

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

Model:GTM96300-36VV-R3A

July 16, 2019

## GlobTek's GTM96300 series of external tabletop/desktop power supplies offer up to 36W of power while offering compliance to the latest ITE, Medical, Household, and Efficiency requirements Hybrid Class I

### Information

Model Number GTM96300-36VV-R3A

Description The family is certified for IEC 60601-1 Medical Safety and EMC (4th edition, 2MOPP), IEC 60950-1 Information Technology Equipment, IEC 62368-1 Audio/video, information and communication technology equipment, UL1310 Class 2 Power Unit, and IEC 60335-1 Safety of household and similar electrical appliances. The power supplies which have an output current rating of 6A or less are all rated for Limited Power Source (LPS) application

Model Picture



- Agency Documents <http://www.globtek.info/certs/GTM96300-TZ/>
- CE Declaration [https://www.globtek.com/pdf/ec\\_declaration/a0Oa000000Mm3T6EAJ](https://www.globtek.com/pdf/ec_declaration/a0Oa000000Mm3T6EAJ)
- RoHS/RoHS2 Declaration [https://www.globtek.com/pdf/rohs\\_cert/a0Oa000000Mm3T6EAJ](https://www.globtek.com/pdf/rohs_cert/a0Oa000000Mm3T6EAJ)
- 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>

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**Model Parameters**

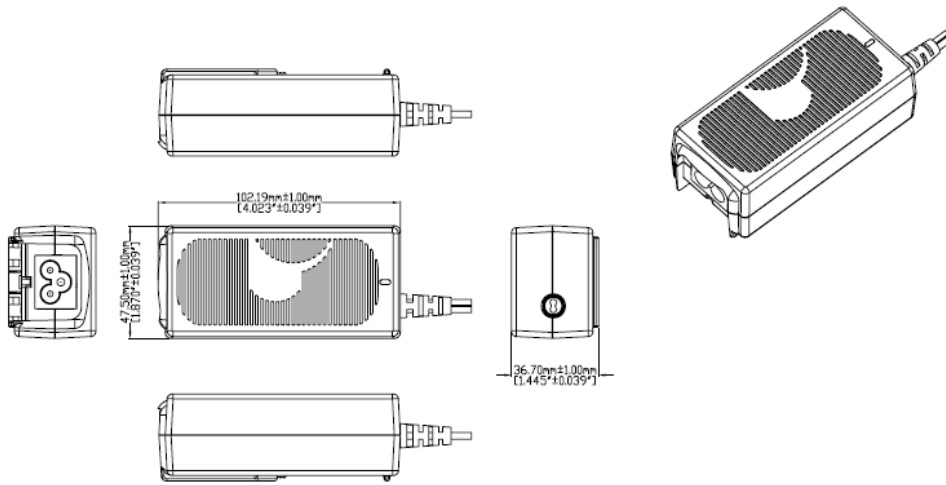
Type	Wall Plug-in+Desktop Combination
Technology	Regulated Switchmode AC-DC Power Supply AC Adaptor
Category	Medical/ITE/Household use Power Supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	1.0A
Wattage (W)	36.0
Vout Range (V)	5-54
Efficiency Level	VI
Ingress Protection	IP40 (cord), IP52(R-blades)
Size (mm)	(L)101.7x(W)46.47x(H)38.2mm

