



TEST REPORT
C381.1-17
Test Method for Calculating the Energy Efficiency of Single-Voltage
External Ac-Dc and Ac-Ac Power Supplies

Report Reference No. 413302/EN

Tested by
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Approved by
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Total number of pages 8

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 China

Testing location As above

Applicant's name GlobTek, Inc.

Address 186 Veterans Dr. Northvale, NJ 07647 USA

Test specification:

Standard International Efficiency Marking Protocol ver.3.0
 C381.1-17: Energy performance of external ac-dc and ac-ac power
 supplies
 Title 10 CFR part 429 and Appendix Z to Subpart B of Title 10 CFR
 Part 430 for External Power Supply.

Test procedure Appendix Z to Subpart B, Part 430 of Title 10 to the United States
 Code of Federal Regulations, entitled Uniform Test Method for
 Measuring the Energy Consumption of External Power Supplies

Test Report Form No. C381.1-17_A

Test Report Form(s) Originator Nemko Shenzhen

Master TRF 2019-10

This test report is based on the content of the internal test program. The test program considered selected clauses of the
 a.m. standard(s) and experience gained with product testing. It was prepared by Nemko Shenzhen Ltd.

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Test item description	ITE Power Supply
Trademark	G GLOBTEK,INC.
Manufacturer	Same as applicant
Factory	See page 3
Model and/or type reference	GTM46101-1005-USB
Rating(s) (V; Hz)	Input:100-240 V ~, 50-60 Hz, 0.3 A
	Output: 5.0 V === 2.0 A, 10.0 W

Copy of marking plate



GlobTek, Inc.
186 Veterans Dr.
Northvale, NJ 07647 USA
www.globtek.com

ITE/MEDICAL POWER SUPPLY 电源供应器 адаптер питания

P/N/номер/料号: WR9QA2000USBNR6B3325
MODEL/модель/型号: GTM46101-1005-USB
INPUT/вход/输入: 100-240V~, 50-60Hz, 0.3A
OUTPUT/выход/输出: 5.0 V === 2.0A, 10.0W

RECOGNIZED COMPONENT
ETL US Intertek 4007497
S Intertek IEC/EN60601-1 IEC60601-1-11 4007497
C ETL US Intertek 4007497
GlobTek, Inc.

Conforms to UL STD. 60950-1
Certified to CSA STD C22.2 NO.60950-1
Conforms to AAMI STD. ES60601-1 IEC 60601-1-11
Certified to CAN/CSA STD. C22.2 NO.60601-1
Conforms to UL Std. 62368-1
Cert. to CSA Std. C22.2 No.62368-1

진류전원장치 AC/DC ADAPTER
KTC HU10499-20042A
R-R-GSZ-0005
전기용품안전관리법에 의한 표시
최저소비효율기준 만족 제품
모델명: GTM46101-1005-USB
Mfr. Name: GLOBTEK (SUZHOU) CO., LTD
A/S Center: 10-6221-6100

Pin 1:(+)
Pin 2 (D-): Connected to Pin 3 (D+)
Pin 3 (D+): Connected to Pin 2 (D-)
Pin 4:(-);
P2 (D-) and P3 (D+) are shorted together inside power supply.

LPS
IP20

10276
CAN ICES-3 (B)/NMB-3(B)

IS 13252 (Part 1)
IEC 60950-1
R-41017175
www.bis.gov.in
RoHS
EFFICIENCY LEVEL VI

제조국가: 중국 Китай Производство MADE IN CHINA (中国制造) WWYY

Summary of testing:

This EUT comply with efficiency requirement of Title 10 CFR part 429 and Appendix Z to Subpart B of Title 10 CFR Part 430 for External Power Supply.

This EUT comply with efficiency requirement of C381.1-17: Energy performance of external ac-dc and ac-ac power supplies.

Summary of testing:

--	Result	Limit for NrCan Directive
Vin=	115V 60Hz	Mark VI
No load condition power consumption (W)	0.033	0.10
Average active efficiency	85.20%	78.7%

Supplementary Information:
Power consumption calculation

Test	Active mode efficiency, %	No-load mode power, W
1	84.60	0.028
2	85.79	0.029

Active mode efficiency, %	
Mean value	85.20
UCL (97.5% confidence)	97.64

Reported efficiency is Min (Mean value, UCL/0.95) = 85.20 %

No-load mode power, W	
Mean value	0.029
UCL (97.5% confidence)	0.035

Reported Standby (no-load) mode power is Max (Mean value, UCL/1.05) = 0.033 W

Remark: International Efficiency Marking Protocol ver.3.0.

