

Model:GTM46161-16V.V-USB1A

May 9, 2025

## GTM46161-16V.V-USB1A

### Information

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Number                  | GTM46161-16V.V-USB1A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Description                   | GTM46161-16V.V-USB1A, ICT / ITE / Medical Power Supply, 60601-1-4th Ed. , 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: 16 Watts, Power rating with convection cooling (W) , 5-5.5V in 0.1V increments, Approvals: CCC; PSE; CE; RCM; CB 62368; CB 60950; China RoHS; Double Insulation; EAC; Conforms to 62368-1; LPS 62368; Ukraine; WEEE; VCCI; Morocco; LVD 60335; CB 60601-1; ETL; UKCA; Taiwan BSMI; India BIS (5, 5.2 and 5.5V only); |
| Model Picture                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Agency Documents              | <a href="http://www.globtek.info/certs/GTM46161%20-1A,2A,C/">http://www.globtek.info/certs/GTM46161%20-1A,2A,C/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| CE EC-Declaration             | <a href="https://www.globtek.com/pdf/ec_declaration/a000c000000lcx5EAB">https://www.globtek.com/pdf/ec_declaration/a000c000000lcx5EAB</a>                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| RoHS/RoHS2 Declaration        | <a href="https://www.globtek.com/pdf/rohs_cert/a000c000000lcx5EAB">https://www.globtek.com/pdf/rohs_cert/a000c000000lcx5EAB</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>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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**MODEL PARAMETERS**

|                    |                                                                     |
|--------------------|---------------------------------------------------------------------|
| Type               | Wall Plug-in                                                        |
| Technology         | Regulated Switchmode AC-DC Power Supply AC Adaptor                  |
| Category           | ICT / ITE / Medical Power Supply                                    |
| Input Voltage      | 100-240V~, 50-60 Hz                                                 |
| I/P Amps (A)       | 0.45A                                                               |
| Wattage (W)        | 16.0                                                                |
| Vout Range (V)     | 5-5.5                                                               |
| Efficiency Level   | USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782 |
| Ingress Protection | Indoor Use                                                          |
| Size (mm)          | 41.0 x 74.8 x 35.3                                                  |

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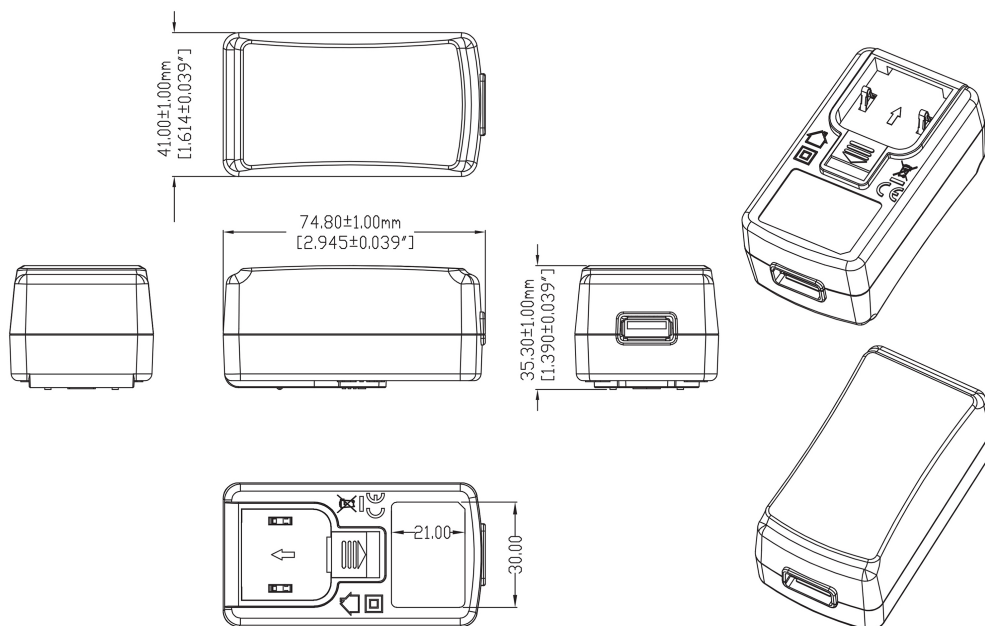
<https://www.globtek.com/ds/b6yA4tQ3FmU/fyJiZtB7Eyn.html#datasheet>

