

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

Model:GT-46401-WWVV-x.x-Q

December 3, 2021

## DOE EPS 2.0 Level VI Power Supply / Charger / AC Adapter, 40W Interchangeable Plugs wall plug in with Class II Input, Available with 12-24VDC output Certified to Medical and ITE Standards

### Information

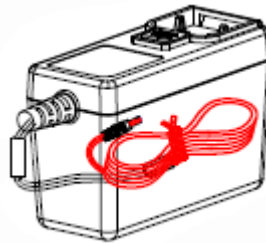
#### Model Number

GT-46401-WWVV-x.x-Q

#### Description

GT-46401-WWVV-x.x-Q, ICT/ITE 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: 40 Watts, Power rating with convection cooling (W) , 12-48V in 0.1V increments, Approvals: Korea (12V-17.9V Only); FCC; 230V CoC Tier 2; EAC; LPS 62368; CB 62368; UKCA; cULus; GEMS (24V); NrCAN (24V only); BIS 24V (pending); Morocco; NOM; CE; China RoHS; Double Insulation; IP40; Level VI; LPS 60950; PSE; RoHS; Ukraine; VCCI; WEEE; S-Mark 60950;PSE; PSE; PSE; RCM; CCC; CAN ICES-3; CB 60950; cULus;

#### Model Picture



#### Agency Documents

<http://www.globtek.info/certs/GT-46401-WWVV-X.X/>

#### CE EC-Declaration

[https://www.globtek.com/pdf/ec\\_declaration/a00a000000NrvmWEAR](https://www.globtek.com/pdf/ec_declaration/a00a000000NrvmWEAR)

#### RoHS/RoHS2 Declaration

[https://www.globtek.com/pdf/rohs\\_cert/a00a000000NrvmWEAR](https://www.globtek.com/pdf/rohs_cert/a00a000000NrvmWEAR)

#### REACH Declaration

[https://www.globtek.com/pdf/iso\\_certificates/REACH.pdf](https://www.globtek.com/pdf/iso_certificates/REACH.pdf)

#### Conflict Minerals Declaration

<https://www.globtek.com/pdf/conflict-minerals.pdf>

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

Model:GT-46401-WWVV-x.x-Q

December 3, 2021

**MODEL PARAMETERS**

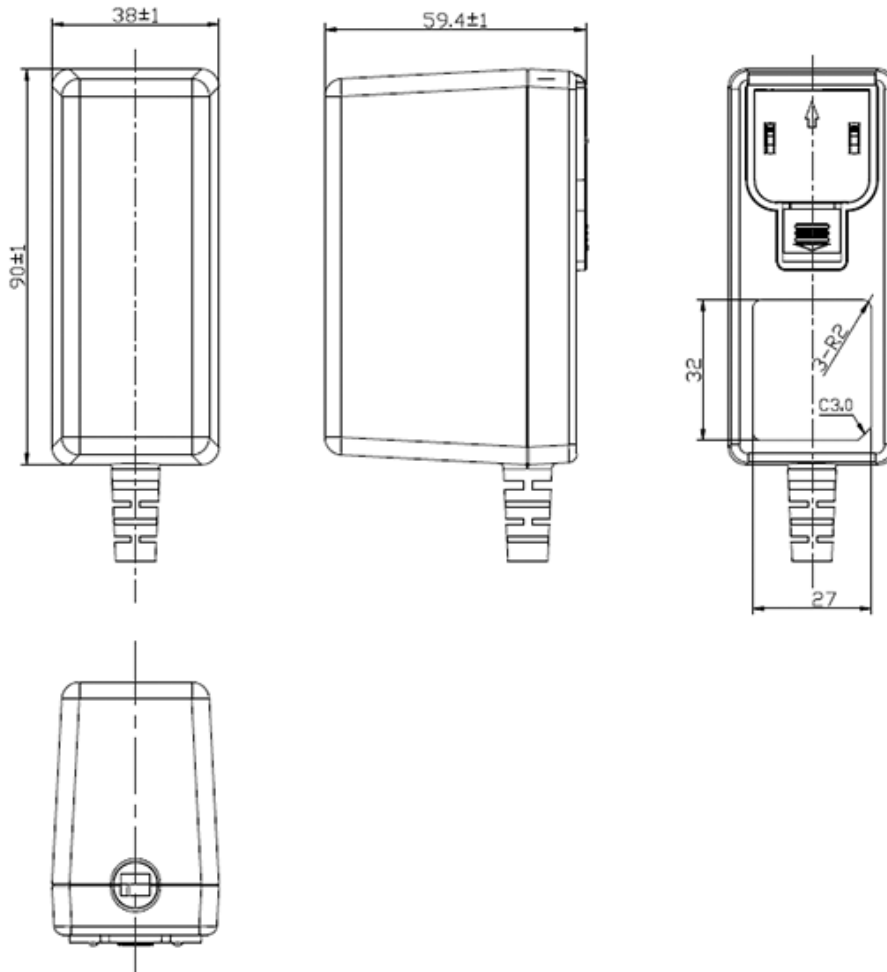
Type	Wall Plug-in
Technology	Regulated Switchmode AC-DC Power Supply AC Adaptor
Category	ICT/ITE Power Supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	1.0A
Wattage (W)	40.0
Vout Range (V)	12-48
Efficiency Level	USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782
Ingress Protection	Indoor Use
Size (mm)	90.0*38.0*59.4

