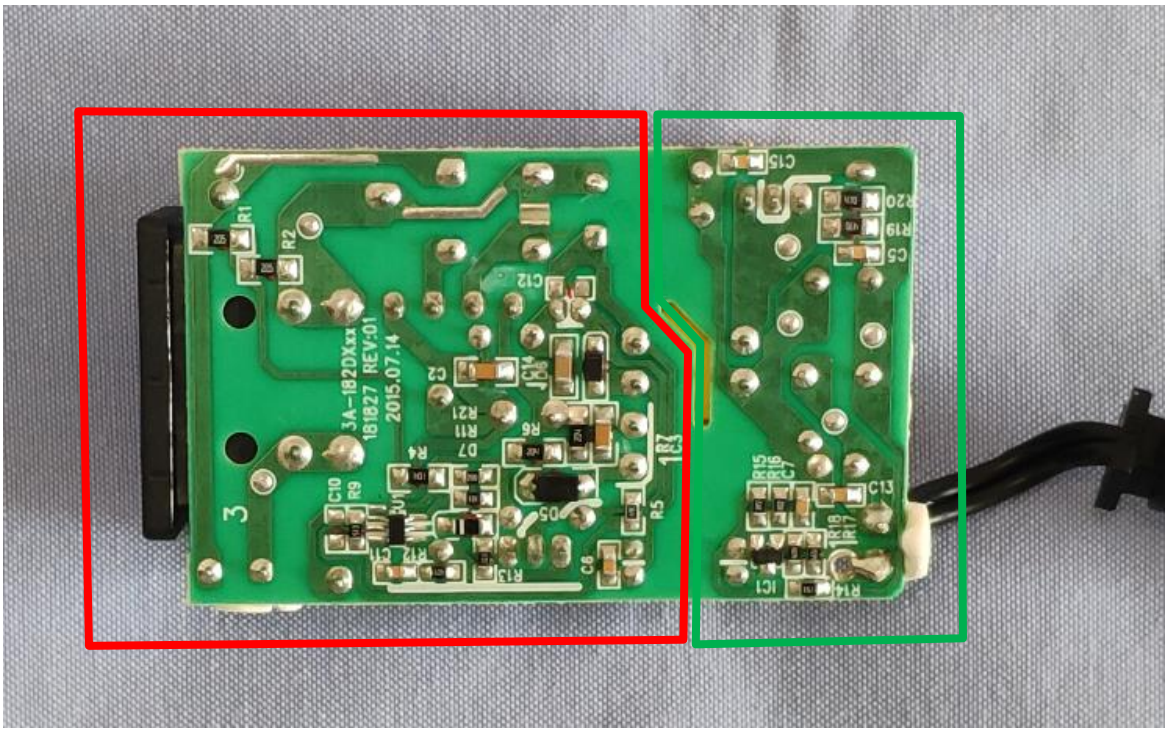
Additional application considerations – (Considerations used to test a component or sub-assembly) –
N/A

ENERGY SOURCE DIAGRAM		
Indicate which energy sources are included in the energy source diagram. Insert diagram below		
Class 1	Class 2	Class 3

For Class II equipment



For Class II equipment



☒ ES ☐ PS ☐ MS ☐ TS ☐ RS

OVERVIEW OF EMPLOYED SAFEGUARDS				
Clause	**Possible Hazard**			
5.1	Electrically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (ES3: Primary Filter circuit)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
Ordinary person	ES3: Primary circuits	N/A	N/A	Enclosure.
Ordinary person	ES3: Primary Circuits	N/A	N/A	Cl. & Cr. Distance comply 5.4.2 & 5.4.3; Solid insulation 5.4.4; Component comply Annex G
Ordinary person	ES3: Primary Circuits	Basic insulation Distances: cl. 5.4.2 and 5.4.3, 5.4.9 **(for Class I equipment)**	Protective bonding conductor (wire) comply 5.6.4 (Table G.5) **(for Class I equipment)**	N/A
Ordinary person	ES3: Primary Circuits	N/A	N/A	Reinforced or supplementary insulation Distances: cl. 5.4.2 and 5.4.3, 5.4.9 **(for Class II equipment)**
Ordinary person	ES3: Primary Circuit (X-cap)	N/A	N/A	Bleeder resistors cl.5.5.2.2

