

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021

## GTM46360-2505-USB2A-Q

### Information

Model Number	GTM46360-2505-USB2A-Q
Description	GTM46360-2505-USB2A-Q, Medical Power Supply, Wall Plug-in, Regulated Switchmode AC-DC Power Supply AC Adaptor, , Input Rating: 100-240V~, 50-60 Hz, Blade Options for Q Series Wall Plug-in Power Supplies, Output Rating: 25 Watts, Power rating with convection cooling (W) , 5V in 0.1V increments, Approvals: LPS 62368; PSE; CAN ICES-3; RCM; China RoHS; Level VI; CB 60601-1; RoHS; Ukraine; VCCI; WEEE; Double Insulation; CCC; FCC; cETLus 60601-1 3rd; EAC; 230V CoC Tier 2; CB 60950; CB 62368;
Model Picture	
Agency Documents	
CE EC-Declaration	<a href="https://www.globtek.com/pdf/ec_declaration/a0O3a00000M3ytbEAB">https://www.globtek.com/pdf/ec_declaration/a0O3a00000M3ytbEAB</a>
RoHS/RoHS2 Declaration	<a href="https://www.globtek.com/pdf/rohs_cert/a0O3a00000M3ytbEAB">https://www.globtek.com/pdf/rohs_cert/a0O3a00000M3ytbEAB</a>
REACH Declaration	<a href="https://www.globtek.com/pdf/iso_certificates/REACH.pdf">https://www.globtek.com/pdf/iso_certificates/REACH.pdf</a>
Conflict Minerals Declaration	<a href="https://www.globtek.com/pdf/conflict-minerals.pdf">https://www.globtek.com/pdf/conflict-minerals.pdf</a>

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021

**MODEL PARAMETERS**

Type	Wall Plug-in
Technology	Regulated Switchmode AC-DC Power Supply AC Adaptor
Category	Medical Power Supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	0.75A
Wattage (W)	25.0
Vout Range (V)	5
Efficiency Level	USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782
Ingress Protection	Indoor Use
Size (mm)	41.0 x 70.0 x 35.1

**PROPRIETARY INFORMATION**

PROPRIETARY OF GLOBTEK, INC. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING, IN WHOLE OR IN PART, IS HEREBY PROHIBITED EXCEPT AS SPECIFIED IN WRITING BY GLOBTEK, INC.

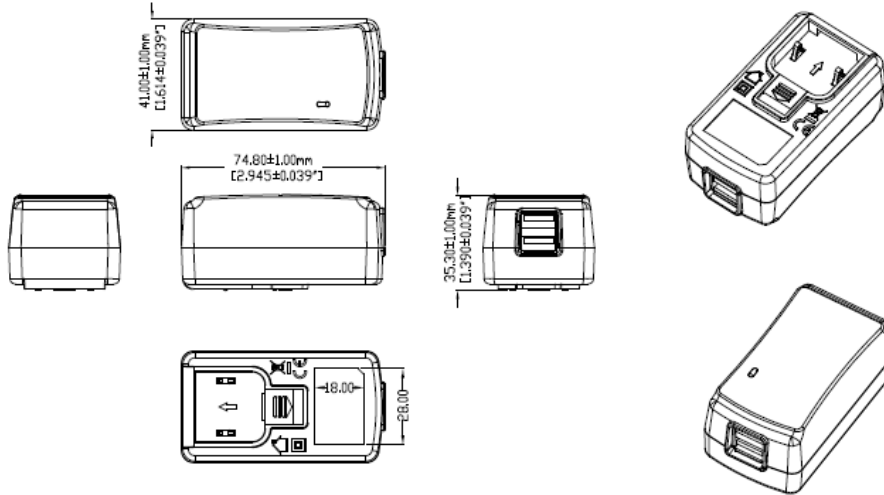
<https://en.globtek.com/datasheet/id/a003a00000M3ytb>

Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021

# ENCLOSURE



Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021

## RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GTM46360-2505-USB2A	5.0 V	5	25.00	<a href="#">RFQ</a>

Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021

## SPECIFICATIONS

### Input

Input Voltage:	Specified: 90-264VAC, Nameplate: 100-240VAC 100% rated load current for 90-264VAC 85% rated load current for 85-264VAC 100% rated load current for 110-370VDC
Input Frequency:	Specified: 47-63Hz, Nameplate: 50-60Hz
No Load Input Power:	< 75mW @ 230VAC (EU CoC Tier 2 compliant)
Inrush Current:	< 30A @ 115VAC, < 60A @ 230VAC (cold start)
Efficiency:	DoE Efficiency Level VI and CoC Tier 2 compliant (tested according to DoE 10 CFR Part 430, Subpart B, Appendix Z)

### Output

Turn-on Delay:	< 1 second @ 115VAC and full load
Output Regulation	± 4% max. (measured at the end of a 1m long output cord)
Line Regulation:	± 1% typ. (measured at the end of a 1m long output cord)
Ripple:	75mV max. (using a 47µF low-ESR electrolytic cap + 0.1µF ceramic cap, measured @ 20MHz BW, at the output connector)
Transient Response:	5% max. deviation, 1ms max. recovery time (with 25% load step),
Hold-up Time:	8ms min. (100VAC and full load)
Power Indicator:	Green LED

### Protections

Input Protection:	MOV transient suppressor, input line fusing
Over-Voltage Protection:	110-130%, Latched off, cycle AC to reset
Over-Current Protection:	110-130%, Auto-recovery
Short-Circuit Protection:	Auto-recovery

### Environmental

MTBF:	1,000,000 hours @ 40°C ambient, full load (Telcordia SR-332, Issue 3)
Operating Temperature:	-10°C to 40°C (full load)
Storage Temperature:	-40°C to 80°C
Humidity:	0% to 95% relative humidity, non-condensing
Altitude	5000m
Cooling:	Convection
RoHS:	Complies with EU 2011/65/EU and China SJ/T 11363-2006

Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021

## Safety

Dielectric Withstand Voltage:	4000VAC or 5656VDC from input to output 10mA, 1 minute
Touch Current:	NC: 80µA max. SFC: 400µA max.
Earth Leakage Current	N/A for 2-conductor input models
Means of Protection:	2 x MOPP
Output Isolation:	Class II (2-conductor)

## EMC

Applicable Standards:	Medical: EN 60601-1-2, 4th edition Emissions: EN55032, EN61000-6-3, EN61000-6-4 Immunity: EN55024, EN61000-6-1, EN61000-6-2
Conducted Emissions:	Class B, FCC Part 15, Class B (with resistive load)
Radiated Emissions:	Class B, FCC Part 15, Class B (with resistive load)
Harmonic Current Voltage Distortion:	EN61000-3-2, Class A
Voltage Fluctuations/Flicker:	EN61000-3-3
Electrostatic Discharge (ESD) Immunity:	EN61000-4-2, 10KV contact discharge, 18KV air discharge, Criterion A
Radiated RF Immunity:	EN61000-4-3, 10V/m @ 80-1000MHz, 3V/m @ 1-2.7GHz, 80% 1KHz AM, Criterion A
EFT/Burst Immunity:	EN61000-4-4, 2KV/100KHz., Criterion A
Line Surge Immunity:	EN61000-4-5, 1KV differential, 2KV common-mode, Criterion A
Conducted RF Immunity:	EN61000-4-6, 3VRMS, 80% 1KHz AM, Criterion A
Power Frequency Magnetic Field Immunity:	EN61000-4-8, 30A/m, Criterion A
Voltage Dip Immunity:	EN61000-4-11, Criterion B/C
Note 1:	When a Class II power supply is connected to an earth-referenced system, conducted/radiated EMI levels tend to increase since the distant earth connection creates a long return path for common-mode currents. This model includes an output common-mode choke to help alleviate system-level EMI issues. This choke can be removed, if low cost is a priority.