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

Model:GT-46401-WWVV-x.x-Q

December 3, 2021

# ENCLOSURE



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

Model:GT-46401-WWVV-x.x-Q

December 3, 2021

**RATING TABLE**

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GT-46401-2412	12 V	2	24.00	<a href="#">RFQ</a>
GT-46401-3612	12 V	3	36.00	<a href="#">RFQ</a>
GT-46401-4015	15 V	2.66	39.90	<a href="#">RFQ</a>
GT-46401-4019-1.0	18 V	2.2	39.60	<a href="#">RFQ</a>
GT-46401-4019	19 V	2.1	39.90	<a href="#">RFQ</a>
GT-46401-4024	24 V	1.66	39.84	<a href="#">RFQ</a>
GT-46401-4048	48 V	0.75	36.00	<a href="#">RFQ</a>

## SPECIFICATIONS

### A) ELECTRICAL SPECIFICATIONS:

01. Input Voltage: Specified 90-264 Vac, Nameplate rated: 100-240Vac
02. Input Frequency: Specified 47-63 Hz, Nameplate rated 50-60Hz
03. Inrush Current: 115Vac,(Cold Start) No damage, 230Vac,(Cold Start) No damage
04. Input Rated current: 1.0A RMS Max
05. Efficiency: 87.59% Min (CEC & DOE LEVEL VI Compliant), 88.30% Min (ErP European Commission's Ecodesign Directive (2005/32/EC) / CoC Tier 2 Compliant)
06. Input power(no load): <0.1W (CEC & DOE LEVEL VI Compliant), <0.075W (ErP European Commission's Ecodesign Directive (2005/32/EC) / CoC Tier 2 Compliant)
07. Load regulation:  $\pm 5\%$
07. Output Voltage: Tolerance  $\pm 5\%$
09. Leakage current: <0.25mA
10. Ripple Voltage:  $\pm 1\%$  or 150 mV whichever is greater, measured at 20 MHz bandwidth with 0.1 uf ceramic capacitor in parallel with 10 uf electrolytic capacitor connected at the end of the output connector at nominal line.

### B) PROTECTION

01. Over voltage protected.
02. Short circuit protection: Output shut down and auto recover
- 03.Over Load Protected: Output auto recover

### C) SAFETY

01. HI-POT : Input to output : 3000VAC or 4242VDC 10mA 1 minute
- 02.Insulation resistance: Input to output: 500vdc to test the input to output resistance not be less 100M ohm
03. Touch Current: <0.25mA @ 240Vac input voltage

### D) EMC

01. Emissions, per EN 55032, EN 61000-6-3, EN 61000-6-4
  - Conducted Emissions: Class B, FCC Part 15, Class B
  - Radiated Emissions: Class B, FCC Part 15, Class B
02. Line Frequency Harmonics EN61000-3-2, Class A
03. Voltage Fluctuations/Flicker EN61000-3-3
04. Immunity, per EN 55024, EN 61000-6-1, EN 61000-6-2
  - Static Discharge Immunity EN61000-4-2, 4kV Contact Discharge, 8kV air discharge
  - Radiated RF Immunity EN61000-4-3, 3V/m 80-1000MHz, 80% 1KHz AM.
  - EFT/Burst Immunity EN61000-4-4, 1kV/100kHz.
  - Line Surge Immunity EN61000-4-5, 1kV differential, 2kV common-mode
  - Conducted RF Immunity EN61000-4-6, 3Vrms, 80% 1KHz AM
  - Power Frequency Magnetic Field Immunity EN61000-4-8, 1A/m
  - Voltage Dip Immunity EN61000-4-11, Criteria

### E) OTHER:

01. MTBF: 200,000 Hours @ 25°C ambient temperature
02. Operating Temperature: 0°C to 40°C ambient temperature
03. Optional version with -40°C to 40°C operating temperature is available (RFP3927)
04. Humidity Operating : 15% to 95% RH