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
4	**GENERAL REQUIREMENTS**		P
4.1.1	Acceptance of materials, components and subassemblies	Refer to summary of testing and appended table 4.1.2.	P
4.1.2	Use of components	Certified components are used in accordance with their ratings, certifications and they comply with applicable parts of this standard. Components, for which no relevant IEC-standard exists, have been tested under the conditions occurring in the equipment, using applicable parts of IEC 62368-1.	P
5	**ELECTRICALLY-CAUSED INJURY**		P
5.6	Protective conductor		N/A
5.6.2	Requirement for protective conductors		N/A
5.6.2.1	General requirements	Class II equipment.	N/A
5.6.2.2	Colour of insulation		N/A
5.6.3	Requirement for protective earthing conductors		N/A
	Protective earthing conductor size (mm^2) .....:		—
5.6.4	Requirement for protective bonding conductors		N/A
5.6.4.1	Protective bonding conductors		N/A
	Protective bonding conductor size (mm^2). .....:		—
	Protective current rating (A) ..... :		—
5.6.4.3	Current limiting and overcurrent protective devices		N/A
5.6.5	Terminals for protective conductors		N/A
5.6.5.1	Requirement		N/A
	Conductor size (mm^2), nominal thread diameter (mm). .....:		N/A
5.6.5.2	Corrosion		N/A
5.6.6	Resistance of the protective system		N/A
5.6.6.1	Requirements		N/A
5.6.6.2	Test Method Resistance (Ω).....:		N/A
F	**EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS**		P
F.3	Equipment markings		P
F.3.1	Equipment marking locations	The required marking is located on the external enclosure of the equipment.	P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
F.3.2	Equipment identification markings	Refer below.	P
F.3.2.1	Manufacturer identification ..... :	GlobTek, Inc.	—
F.3.2.2	Model identification ..... :	GT-46181-***-T**	—
F.3.3	Equipment rating markings	Refer below:	P
F.3.3.1	Equipment with direct connection to mains	Refer F.3.3.3 – F.3.3.6	P
F.3.3.2	Equipment without direct connection to mains	Direct connection to mains.	N/A
F.3.3.3	Nature of supply voltage..... :	~ (IEC 60417-5032)	—
F.3.3.4	Rated voltage ..... :	100-240V~	—
F.3.3.4	Rated frequency ..... :	50-60Hz **or 50/60Hz**	—
F.3.3.6	Rated current or rated power ..... :	0.5A	—
F.3.3.7	Equipment with multiple supply connections	Single supply connection.	N/A
F.3.6	Equipment markings related to equipment classification	Refer below:	P
F.3.6.1	Class I Equipment		N/A
F.3.6.1.1	Protective earthing conductor terminal		N/A
F.3.6.1.2	Neutral conductor terminal		N/A
F.3.6.1.3	Protective bonding conductor terminals		N/A
F.3.6.2	Class II equipment (IEC60417-5172)	For Class II equipment.	P
F.3.6.2.1	Class II equipment with or without functional earth	No functional earth. The symbol for IEC 60417- 5172 marked.	P
F.3.6.2.2	Class II equipment with functional earth terminal marking		N/A