## Enclosure

Housing:	High impact plastic, 94V0 polycarbonate, non-vented
Markings:	Adhesive backed label or laser engraving

## Special Options

Non-standard - Contact GlobTek

1. Custom housing and output cord colors
2. Custom fixed output cord lengths
3. Custom markings and marking methods

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021

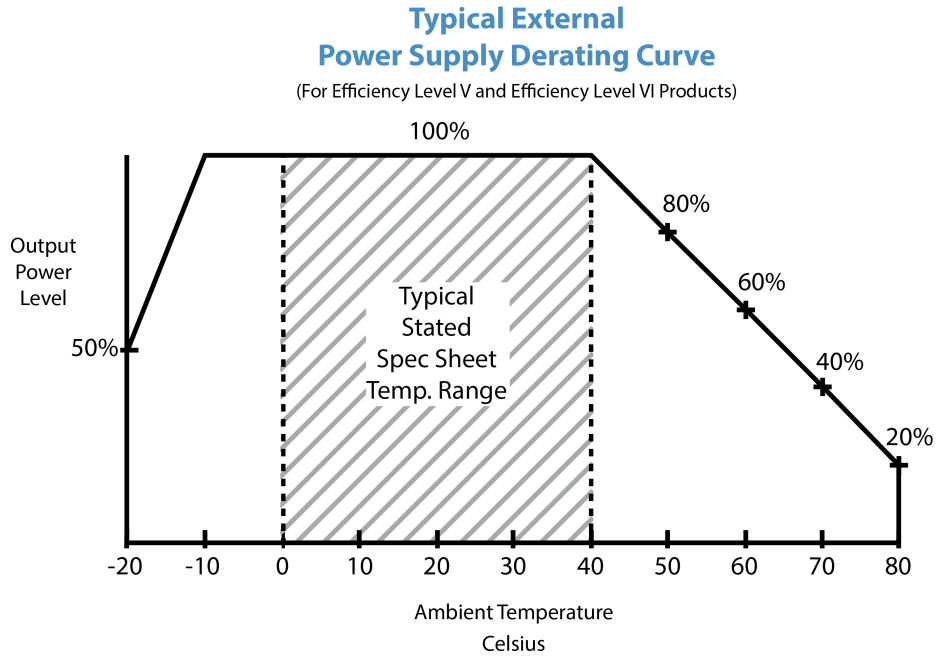
4. Reduced output ripple
  5. Improved output voltage set-point tolerance
-

Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021

## DERATING CURVE





Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTM46360-2505-USB2A-Q

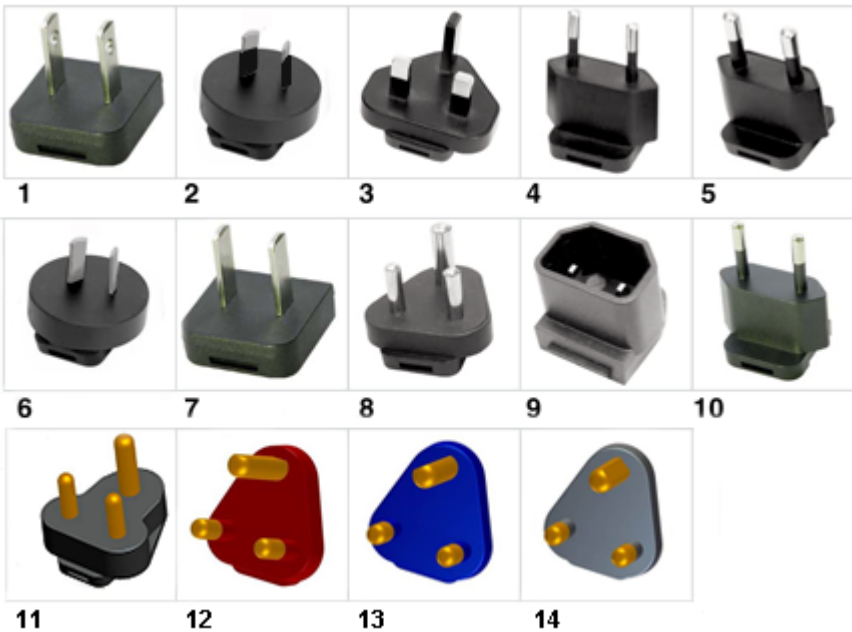
April 15, 2021

**INPUT CONFIGURATION**

Description Blade Options for Q Series Wall Plug-in Power Supplies

 Data Sheet: <http://en.globtek.com/interchangeable-blades.php>

 Insertion Instructions: <http://www.globtek.com/pdf/Instructions-Interchangeable-Blades.pdf>