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## ENCLOSURE



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## RATING TABLE

| Model Number         | Voltage | Amps(A) | Watts(W) | RFQ                 |
|----------------------|---------|---------|----------|---------------------|
| GTM46161-155.0-USB1A | 5 V     | 3       | 15.00    | <a href="#">RFQ</a> |
| GTM46161-165.0-USB1A | 5 V     | 3.2     | 16.00    | <a href="#">RFQ</a> |
| GTM46161-155.2-USB1A | 5.2 V   | 2.88    | 14.98    | <a href="#">RFQ</a> |
| GTM46161-165.2-USB1A | 5.2 V   | 3.07    | 15.96    | <a href="#">RFQ</a> |
| GTM46161-135.2-USB1A | 5.2 V   | 2.5     | 13.00    | <a href="#">RFQ</a> |
| GTM46161-115.2-USB1A | 5.2 V   | 2.11    | 10.97    | <a href="#">RFQ</a> |
| GTM46161-165.5-USB1A | 5.5 V   | 2.9     | 15.95    | <a href="#">RFQ</a> |

## SPECIFICATIONS

### A) ELECTRICAL SPECIFICATIONS:

1. Input Voltage: Specified 90-264 V<sub>AC</sub>, Nameplate rated 100-240 V<sub>AC</sub>
2. Input Frequency: Specified 47-63 Hz, Nameplate rated 50-60 Hz
3. Output Regulation:  $\pm 5\%$  measured at the end of a 1.2 meter USB cordset employing 20AWG conductors (RFP RFI-50856)  
The longest recommended output cordset length is 1.2 meters. Use GlobTek PNs USBA1M2MICROB20(R) or USBC1M0USBA(R) for best voltage regulation performance. (RFP RFI-20435-3)
4. Line Voltage Regulation:  $\pm 3\%$  (typical)
5. Output Ripple (V<sub>p-p</sub>): 150mV, measured with a 47 $\mu$ F electrolytic capacitor in parallel with a 0.1 $\mu$ F ceramic capacitor across the output, and 20MHz bandwidth limiting
6. Turn-On/Turn-Off Overshoot: 5% maximum, 500 $\mu$ s maximum recovery time for 25% step load.
7. Turn-On Delay: 3000ms (max.) @ 115V<sub>AC</sub> and full load
8. Hold-Up Time: 8ms (min.) @ 100V<sub>AC</sub> and full load
9. Inrush Current: No damage when switching on/off repeatedly under any condition
10. Switching Frequency: 66.5 KHz (typical)
11. Average Efficiency: 78.7% (min.) (CEC&DOE Level VI Compliant), 79.0% (min.) (ErP **European** Commission's Ecodesign Directive (2005/32/EC) / CoC Tier 2 Compliant)
12. No-Load Input Power: < 0.1W < 0.1W, < 0.075W (ErP **European** Commission's Ecodesign Directive (2005/32/EC) / CoC Tier 2 Compliant)

### B) PROTECTION

1. Over-Voltage: Output shut down and auto restart
2. Over Temperature Protection: Output shut down and auto restart
3. Short Circuit Protection Output shut down and auto restart
4. Over Load Protection Output shut down and auto restart
5. Input Protection: Input line fusing
6. ESD: 8 kV Contact/20kV Air Discharge