4.1.2	TABLE: List of critical components	P

Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity[1])
Plastic enclosure	SABIC JAPAN L L C	945(GG), 915R (GG)	V-0, 120°C, Min. 2.0mm thickness	UL 94	UL
Alt.)	SABIC INNOVATIVE PLASTICS US L L C	945(GG), 915R (GG)	V-0, 120°C, Min. 2.0mm thickness	UL 94	UL
Alt.)	SABIC INNOVATIVE PLASTICS B V	945(GG), 915R(GG)	V-0, 120°C, Min. 2.0mm thickness	UL 94	UL
Alt.)	LG CHEM (GUANGZHOU) ENGINEERING PLASTIC CO LTD	LUPOY EF-1006F(m)	V-0, 115°C, Min. 2.0mm thickness	UL 94	UL
Alt.)	COVESTRO DEUTSCHHLAND AG [PC RESINS]	FR6005+(z)	V-0, 105°C, Min. 2.0mm thickness	UL 94	UL
Alt.)	SILVER AGE ENGINEERING PLASTICS (DONGGUAN) CO LTD	PC2330	V-0, 115°C, Min. 2.0mm thickness	UL 94	UL
PCB	Interchangeable	Interchangeable	V-1 or better, min. 130°C	UL796	UL
Appliance inlet (CN1) (for GT-46181-***-T3*) **(for Class I equipment)**	TECX	TU-301-SP, TU-301 series including to TU-301A, TU-301AP, TU-301S, TU-301AP-A and TU-301-AL	Min. 250Vac; Min. 10A (C14 type)	IEC/EN60320-1, UL 498	ENEC-UL, UL
Alt.)	Leci	DB-14, DB-14-1, DB-14-2, DB-14-3, DB-14-5, DB-14-6, DB-14-1-7, DB-14-8, DB-14-10	250Vac, 10A (C14 type)	IEC/EN60320-1, UL 498	VDE, UL
Alt.)	Zhe Jiang BeiErjia	ST-A01-003J, ST-A01-001L, ST-A01-002L, ST-A01-003K	250Vac, 10A (C14 type)	IEC/EN60320-1, UL 498	VDE, UL
Alt.)	Sun Fair	S-03	250Vac, 10A (C14 type)	IEC/EN60320-1, UL 498	VDE, UL

Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity[1])
Alt.)	Echo	AC-P01, AC-P03, AC-P06, AC-P07	250Vac, 10A (C14 type)	IEC/EN60320-1, UL 498	VDE, UL
Alt.)	**Rong Feng**	**SS-120**	**250Vac, 10A (C14 type)**	**IEC/EN60320-1, UL 498**	**VDE, UL**
Appliance inlet (CN1) (for GT-46181-***-T3A*) **(for Class I equipment)**	TECX	TU-333	AC 250V, 2.5A (C6 type)	IEC/EN60320-1, UL 498	ENEC-UL, UL
Alt.)	Sun Fair	S-02	AC 250V, 2.5A (C6 type)	IEC/EN60320-1, UL 498	VDE, UL
Alt.)	Leci	DB-6, DB-6-2, DB-6-3, DB-6-4, DB-6-2BP27P27	AC 250V, 2.5A (C6 type)	IEC/EN60320-1, UL 498	VDE, UL
Alt.)	**Zhe Jiang Bei Er Jia Electronic Co., Ltd.**	**ST-A04-002, ST-A04-001**	**AC 250V, 2.5A (C6 type)**	**IEC/EN 60320-1, UL 498**	**VDE, UL**
Alt.)	**Rong Feng**	**RF-190**	**AC 250V, 2.5A (C6 type)**	**IEC/EN60320-1, UL 498**	**VDE, UL**
Appliance inlet (CON1) (for GT-46181-*-T2*) (for Class II equipment)**	**TECX-UNIONS**	**SO-222**	**2.5A, 250Vac (C8 type)**	**IEC/EN 60320-1, UL 498**	**ENEC 15, UL**
Alt.)	**Zhejiang LECI**	**DB-8**	**2.5A, 250Vac (C8 type)**	**IEC/EN 60320-1, UL 498**	**VDE, UL**
Alt.)	**Zhe Jiang Bei Er Jia Electronic Co., Ltd.**	**ST-A03-005, ST-A03-002, ST-A03-004**	**2.5A, 250Vac (C8 type)**	**IEC/EN 60320-1, UL 498**	**VDE, UL**
Alt.)	**Sun Fair**	**S-01**	**2.5A, 250Vac (C8 type)**	**IEC/EN 60320-1, UL 498**	**VDE, UL**
Alt.)	**Rong Feng**	**RF-180**	**2.5A, 250Vac (C8 type)**	**IEC/EN60320-1, UL 498**	**VDE, UL**
Fuse (F1)	Conquer	MST	T1AL, 250V	IEC/EN 60127-1, IEC/EN 60127-2, UL 248-1, UL 248-14	VDE UL
Alt.)	Ever Island Electric Co Ltd & Walter Electric	2010	T1AL, 250V	IEC/EN 60127-1, IEC/EN 60127-2, UL 248-1, UL 248-14	VDE UL

Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity[1])
Alt.)	Hollyland	5ET	T1AL, 250V	IEC/EN 60127-1, IEC/EN 60127-2, UL 248-1, UL 248-14	VDE UL
Alt.)	BEL	RST	T1AL, 250V	IEC/EN 60127-1, IEC/EN 60127-2, ANSI/UL 248-1, ANSI/UL 248-14	VDE, UL
Alt.)	Cooper Bussmann	SS-5	T1AL, 250V	IEC/EN 60127-1, IEC/EN 60127-2, UL 248-1, UL 248-14	VDE UL
Alt.)	Littelfuse	392	T1AL, 250V	IEC/EN 60127-1, IEC/EN 60127-2, UL 248-1, UL 248-14	VDE UL
Alt.)	Dongguan Better	932	T1AL, 250V	IEC/EN 60127-1, IEC/EN 60127-2, ANSI/UL 248-1, ANSI/UL 248-14	VDE, UL
Choke (NF1)	ENG	NF00030	105°C Min.	IEC 62368-1	Test with equipment
X-Capacitor (CX1) (optional)	Cheng Tung Industrial Co Ltd	CTX	Max. 0.22µF, Min. 250V, 100°C, min. X2 type	IEC/EN 60384-14:2013, UL 60384-14	ENEC 15, UL
Alt.)	Ultra Tech Xiphi Enterprise Co. Ltd.	HQX	Max. 0.22µF, Min. 250V, 100°C, min. X2 type	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Tenta	MEX	Max. 0.22µF, Min. 250V, 100°C, min. X2 type	IEC/EN 60384-14 UL 60384-14	VDE, UL
Alt.)	Joey Electronics (Dongguan) Co Ltd	MPX	Max. 0.22µF, Min. 250V, 105°C, min. X2 type	IEC/EN 60384-14:2013, UL 60384-14	VDE, UL
Alt.)	Xiangtai Electronic (Shenzhen) Co Ltd	MPK, MPX	Max. 0.22µF, Min. 250V, 110°C, min. X2 type	IEC/EN 60384-14:2013, UL 60384-14	VDE, UL
Alt.)	Carli Electronics Co Ltd	MPX	Max. 0.22µF, Min. 250V, 100°C, min. X2 type	IEC/EN 60384-14:2013, UL 60384-14	VDE, UL
Bleeder resistor (R1, R2) (two in series)	Tzai Yuan	HSMD*********, SMD*********	Max.2MΩ, min. 1/4 W	IEC 62368-1 (ed.1), UL 62368-1	CB by UL, UL

Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity[1])
Alt.)	Prosperity	FVS03, TF12V, FVS20, TF20V, FVS25, TF25V	Max.2MΩ, min. 1/4 W	IEC 62368-1:2014, UL 62368-1	CB by UL, UL
Alt.)	Ralec	RTV06, RTV12, RTV20, RTV25,	Max.2MΩ, min. 1/4 W	IEC 62368-1:2014	CB by UL
Alt.)	Futaba	RM	Max.2MΩ, min. 1/4 W	EN 60065:2014	VDE
Alt.)	Yageo Components (Suzhou)	HHV series	Max.2MΩ, min. 1/4 W	IEC 62368-1:2018	VDE
Bridging diode (DB1)	Interchangeable	Interchangeable	Min 2A, min 600V	IEC 62368-1	Test in equipment
E-Capacitor (C1)	Interchangeable	Interchangeable	Max.33µF Min.400V, 105°C	IEC 62368-1	Test in equipment
Transistor (Q1)	Interchangeable	Interchangeable	4A Min.600V	IEC 62368-1	Test in equipment
Photo Coupler (PC1)	Everlight Electronics Co., Ltd.	EL817	Dti=0.5mm, Int. dcr=6.0mm, Ext. dcr=7.7mm, Thermal cycling test, 110°C	IEC/EN 60950-1, IEC/EN 60747-5-5, UL 1577	VDE, FINKO, UL
Alt.)	Lite-On Technology Corporation	LTV-817	Dti=0.8mm, Ext. dcr=7.8mm, Thermal cycling test, 100°C	IEC/EN 60950-1, IEC/EN 60747-5-5, UL 1577	VDE, FINKO, UL
Alt.)	Bright Led Electronics Corp.	BPC-817A/B/C/D/L, BPC-817 S, BPC-817 M	Dti=0.4mm, Ext. dcr=7.0mm, Thermal cycling test, 100°C	IEC/EN 60950-1, IEC/EN 60747-5-5, UL 1577	VDE, FINKO, UL
Alt.)	COSMO	K1010	Dti=0.6mm, Int. dcr=4.0mm, Ext. dcr=5.0mm, Thermal cycling test, 115°C	IEC/EN 60950-1, IEC/EN 60747-5-5, UL 1577	VDE, FINKO, UL
Alt.)	Renesas Electronics Corporation	PS2561-1	Dti=0.4mm, Ext. dcr=7.0mm, Thermal cycling test, 5000V, 100°C	IEC/EN 60950-1, IEC/EN 60747-5-5, UL 1577	VDE, FINKO, UL
Alt.)	SHENZHEN ORIENT COMPONENTS CO LTD	ORPC817x, ORPC817M x, ORPC817S x	Dti=0.4mm, Ext. dcr=7.6mm, Thermal cycling test, 110°C	IEC/EN 60950-1, IEC/EN 60747-5-5, UL 1577	VDE, FINKO, UL

Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity[1])
Y-Capacitor (CY1)	Walsin Technology Corp	AH	Max. 2200pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	Success Electronics Co., Ltd.	SE, SB, SF	Max. 2200pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	TDK Corporation	CD	Max. 2200pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	Haohua Electronic Co	CT7	Max. 2200pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	Xiangtail Electronic (Shenzhen) Co Ltd	YO series	Max. 2200pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	Juhong ELE company	JB series	Max. 2200pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	Murata Mfg. Co., Ltd.	KX	Max. 2200pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Y-Capacitor (CY2) (optional)	Walsin Technology Corp	AH	Max. 100pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	Success Electronics Co., Ltd.	SE, SB, SF	Max. 100pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	TDK Corporation	CD	Max. 100pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	Haohua Electronic Co	CT7	Max. 100pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	Xiangtail Electronic (Shenzhen) Co Ltd	YO series	Max. 100pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL

Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity[1])
Alt.)	Juhong ELE company	JB series	Max. 100pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
Alt.)	Murata Mfg. Co., Ltd.	KX	Max. 100pF, Min. 250Vac, 125 °C, Y1 type	IEC/EN 60384-14, UL 60384-1	VDE, UL
LPS resistor (R10) (for GT-46181-1505-T**)	Interchangeable	Interchangeable	1.2 ohm, 1W	IEC 62368-1	Test in equipment
LPS resistor (R10) (for GT-46181-1605-T**)	Interchangeable	Interchangeable	1.1 ohm, 1W	IEC 62368-1	Test in equipment
LPS resistor (R10) (for GT-46181-*09*-T**, GT-46181-*12*-T**, GT-46181-*15*-T**)	Interchangeable	Interchangeable	1.0 ohm, 1W	IEC 62368-1	Test in equipment
Transformer (T1) ***1)*** (for 5-7.5V)	GlobTek	XF00941	Class B, UL insulation system GTX-130-TM (E243347)	IEC 62368-1, UL 1446	Tested in equipment, UL
Alt.)	ENG	XF00941	Class B, UL insulation system ENG130-1 (E308897)	IEC 62368-1, UL 1446	Tested in equipment, UL
Alt.)	HAOPUWEI	XF00941	Class B, UL insulation system ZT-130 (E315275)	IEC 62368-1, UL 1446	Tested in equipment, UL
Alt.)	BOAM	XF00941	Class B, UL insulation system BOAM-01 B1 (E252329)	IEC 62368-1, UL 1446	Tested in equipment, UL
Transformer (T1) ***1)*** (for 7.6-10.5V)	GlobTek	XF00962	Class B, UL insulation system GTX-130-TM (E243347)	IEC 62368-1 and evaluated acco. To IEC 60085, UL 1446	Tested in equipment, UL
Alt.)	ENG	XF00962	Class B, UL insulation system ENG130-1 (E308897)	IEC 62368-1, UL 1446	Tested in equipment, UL

Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity[1])
Alt.)	HAOPUWEI	XF00962	Class B, UL insulation system ZT-130 (E315275)	IEC 62368-1, UL 1446	Tested in equipment, UL
Alt.)	BOAM	XF00962	Class B, UL insulation system BOAM-01 B1 (E252329)	IEC 62368-1, UL 1446	Tested in equipment, UL
Transformer (T1) ***1)*** (for 10.6-15V)	GlobTek	XF00933	Class B, UL insulation system GTX-130-TM (E243347)	IEC 62368-1 and evaluated acco. To IEC 60085, UL 1446	Tested in equipment, UL
Alt.)	ENG	XF00933	Class B, UL insulation system ENG130-1 (E308897)	IEC 62368-1, UL 1446	Tested in equipment, UL
Alt.)	HAOPUWEI	XF00933	Class B, UL insulation system ZT-130 (E315275)	IEC 62368-1, UL 1446	Tested in equipment, UL
Alt.)	BOAM	XF00933	Class B, UL insulation system BOAM-01 B1 (252329)	IEC 62368-1, UL 1446	Tested in equipment, UL
- Bobbin for all the transformer	CHANG CHUN PLASTICS CO LTD	T375J, T375HF	Phenolic, V-0, 150°C, Min. 0.71mm thickness	UL 94	UL
Alt.)	SUMITOMO BAKELITE CO LTD	PM-9820	Phenolic, V-0, 150°C, Min. 0.71mm thickness	UL 94	UL
- Insulation tape for all the transformer	3M	1350F-1, 1350T-1	130°C	UL 510	UL
Alt.)	Bondtec	370S	130°C	UL 510	UL
- TIW	Great Leoflon	TRW(B)	130°C	IEC 60950-1, UL2353	VDE, UL
Protective bonding conductor (Green/Yellow) **(for Class I equipment)**	Interchangeable	Interchangeable	Marked VW-1 or FT-1, min. 18AWG, min. 300V, min. 85°C	UL 758	UL

Object/part No.	Manufacturer/ trademark	Type/model	Technical data	Standard (Edition / year)	Mark(s) of conformity[1])
Output wire	Interchangeable	Interchangeable	Max.3.05m, Min. VW-1 or FT-1, Min. 80°C, Min. 60V, Min. 20 AWG	IEC62368-1	Test in equipment
Strain relief	Interchangeable	Interchangeable	V-1 or better	UL94, UL746C	UL
PCB	Interchangeable	Interchangeable	Min. V-0, 130°C	UL 796	UL
Secondary capacitor (C8)	Interchangeable	Interchangeable	Max.2200µF, Min. 10V, Min. 105°C	IEC62368-1	Test in equipment
Supplementary information:					

Supplementary information:

[1]) Provided evidence ensures the agreed level of compliance. See OD-CB2039.