## 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://www.globtek.com/datasheet/w71132>

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

Model:GT-46401-WWVV-x.x-Q

December 3, 2021

- 05. Elevation up to 4000 m
- 06. Storage Temperature: -10°C to 70°C  
Humidity Storage: 5% to 95% RH
- 07. RoHS 2: Complies with EU 2011/65/EU and China GB/T26572-2011

**F) ENCLOSURE**

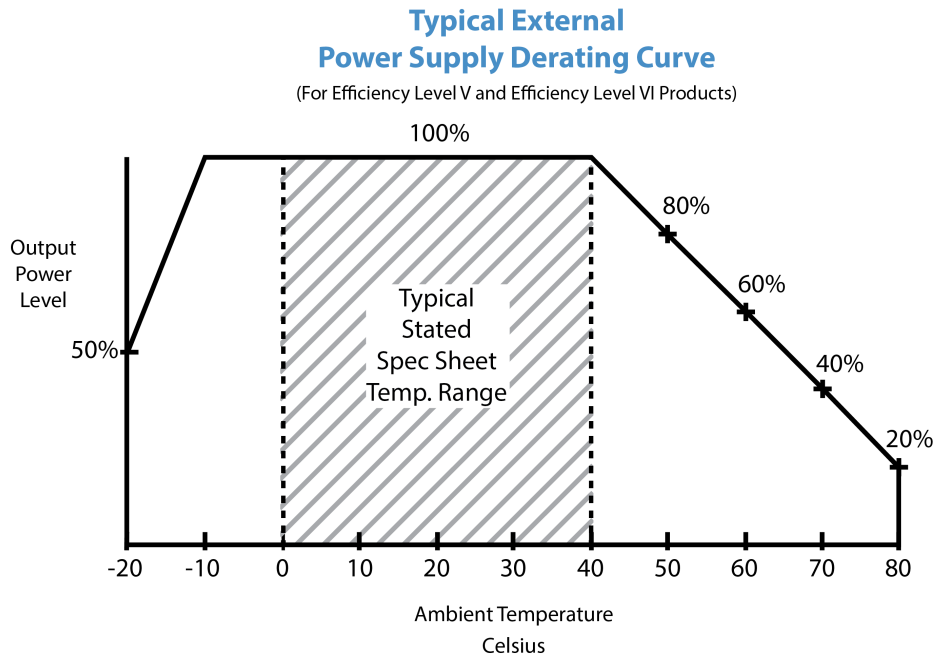
- 01. Housing: High impact plastic, 94V0 polycarbonate, non-vented
- 02. Size: 90.0 x 38.0 x 59.4 +/-1.0 mm
- 03. Markings: Label and/or Pad Printed and/or Molded in the case

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

Model:GT-46401-WWVV-x.x-Q

December 3, 2021

## DERATING CURVE



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

Model:GT-46401-WWVV-x.x-Q

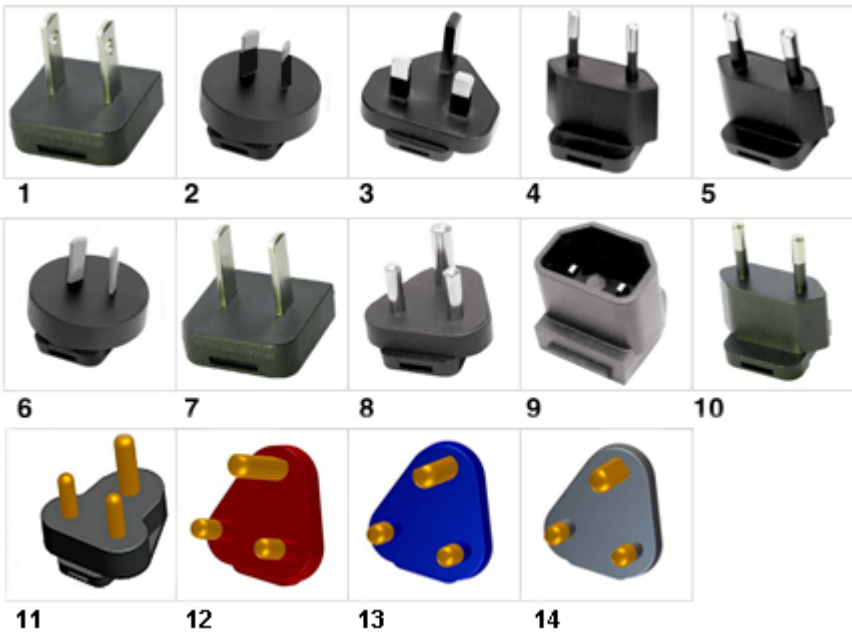
December 3, 2021

**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 and India IS 1293, IS694, 16A type plug, 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)