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ENCLOSURE



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**RATING TABLE**

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GTM96300-2207.5-2.5-R3A	5 V	4.4	22.00	<a href="#">RFQ</a>
GTM96300-2307.5-2.5-R3A	5 V	4.5	22.50	<a href="#">RFQ</a>
GTM96300-2307.5-1.55-R3A	5.95 V	3.75	22.31	<a href="#">RFQ</a>
GTM96300-3010.5-1.5-R3A	9 V	3.333	30.00	<a href="#">RFQ</a>
GTM96300-3012-R3A	12 V	2.5	30.00	<a href="#">RFQ</a>
GTM96300-3614.5-2.5-R3A	12 V	3	36.00	<a href="#">RFQ</a>
GTM96300-3014.5-2.5-R3A	12 V	2.5	30.00	<a href="#">RFQ</a>
GTM96300-3019.5-4.5-R3A	15 V	2	30.00	<a href="#">RFQ</a>
GTM96300-3619.5-4.5-R3A	15 V	2.4	36.00	<a href="#">RFQ</a>
GTM96300-3619.5-1.5-R3A	18 V	2	36.00	<a href="#">RFQ</a>
GTM96300-3624.0-5.0-R3A	19 V	1.9	36.10	<a href="#">RFQ</a>
GTM96300-3024-R3A	24 V	1.25	30.00	<a href="#">RFQ</a>
GTM96300-3624-R3A	24 V	1.5	36.00	<a href="#">RFQ</a>
GTM96300-3636-6.0-R3A	30 V	1.2	36.00	<a href="#">RFQ</a>
GTM96300-3036-6.0-R3A	30 V	1	30.00	<a href="#">RFQ</a>
GTM96300-3048-R3A	48 V	0.625	30.00	<a href="#">RFQ</a>
GTM96300-3648-R3A	48 V	0.75	36.00	<a href="#">RFQ</a>
GTM96300-3654-R3A	54 V	0.666	35.96	<a href="#">RFQ</a>

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**SPECIFICATIONS****A) ELECTRICAL SPECIFICATIONS:**

01. Input Voltage: Specified 90-264 Vac, Nameplate rated: 100-240Vac
  - 90-264 Vac range @ 100% of rated load current
  - 85-264 Vac range @ 85% of rated load current
  - 110-370 VDC range @ 100% of rated load current
02. Input Frequency: Specified 47-63 Hz, Nameplate rated 50-60Hz
03. Output Regulation: +/- 5% measured at the output connector
04. Line Voltage Regulation: +/- 0.5% typical measured at full load
05. Green Power On Indicator LED
06. Output Ripple (Vp-p): 1% or 100 mV whichever is greater, measured at 20 MHz bandwidth with 0.1 uf ceramic capacitor in parallel with a low impedance 47 uf electrolytic capacitor connected at the end of the output connector
07. Turn-ON/OFF Overshoot: 5% maximum, 1 mS typical recovery time for 40% to 70% step load
08. Turn-ON Delay: 1 second maximum @ full load, nominal line
09. Hold-Up Time: 8 mS typical @ nominal input voltage and full load
10. Inrush Current: 30A/60A maximum cold start @ 115/230Vac input
11. Efficiency: Compliant with Efficiency Level VI and CoC Tier 2 standards
12. No Load Standby Power: <0.075 W @ 230Vac

**B) PROTECTION**

01. Input Protection: Input line fusing and 300Vac MOV
02. Short Circuit/ Overload: Electronically Protected unit will auto recover upon removal of fault
  - Output Current Limit: 110% to 160% of rated output current
  - (upper end of current limit range is determined by normal output power rating, not derated output power level)
03. Output Over-Voltage: 110% to 130% of nominal output voltage

**C) SAFETY**

01. Dielectric Withstand Voltage: 4000Vac or 5656Vdc from input to output, On Class I models, 3000Vac or 4242Vdc from input to earth
02. Earth Leakage Current: Class I models < 300uA, N/A for Class II models
03. Touch Current: Class I models < 20uA, Class II models < 75uA
04. Earth Continuity Test: < 0.1 Ohm between Earth Pin at AC input and PCB termination point (Class I models only)
05. Means of Protection: 2 x MOPP
06. Compliant Standards: See listings at end of this drawing for specifics
07. Output Isolation Options:
  - a) C8 or C18 Inlet, Class II
  - b) C6 or C14 Inlet, Class II FE, Output Isolated from Earth contact
  - c) C6 or C14 Inlet, Class I, Output negative directly attached to Earth contact

**D) EMC**

- EN 60601-1-2, 4<sup>th</sup> edition  
Emissions, per EN 55032, EN 61000-6-3, EN 61000-6-4, CISPR11 and CISPR22
  - Conducted Emissions: Class B, FCC Part 15, Class B
  - Radiated Emissions: Class B, FCC Part 15, Class BLine Frequency Harmonics EN61000-3-2, Class A  
Voltage Fluctuations/Flicker EN61000-3-3  
  