 Video: [Q-Blade Style Instruction Video](#)


INPUT CONNECTOR: Q-Socket (below are available blades configurations which are "not included" (unless stated above); can be purchased separately, package with power supply or as a separate "Q-KIT" if specified

01. United States / Canada / Japan NEMA 1-15P/ IEC PLUG Type A [WORKS IN PLUG B] configuration: NA 2 blades, Class II; US/CA/JP P/N: Q-NA(R)
02. Australian AS 3112 configuration: SAA 2 blade/ IEC TYPE I, Class II; AU P/N: Q-SAA(R)
03. UK BS 1363 configuration: UK 3 blade with dummy Ground/ IEC TYPE G, Class II; GB P/N: Q-UK(R)
04. European CEE 7/16 configuration: Europlug 2 pins/ IEC TYPE C [WORKS IN TYPE E&F], Class II; EU P/N: Q-EU(R)
05. Korean KS C8305 configuration: 2 pins/SIMILAR TO IEC TYPE C, Class II; KR P/N: Q-KR(R)
06. Argentina IRAM 2073 configuration: 2 blades/SIMILAR TO IEC TYPE I; AR P/N: Class II Q-AR(R)
07. China GB 2099 configuration: 2 blades/SIMILAR TO TYPE A, Class II; CN P/N:Q-CN(R)
08. India IS 1293 6A/BS546 configuration: 5A, 3 pins with Dummy Ground, Class II/IEC TYPE D; IN P/N: Q-IN(R)
09. IEC60320/C18 Inlet, Class II; P/N: Q-C18(R)
10. Brazilian NBR6147 configuration: 2 pins, Class II;SIMILAR TO IEC TYPE C BR P/N: Q-BR(R)
11. South Africa SABS164-1, 3 round prongs, Class II + dummy ground, IEC TYPE M P/N: Q-SANS164-1-16A(R)
12. South Africa SABS164-4, 3 round prongs with a notched prong @ 0°, Class II + dummy ground, IEC TYPE M Red, P/N: Q-SANS164-4L-16A(R)
13. South Africa SABS164-4, 3 round prongs with a notched prong @ -53°, Class II + dummy ground, Blue, IEC TYPE M,

**PROPRIETARY INFORMATION**

PROPRIETARY OF GLOBTEK, INC. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING, IN WHOLE OR IN PART, IS HEREBY PROHIBITED EXCEPT AS SPECIFIED IN WRITING BY GLOBTEK, INC.

<https://en.globtek.com/datasheet/id/a003a0000M3ytb>

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021

P/N:  
Q-SANS164-4C-16A(R)  
14. South Africa SABS164-4, 3 round prongs with a notched prong @ +53°, Class II + dummy ground, Black,IEC TYPE M  
P/N:  
Q-SANS164-4R-16A(R)

Kits

01. Q-KIT: 1,2,3,4 above  
02. Q-KIT-INTL: 2,3,4 above  
03. Q-KIT-6: 1,2,3,4,5,6 above  
04. Q-KIT-7: 1,2,3,4,5,6,7 above  
05. Q-KIT-8: 1,2,3,4,5,6,7,8 above

---

Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021

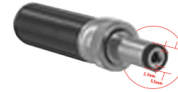
**OUTPUT CONFIGURATION**

Common output connector options:


 L Type (Coaxial  
5.5x2.5mm plug)

 C Type (Coaxial  
5.5x2.1mm plug)

 K Type (Coaxial  
3.5x1.3mm plug)

 LL Type (5.5x2.5mm  
Locking 760k type)

 CL Type (5.5x2.1mm  
Locking S761k type)

 ML2 Type (Molex  
housing 43025-0200)

 YL3 Type  
(KPPX-3P)


YL4 Type (KPPX-4P)


 EJ1/2/3/4/5 (EIAJ  
RC-5320A type  
connectors)

 MSB Type (Micro  
USB)

 USBC Type (USB  
Type C)

 Inquire for custom  
design

 For a comprehensive list of options, [click here](#)







Contact GlobTek for your specific requirements or custom solutions.