### C) SAFETY

1. Dielectric Withstand Voltage: 4000V<sub>AC</sub> or 5656V<sub>DC</sub> 10mA 1 minute
2. Earth Leakage Current: N/A for Class II units. Since there is no PE ground pin, earth leakage current is not measured
3. Touch Current: Maximum allowed values: 100 $\mu$ A NC(Normal Condition) 500 $\mu$ A SFC(Single Fault Condition)
4. Means of Protection: 2 x MOPP
5. ROHS 2: Complies with EU 2011/65/EU and China SJ/T 11363-2006

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**D) EMC****1. Emissions, per EN 55032, EN 61000-6-3, EN 61000-6-4 (See Note.)**

Conducted Emissions: Class B, FCC Part 15, Class B

Radiated Emissions: Class B, FCC Part 15, Class B

**2. Line Frequency Harmonics EN61000-3-2, Class A****3. Voltage Fluctuations/Flicker EN61000-3-3****4. Immunity, per EN 55024, EN 61000-6-1, EN 61000-6-2**

Static Discharge Immunity EN61000-4-2, 8KV Contact Discharge, 15KV air discharge

Radiated RF Immunity EN61000-4-3, 3V/m 80-2700MHz, 80% 1KHz AM.

EFT/Burst Immunity EN61000-4-4, 2KV/100kHz.

Line Surge Immunity EN61000-4-5, 1KV differential, 2KV common-mode

Conducted RF Immunity EN61000-4-6, 3V<sub>RMS</sub>, 80% 1KHz AM

Power Frequency Magnetic Field Immunity EN61000-4-8, NA

Voltage Dip Immunity EN61000-4-11, Criteria

Note: When a Class II power supply is connected to an earth-referenced system, conducted/radiated EMI levels tend to increase since the earth connection creates a return path for common-mode currents. This model includes an output common-mode choke to help alleviate system-level EMI issues. This choke can also be removed to lower product cost .

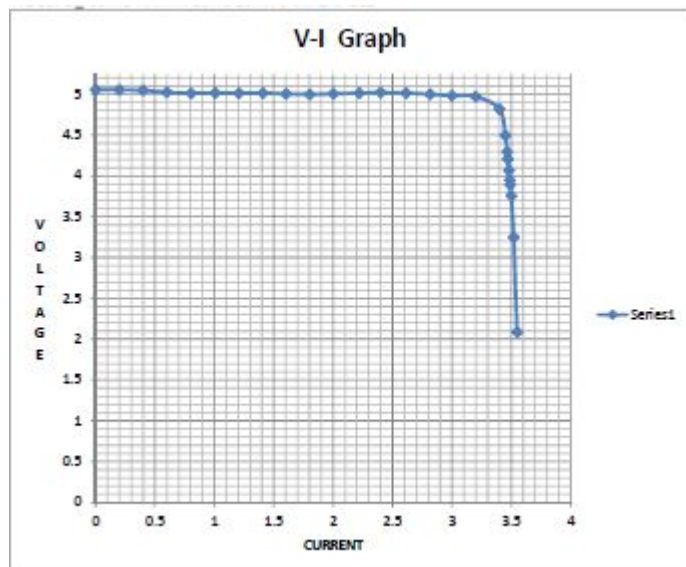
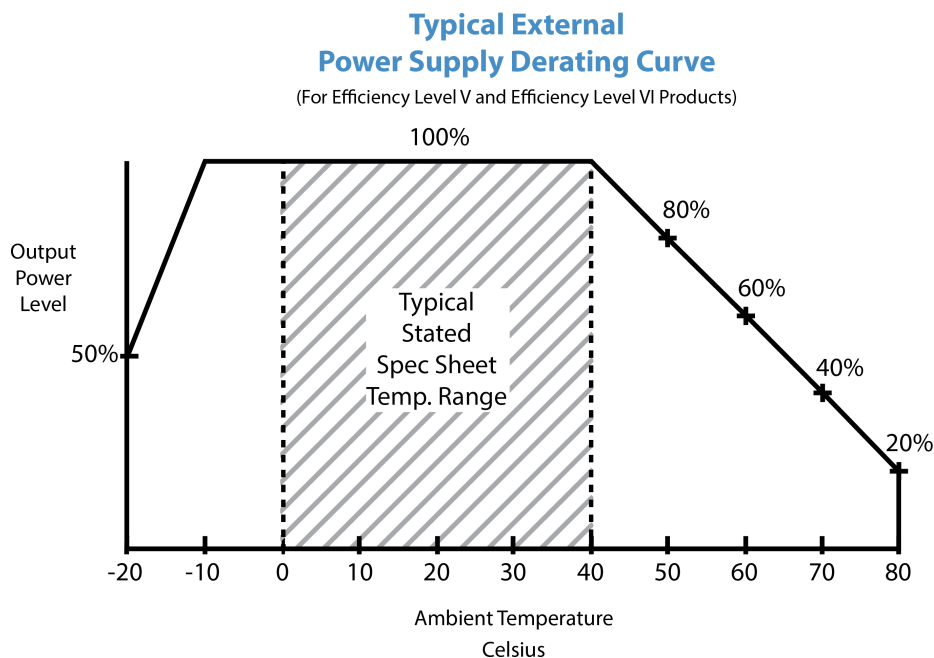
**E) OTHER:****1. USB2.0 , BC1.2 compliant****2. MTBF: 200,000 hours @ 25°C ambient temperature****3. Operating Temperature: 0°C to 40°C ambient temperature****4. Humidity: 0% to 95% relative humidity****5. Storage Temperature: -40°C to 80°C****F) ENCLOSURE****1. Housing: High impact plastic, 94V0 polycarbonate, non-vented****2. Markings: Label and/or Pad Printed and/or Molded in the case**