Immunity, per EN 55024, EN 61000-6-1, EN 61000-6-2

**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.

<http://en.globtek.com/datasheet/id/a00a000000Mm3T6>

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Static Discharge Immunity EN61000-4-2, 10kV Contact Discharge, 20kV air discharge  
Radiated RF Immunity EN61000-4-3, 10V/m 80-1000MHz, 3V/m 1-2.7GHz, 80% 1KHz AM.  
EFT/Burst Immunity EN61000-4-4, 4kV/100kHz.  
Line Surge Immunity EN61000-4-5, 2kV differential, 4kV common-mode  
Conducted RF Immunity EN61000-4-6, 3Vrms, 80% 1KHz AM  
Power Frequency Magnetic Field Immunity EN61000-4-8, 3A/m  
Voltage Dip Immunity EN61000-4-11, Criteria

**E) OTHER:**

01. MTBF: 1,000,000 Hours @ 40°C ambient temperature, Full Load
02. GTM96300 Family: -10°C to 40°C ambient temperature with full load  
Regarding Operating Temperature,
  - a- See below derating table for output power capability at alternate temperature
  - b- Extended low end temperature range available as custom option
03. Operating Humidity: 0% to 95% relative humidity, non-condensing
04. Storage Temperature: -30°C to 80°C
05. Operating Altitude: 5000 Meters
06. ROHS: Compliant with latest regulations, see approvals section below

**F) ENCLOSURE**

01. Housing: High impact plastic, 94V0 polycarbonate, non-vented
02. Markings: Label or Laser Printed
03. AC Input mechanical options: Desktop C6, C8, C14 or C18 IEC Inlet.  
Hybrid option (Desktop or Changeable Blade Wall Plug-in) Class I or Class II input

**G) SPECIAL OPTIONS**

01. Cost reduction, removal of LED
02. Custom Cordsets, various cordage types, and connector types
03. Custom Markings
04. Short term Output Surge Capability
05. Reduced Leakage Current versions
06. Tightened output voltage tolerance
07. Reduced output ripple level
08. Reduced output power rating marking
09. High Rel PCB laminate with Plated through Holes for IPC610 Class 2 Compliance
10. Special Housing Colors and Cordset Colors
11. Quasi Constant Current Output, for Battery Charger Applications
12. Back EMF applications, custom solutions. For unusual motor load aps and other high inductance reverse energy flow requirements
13. Improved Ingress Protection Rating

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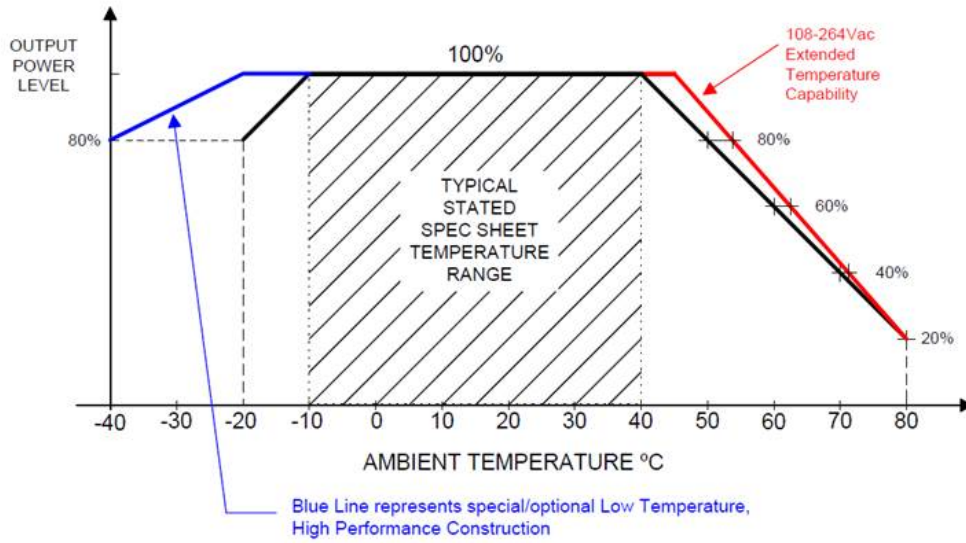
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DERATING CURVE