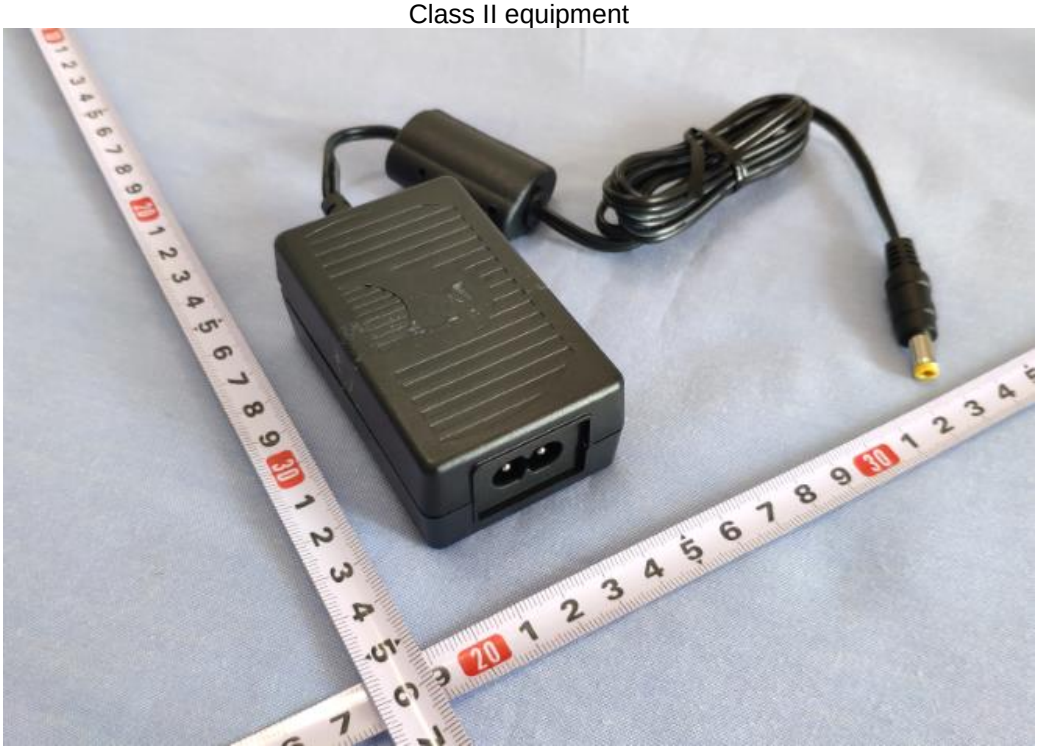
1) T1 shares the same construction from different vendors. All the transformers have the similar construction, different in winding turns and layer of insulation tapes.

- Bold letters indicate the updates.