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

Model:GT-46401-WWVV-x.x-Q

December 3, 2021

13. South Africa SABS164-4, 3 round prongs with a notched prong @ -53°, Class II + dummy ground, Blue, IEC TYPE M,  
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:GT-46401-WWVV-x.x-Q

December 3, 2021

**OUTPUT CONFIGURATION**

Common output connector options:



L Type (Coaxial 5.5x2.5mm plug)



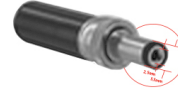
C Type (Coaxial 5.5x2.1mm plug)



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:GT-46401-WWVV-x.x-Q

December 3, 2021

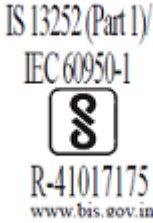






## Approvals

Logo	Description
No Logo Applicable	EU 230V CoC Tier 2, 278/2009, Mar 2014
No Logo	IEC 60950-1: 2005 (Second Edition) + Am 1: 2009 + Am 2: 2013
No Logo Applicable	CB for IEC 62368-1:2014 (Second Edition) + A11:2017
 仅适用于海拔2000m以下地区使用	CCC certificate: GT-222011-5012-1.8 10.2 Volts Only GB4943.1-2011 GB9254-2008 GB17625.1-2012, ???????2000m??????
	CE Certification
	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>
Conforms to UL STD. 62368-1 Certified to CSA STD C22.2 NO.62368-1	Conforms to UL STD. 62368-1 Certified to CSA STD C22.2 NO.62368-1
	UL 60950-1, (Information Technology Equipment - Safety - Part 1: General Requirements). CAN/CSA C22.2 No. 60950-1-07, (Information Technology Equipment - Safety - Part 1: General Requirements).
	
	Declaration ДС № EAЭC 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>
No Logo	Greenhouse and Energy Minimum Standards (GEMS) for model GTM46401-4024
	FCC PART 15 CLASS B

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

Model:GT-46401-WWVV-x.x-Q





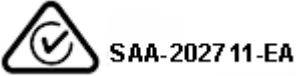



December 3, 2021

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 demonstrate compliance with the ICES-3 emission limits with the actual system load.
	INDIA BIS (GT-46401) 12,15,16 and 24V only
	Indoor Use Only - Mark is on the label or Molded in the case
IP40	Ingress Protection: ?IP40 to IEC60529:2001 Protection against granular foreign bodies
 GlobTek, Inc.	JAPAN TUV R-PSE, Cert. No. JD 50473430, to J62368-1(H30) , J55032(H29),J3000(H25)[15V or less]. Please reference the following website for guidelines on 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>
 GlobTek, Inc.	JAPAN TUV R-PSE, Cert. No. JD50473430 , to J62368-1(H30) , J55032(H29),J3000(H25)[DC15? 30V]. Please reference the following website for guidelines on 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>
 GlobTek, Inc.	JAPAN TUV R-PSE, Cert. No. JD 50473430, to J62368-1(H30) , J55032(H29),J3000(H25)[DC30? 60V]. Please reference the following website for guidelines on 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>
	HU10499-19037A GT-46401-3612 for Model Series: GT-46401-2412, GT-46401-3615-1.0, GT-46401-3615-20, GT-46401-3615-1.5, GT-46401-4015, GT-46401-4019-2.0, GT-46401-4019-3.0
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 60950

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

Model:GT-46401-WWVV-x.x-Q




December 3, 2021

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>
	NOM MEXICO ANCE for GT-46401
	NRCAN QPS EEV1191 for GT-46401-4024 (24V only) Natural Resources Canada (NRCAN): CSA Standard C381.1-08, QSP NRCAN EEV1191; <a href="http://shop.csa.ca/en/canada/energy-efficiency/canca-c3811-08/inv/27024802008">http://shop.csa.ca/en/canada/energy-efficiency/canca-c3811-08/inv/27024802008</a>
 GlobTek, Inc.	JAPAN TUV Rheinland-PSE GlobTek Inc to J60950-1(H26) , J55022(H22),J3000(H25).Please follow the procedure listed in the following link for proper import to Japan: <a href="http://en.globtek.com/importing-to-japan.php">http://en.globtek.com/importing-to-japan.php</a> .
	RCM certificate SAA-202711-EA; 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>
	S-Mark Certificate EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 +A2:2013 ( <a href="http://www.intertek.com/marks/s/">http://www.intertek.com/marks/s/</a> )
	UKCA Certification
	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> )

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

Model:GT-46401-WWVV-x.x-Q

December 3, 2021

	UL 62368-1 and CAN/CSA C22.2 No. 62368-1-14
	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