TYPICAL EXTERNAL POWER SUPPLY DERATING CURVE

(FOR EFFICIENCY LEVEL V AND EFFICIENCY LEVEL VI PRODUCTS)



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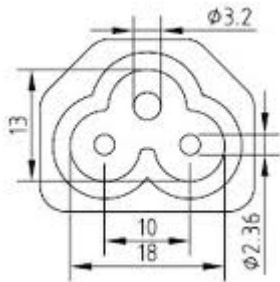
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**Input Configuration**

Description IEC 60320/C6 AC Inlet Connector, Class I, Earth Ground ( aka "Mickey Mouse")

[Blade Insertion Instructions](#)  
[R-Blade Style Instruction Video](#)

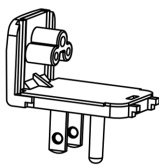


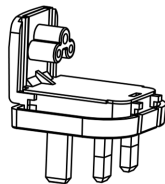
Mates with IEC 60320/C5 Plug

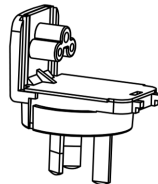
This series of Interchangeable Blade products may be used with Proprietary Interchangeable Blades as described below or with standard international power cords.

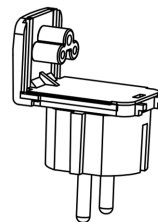
Optional INPUT BLADES: R-Socket: below are available blades configurations which are "not included" (unless stated above); may be purchased separately, packaged with power supply, or as a separate "R-KIT" if specified

1. Class I model NEMA 5-15P, Class I AC power plug with 2 blades & ground pin, R-NA-3(R)
2. Australian AS 3112 configuration: SAA 3 pins Class I, R-SAA-3(R)
3. UK BS 1363 configuration: UK 3 pins (Ground) Class I, R-UK-3(R)
4. European CEE 7/7 configuration: European plug 2 PINS + ground, Class I, R-EU-3(R)
5. Desktop Insert
- Kits
05. R-3-KIT: 1,2,3,4 above
06. R-3-KIT-INTL: 2,3,4 above


**UL 3P**

 P/N: R-NA-3(R)  
 NORTH AMERICA  
 JAPAN

**UK 3P**

 P/N: R-UK-3(R)  
 UNITED KINGDOM  
 HONG KONG  
 SINGAPORE

**AUS 3P**

 P/N: R-SAA-3(R)  
 AUSTRALIA

**EU 3P**

 P/N: R-EU-3(R)  
 EUROPE  
 SOUTH AMERICA

Below are standard cordsets which are "not included" (unless stated above); these can be purchased separately or package with the power supply. Contact your Sales Engineer if the style required is not shown below. Many more available in different lengths, colors or cable material.

[Standard International IEC 320/C5 Cordsets](#)

<a href="#">3021066F712(R)</a>	N. American (Type B)	NEMA 5-15P	IEC 320/C5	1880	6
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<a href="#">1191068F0712(R)</a>	N. American (Type B)	NEMA 5-15P Hospital	IEC 320/C5	2459	8
<a href="#">2064262M0712(R)</a>	Australian (Type I)	AS3112 / 3 PRONG	IEC 320/C5	2050	7
<a href="#">204B4262M0712(R)</a>	Brazil (Type N)	BRAZIL	IEC 320/C5	2050	7
<a href="#">6023592M5712(R)</a>	China (Type I)	CCC GR2099	IEC 320/C5	2500	8
<a href="#">23144262M0712(R)</a>	Europe (Type E)	CEE 7/7	IEC 320/C5	2050	7
<a href="#">2084262M0712(R)</a>	India/S.Africa (Type M)	India/S.Africa	IEC 320/C5	2050	7
<a href="#">23024262M0712(R)</a>	Italy (Type L)	CEI 23-16/VII	IEC 320/C5	2050	7
<a href="#">3003316F0712(R)</a>	Japan (Type B)	JIS 8303 / 3 PINS	IEC 320/C5	1830	6
<a href="#">23214262M0712(R)</a>	Switzerland (Type J)	SEV 1011 ( EL 203)	IEC 320/C5	2050	7
<a href="#">6104262M0712(R)</a>	UK, Hong Kong, Singapore, Gulf States (Type G)	BS1363	IEC 320/C5	2050	7