C381.1-17: Energy performance of external ac-dc and ac-ac power supplies.

Possible test case verdicts:

- test case does not apply to the test object: N/A (Not applicant)
- test object does meet the requirement.....: P (Pass)
- test object does not meet the requirement.....: F (Fail)

Testing:

Date of receipt of test item.....: 2020-12-22

Date (s) of performance of tests: 2020-12-23

General remarks:

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 testing laboratory.
"(See Annex #)" refers to additional information appended to the report.
Throughout this report a point is used as the decimal separator.
Determination of the test result includes consideration of measurement uncertainty from the test equipment and methods

General product information:**Factory Information**

1. Name: GlobTek, Inc.

Address: 186 Veterans Dr. Northvale, NJ 07647 USA

2. Name: GlobTek (Suzhou) Co., Ltd

Address: Building 4, No. 76, Jin Ling East Rd., Suzhou Industrial Park, Suzhou, JiangSu 215021, China

The EUT is an external power supply with output rating 5.0 Vdc 2.0 A. And it is with Single voltage output.
The output is with USB-A connector but without cable.

The rated output power (Po) of the EUT=10 W.

Ref. No	Test equipment	Manufacturer	Model	Serial number	Calibration due date
NSZ2018	Digital AC Power Source	All power	APW-150N	888130	21 Dec. 2021
NSZ2013	EUP Power Meter	Xitron	2801	28010907016	21 Dec. 2021
NSZ2046	DC Electric Load	ARRAY	3711A	A06BH02082	21 Dec. 2021
NSZ2050	Ambient Recorder (Wi-Fi)	Corintech	EL-WiFi-TH+	4703	21 Dec. 2021

	Test conditions	—
	Ambient temperature in °C	See the test result table.
	Information describing the test set-up used at each load condition	--

	Test configuration	—
	Nominal test supply voltage (V)	115Vac
	Nominal total harmonic distortion of supply voltage waveform	<2%
	Test frequency (Hz)	60 Hz
	Any notes regarding the operation of the product :	--
	Did the EPS have a built-in ON/OFF switch on the input?	No
	Was the output voltage selectable?	No
	Setting used when performing tests	--
	Output cable length (to the nearest cm)	No

Supplementary Information: average value efficiency of 100%,75%,50%,25%=84.60%

TABLE: Test results						P
Vin=115V / 60Hz UUT2						
	No load	Power Modes				
Percent of nameplate current	0%	10%	25%	50%	75%	100%
DC output current (A)	0	0.2	0.5	1	1.5	2
DC output voltage (V)	4.976	4.983	4.972	4.988	5.05	5.081
DC output power (W)	0.00	1.00	2.49	4.99	7.58	10.16
Max AC input voltage (V)	115.212	115.184	115.181	115.15	115.149	115.129
MinAC input voltage (V)	115.076	115.136	115.123	115.101	115.086	115.075
Max temperature	23.3	23.3	23.3	23.3	23.3	23.3
Min temperature	23.2	23.2	23.2	23.2	23.2	23.2
AC input power (W)	0.029	1.24	2.844	5.753	8.836	12.194
Current total harmonic distortion THD	3.886	2.297	2.01	1.792	1.632	1.490
Real Power factor also called True PF	0.245	0.398	0.442	0.478	0.506	0.532
Crest Factor	9.963	5.046	4.31	3.967	3.802	3.549
Power consumed by UUT	0.03	0.24	0.36	0.77	1.26	2.03
Efficiency		80.37%	87.41%	86.70%	85.73%	83.34%
Uncertainty	0.0001	0.0016	0.0038	0.0074	0.0121	0.0162
Uncertainty limit	0.0691	0.0243	0.0569	0.1151	0.1767	0.2439
Supplementary Information: average value efficiency of 100%,75%,50%,25%=85.79%						

Annex 1 - Photos

Overview