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021










## Approvals

Logo	Description
No Logo Applicable	EU 230V CoC Tier 2, 278/2009, Mar 2014
No Logo Applicable	IEC 60601-1:2005 (Third Edition) + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1 (2012 reprint) (Ed 3.1) for GTM96180 only
No Logo Applicable	CB for IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013
No Logo Applicable	CB for IEC 62368-1:2014 (Second Edition)
	CCC to GB4943. 1-2011; GB9254-2008; GB17625. 1-2012 with Tropical and Altitude up to 5000 m approval.
	AAMI ES60601-1 Issued: 2012/08/20 Med Electrical Equipment - Part 1: CAN/CSA-C22.2 No.60601-1:14, 3rd Edition Issued: 2014/03/01 - Med Electrical Equipment - Part 1: IEC 60601-1-11 Issued: 2015/01/20 Ed. 2 Medical Elec. Equip.- Part 1-11: GTM96180 only
	CHINA SJ/T 11364-2014, China RoHS Chart: <a href="http://en.globtek.com/globtek-rohs.php">http://en.globtek.com/globtek-rohs.php</a>
	
	Declaration ДС № EAЭС N RU Д-US.KA01.B.10453_19 Custom Union of Russia, Belarus and Kazakhstan <a href="http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration">http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration</a>
	Compliance of this power supply with FCC Part 15, Class B has been demonstrated with a standard output load. The FCC law stipulates that system-level testing is required to demonstrate compliance with the FCC emission limits with the actual system load.
CAN ICES-3(B)/NMB-3(B)	Compliance of this PSU with Industry Canada, Class B demonstrated with a standard output load. The ICES law stipulates that system-level testing is required to

Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTM46360-2505-USB2A-Q

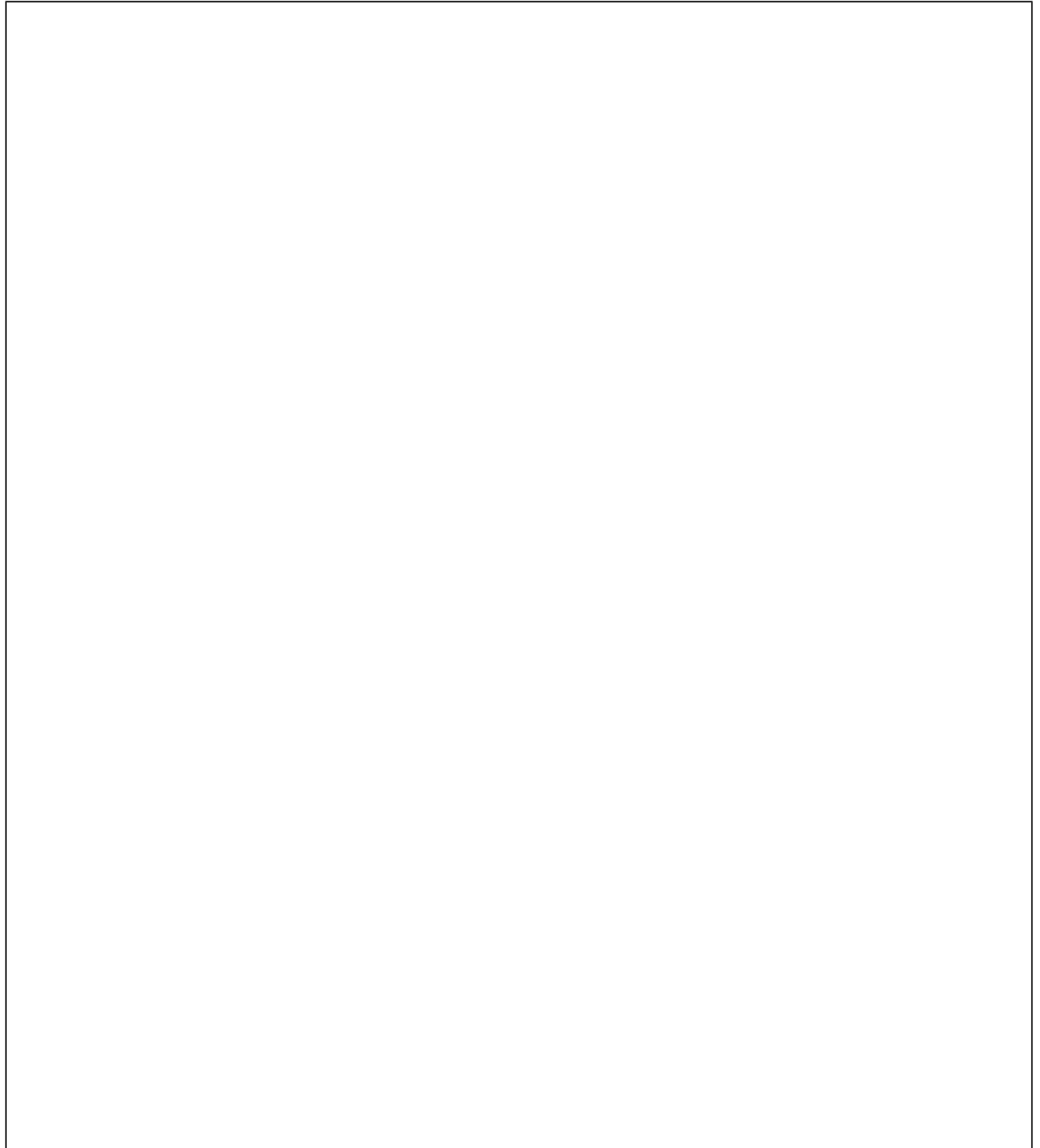
April 15, 2021

	demonstrate compliance with the ICES-3 emission limits with the actual system load.
	Indoor Use Only - Mark is on the label or Molded in the case
 GlobTek, Inc.	JAPAN TUV R-PSE, Cert. No. JD 50471561.pdf, to J62368-1(H30) , J55032(H29), J3000(H25) ,[15V?30V]. Please reference the following website for PSE regulations: <a href="http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/">http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/</a>
EFFICIENCY LEVEL 	Efficiency: complies to section 301 of Energy Independence and Security Act (EISA) complies with Energy Star tier 2 (North America), ECP tier 2 (China), MEPS tier 2 (Australia), Code of Conduct (Europe)
LPS	Limited Power Source 62368
	Morocco SDoC declaration <a href="http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/">http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/</a>
	Australia and New Zealand Regulatory Compliance, Mark ( <a href="http://rcm.standards.org.au/rcmfaq/rcmfaq.htm">http://rcm.standards.org.au/rcmfaq/rcmfaq.htm</a>
RoHS	Specifications of directive 2011/65/EU Annex VI (ROHS-2) with amendment 2015/863-EU (ROHS-3) <a href="http://www.ce-mark.com/Rohs%20final.pdf">http://www.ce-mark.com/Rohs%20final.pdf</a>
	UKCA Certification
 10276	Ukraine UKRSepr (Document: <a href="http://www.globtek.com/html/iso_certificates/GT_Ukraine.pdf">www.globtek.com/html/iso_certificates/GT_Ukraine.pdf</a>
	Japan: Voluntary Control Council for Interference (VCCI)
	WEEE: Complies with EU 2012/19/EU ( <a href="http://ec.europa.eu/environment/waste/weee/index_en.htm">http://ec.europa.eu/environment/waste/weee/index_en.htm</a> ) Mark is on the label or Molded in the case

Delivering leading edge, innovative power solutions for more than **30** years....

Model:GTM46360-2505-USB2A-Q

April 15, 2021



PROPRIETARY INFORMATION

PROPRIETARY OF GLOBTEK, INC. ANY REPRODUCTION, DISCLOSURE OR USE OF THIS DRAWING, IN WHOLE OR IN PART, IS HEREBY PROHIBITED EXCEPT AS SPECIFIED IN WRITING BY GLOBTEK, INC.

<https://en.globtek.com/datasheet/id/a003a00000M3ytb>