- End of report --

Photos

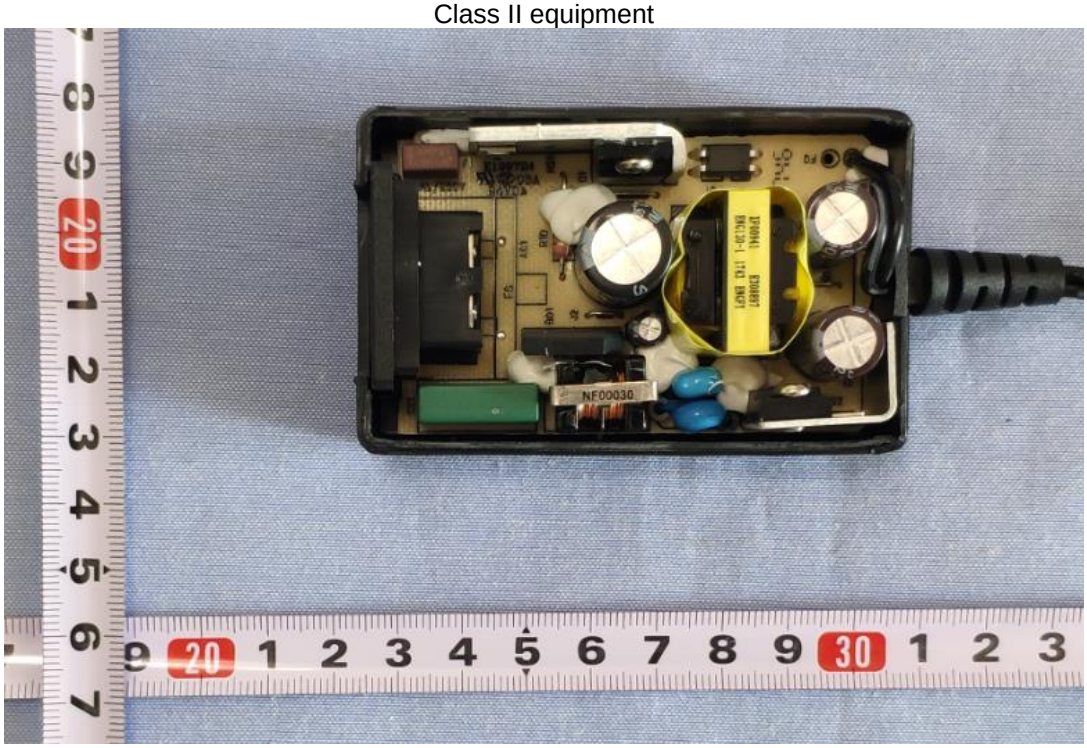
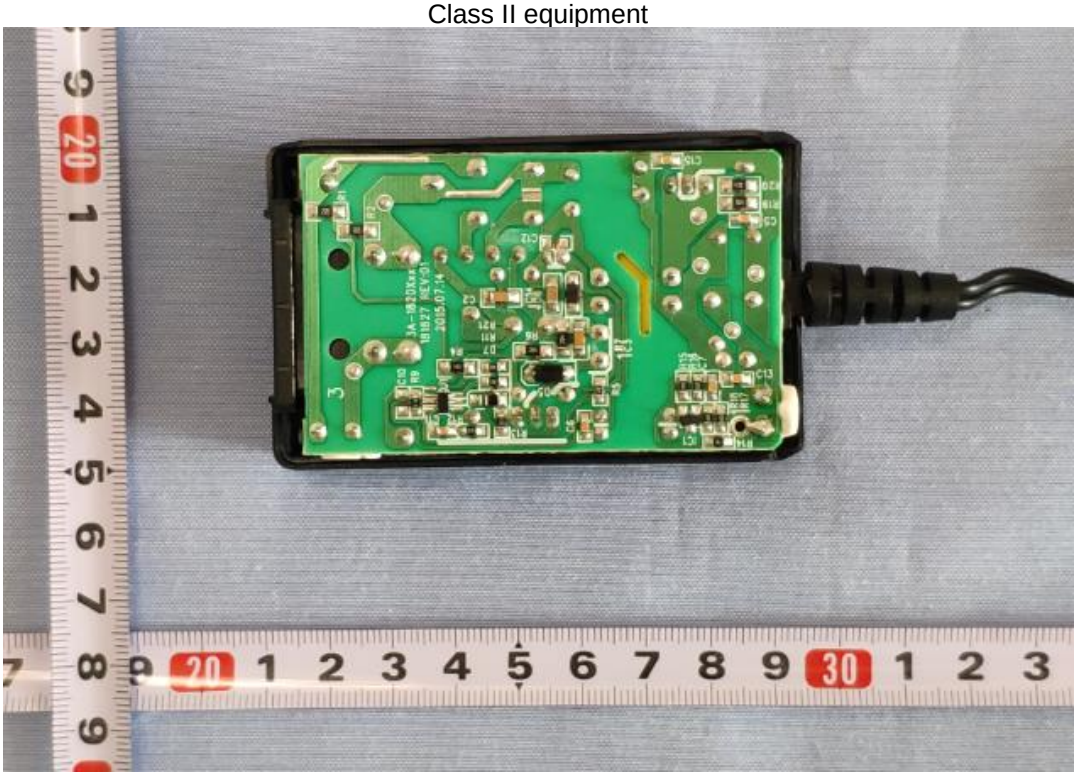
Class II equipment



Class II equipment

Photos

Class II equipment



Class II equipment