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## DERATING CURVE



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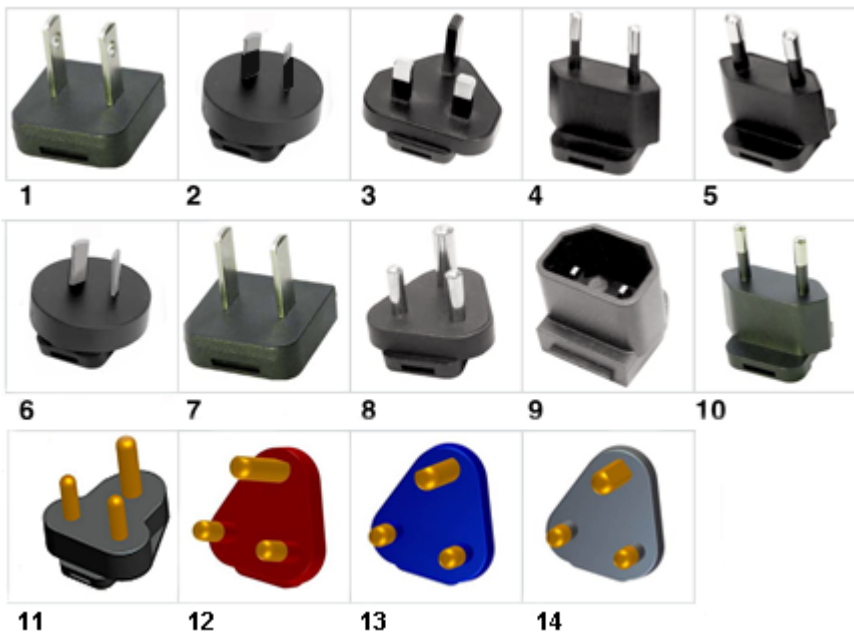
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## INPUT CONFIGURATION

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-SANS164-4C-16A(R)

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13. South Africa SABS164-4, 3 round prongs with a notched prong @ -53°, Class II + dummy ground, Blue, IEC TYPE M,  
P/N:

Q-SANS164-4L-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

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## 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.