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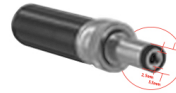
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**Output Configuration**

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
No Logo Applicable	EU 230V CoC Tier 2, 278/2009, Mar 2014
	Book 60335 up to 36 Volts
	60601-1 3rd Operating Instructions
No Logo Applicable	CB for IEC 60601-1:2005 (Third Edition) + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1 (2012 reprint) (Ed 3.1) up to 48V only
No Logo Applicable	CB for IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013
No Logo Applicable	CB to IEC 60335-1:2010 (Fifth Edition) incl. Corr. 1:2010 and Corr. 2:2011 + A1:2013 for up to 36V only
No Logo Applicable	CB for IEC 62368-1:2014 (Second Edition)
	CCC Altitude up to 5000 m GB17625.1-2012, GB4943.1-2011, GB/T9254-2008
	CCC model meets both Tropical and Altitude up to 5000M GB4943.1-2011; GB/T9254-2008; GB17625.1-2012 up to 48V only
	CE Mark: tested to comply with EN 55032:2012+AC:2013, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 55024:2010, EN 60601-1-2:2015
<small>Conforms to ANSI/UL Std. 60950-1 Cert. to CAN/CSA Std. C22.2 NO. 60950-1</small>	Conforms to ANSI/UL Std. 60950-1 2nd Edition Cert. to CAN/CSA Std. C22.2 NO. 60950-1 2nd Edition
	AAMI ES60601-1 Issued: 2012/08/20 Medical Electrical Equipment - Part 1: CAN/CSA-C22.2 No.60601-1:14, 3rd Ed Issued: 2014/03/01 - Medical Electrical Equipment - Part 1:IEC 60601-1-11 Issued: 2015/01/20 Ed. 2 Medical Elec. Equip.- Part 1-11: to 48V only
	Information Technology Equipment Safety Part 1: General Requirements (UL 60950-1 Issued: 2007/03/27 Ed: 2 Rev: 2014/10/14) Information Technology Equipment Safety Part 1: General Requirements (CSA C22.2 No. 60950-1 Issued: 2007/03/27 Ed: 2 (R2012) Amd. 1:
	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 # EA9C N RU Д-US.AД75.B.01052 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>
	Class 2 Power Units [UL 1310:2011 Ed.6+R:01Feb2017] Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2#223:2015 Ed.3] up to 48V only
Class 2 Power Unit	

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	Information Technology Equipment Safety Part 1: General Requirements (UL 60950-1 Issued: 2007/03/27Ed: 2 Rev: 2014/10/14)
Intertek RECOGNIZED COMPONENT	Information Technology Equipment Safety Part 1: General Requirements (CSA C22.2 No. 60950-1 Issued: 2007/03/27 Ed: 2 (R2012))
	IEC 60601-1-11 Issued: 2015/01/20 Ed. 2 Medical Elec. Equip.- Part 1-11: Gen. Req. for Basic Safety & Essential Perf.- Collateral Standard - Req. for Medical Elec. Equip. & Medical Elec.Systems Used in the Home Healthcare Environment; up to 48V only
FC T3.15A 250VAC 	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.  Fuse 60335 T3.15A 250VAC Up to 36 volts
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.
 IP40	Indoor Use Only - Mark is on the label or Molded in the case  Ingress Protection: ?IP40 to IEC60529:2001 Protection against granular foreign bodies
 GlobTek, Inc.	JAPAN TUV R-PSE, Cert. No. JD 50313285, to J60950-1(H26) , J55022(H22),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. JD 50313285, to J60950-1(H26) , J55022(H22),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 50313285, to J60950-1(H26) , J55022(H22),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>
EFFICIENCY LEVEL (VI)	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
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>
 Intertek	IEC 60601-1:2005 (Third Edition) + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) EN 60601-1:2006/ A1:2013+A12:2014 up to 48V only
 Intertek	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> )
 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)

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WEEE: Complies with EU 2012/19/EU ([http://ec.europa.eu/environment/waste/weee/index\\_en.htm](http://ec.europa.eu/environment/waste/weee/index_en.htm))  
Mark is on the label or Molded in the case