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## Approvals

| Logo                                                                                                | Description                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>R37924<br>RoHS | Taiwan BSMI; <a href="http://www.bsmi.gov.tw/wSite/ct?xItem=4072&amp;ctNode=816&amp;mp=2">http://www.bsmi.gov.tw/wSite/ct?xItem=4072&amp;ctNode=816&amp;mp=2</a>                                                                                                             |
| No Logo                                                                                             | CB Report IEC 60601-1:2005 (Third Edition) + CORR. 1:2006 + CORR. 2:2007 + A1:2011                                                                                                                                                                                           |
| No Logo Applicable                                                                                  | CB for IEC 62368-1:2014 (Second Edition)                                                                                                                                                                                                                                     |
| No Logo                                                                                             | CB Report IEC60950-1:2005 (2nd Edition), Am 1: 2009 + Am 2:2013                                                                                                                                                                                                              |
|                  | CCC to GB 17625.1-2012;GB 4943.1-2011;GB/T 9254.1-2021 with Non-Tropical and Alt 5000m approval                                                                                                                                                                              |
| No Logo Applicable                                                                                  | IEC 60335-1:2010 (Fifth Edition) incl. Corr. 1:2010 and Corr. 2:2011 + A1:2013 + A2:2014                                                                                                                                                                                     |
|                  | CE Mark: tested to comply with EN60601-1-2:2013 (4th Ed), EN61000-3-2, EN61000-3-3, EN50082-1, including EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-7, EN61000-4-8, EN61000-4-11, EN61000-1-2-2001<br>EMI: EN55011 CLASS B and FCC Part 15 B |
|                  | CHINA SJ/T 11364-2014, China RoHS Chart:<br><a href="http://www.globtek.com/pdf/F-GT-DJD-8.4.1-006%20China%20RoHS%20Declaration%20Sheet.pdf">http://www.globtek.com/pdf/F-GT-DJD-8.4.1-006%20China%20RoHS%20Declaration%20Sheet.pdf</a>                                      |
| Conforms to UL STD. 62368-1<br>Certified to CSA STD C22.2 NO.62368-1                                | Conforms to UL STD. 62368-1<br>Certified to CSA STD C22.2 NO.62368-1                                                                                                                                                                                                         |
|                  |                                                                                                                                                                                                                                                                              |
|                  | Declaration DC № EA3C N RU Д-US.KA01.B.10453_19 Custom Union of Russia, Belarus, Kazakhstan <a href="http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration">http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration</a>                        |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                      | Medical Elec. Equip.- Part 1-11: Gen. Req. For Basic Safety & Essential Perf.- Collateral Req.<br>For Medical Elec. Equip. & Medical Elec. Systems Used In The Home Healthcare Environ<br>60601-<br>1-11:2015 Ed.2] |
| IS 13252 (Part 1)<br>IEC 60950-1<br><br>R-41017175<br>www.bis.gov.in | Bureau Of Indian Standards for GTM46161-165.0-USBxx 5, 5.2 and 5.5V                                                                                                                                                 |
|                                                                      | Indoor Use Only - Mark is on the label or Molded in the case                                                                                                                                                        |
| <br>GlobTek, Inc.                                                   | JAPAN TUV R-PSE, Cert. No. JD 50471561, to J62368-1(H30) , J55032(H29), J3000(H2 less]. Please reference the following website for PSE regulations: <a href="https://www.globtek.com">https://www.globtek.com</a>   |
| LPS                                                                                                                                                   | Limited Power Source 62368                                                                                                                                                                                          |
|                                                                    | Morocco SDoC declaration<br><a href="http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/">http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/</a>                                                   |
| <br>GMA-516946-EA                                                  | RCM certificate GMA-516946-EA; Australia and New Zealand Regulatory Compliance, M<br><a href="http://rcm.standards.org.au/rcmfaq/rcmfaq.htm">http://rcm.standards.org.au/rcmfaq/rcmfaq.htm</a> )                    |
|                                                                                                                                                       |                                                                                                                                                                                                                     |

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|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | UKCA Certification                                                                                                                                                                                          |
| <br>10276 | Ukraine UKRSepro (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.htm">http://ec.europa.eu/environment/waste/weee/index.htm</a> )<br>Mark is on the label or Molded in the case |