

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

Model:GTM96300-36VV-R2

May 20, 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 II

Information

Model Number GTM96300-36VV-R2

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/a0Oa000000MmVxmEAF

RoHS/RoHS2 Declaration https://www.globtek.com/pdf/rohs_cert/a0Oa000000MmVxmEAF

REACH Declaration 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:GTM96300-36VV-R2

May 20, 2019

Model Parameters

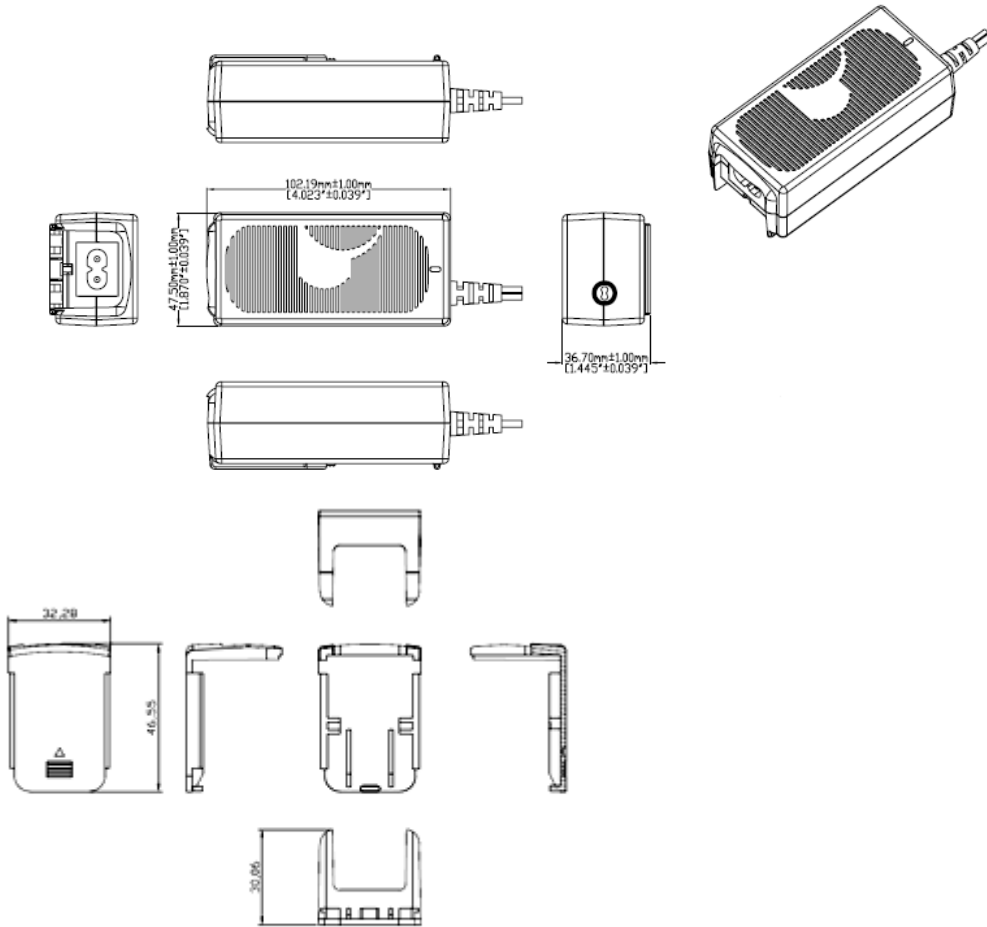
Type	Wall Plug-in+Desktop Combination
Technology	Regulated Switchmode AC-DC Power Supply AC Adaptor
Category	ITE / Medical Power Supply/Class 2/Household Power Supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	1A
Wattage (W)	36.0
Vout Range (V)	5-54
Efficiency Level	VI
Ingress Protection	IP40 (cord), IP52(R-blades)
Size (mm)	(L)101.73x(W)46.47x(H)38.2mm

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

Model:GTM96300-36VV-R2

May 20, 2019

ENCLOSURE



Units shipped without an installed input plug have a "desktop insert" installed.

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

Model:GTM96300-36VV-R2

May 20, 2019

RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GTM96300-2307.5-2.5-R2	5 V	4.5	22.50	RFQ
GTM96300-2307.5-1.55-R2	5.95 V	3.86	22.97	RFQ
GTM96300-2307.5-R2	7.5 V	3	22.50	RFQ
GTM96300-3010.5-1.5-R2	9 V	3.33	29.97	RFQ
GTM96300-3614.5-2.5-R2	12 V	3	36.00	RFQ
GTM96300-3619.5-4.5-R2	15 V	2.4	36.00	RFQ
GTM96300-3619.5-1.5-R2	18 V	2	36.00	RFQ
GTM96300-3624-4.0-R2	20 V	1.8	36.00	RFQ
GTM96300-3624-R2	24 V	1.5	36.00	RFQ
GTM96300-3636-6.0-R2	30 V	1.2	36.00	RFQ
GTM96300-3648-R2	48 V	0.75	36.00	RFQ
GTM96300-3654-R2	54 V	0.666	35.96	RFQ

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

Model:GTM96300-36VV-R2

May 20, 2019

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, 4th 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 B
- Line 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/a00a000000MmVxm>

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

Model:GTM96300-36VV-R2

May 20, 2019

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

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

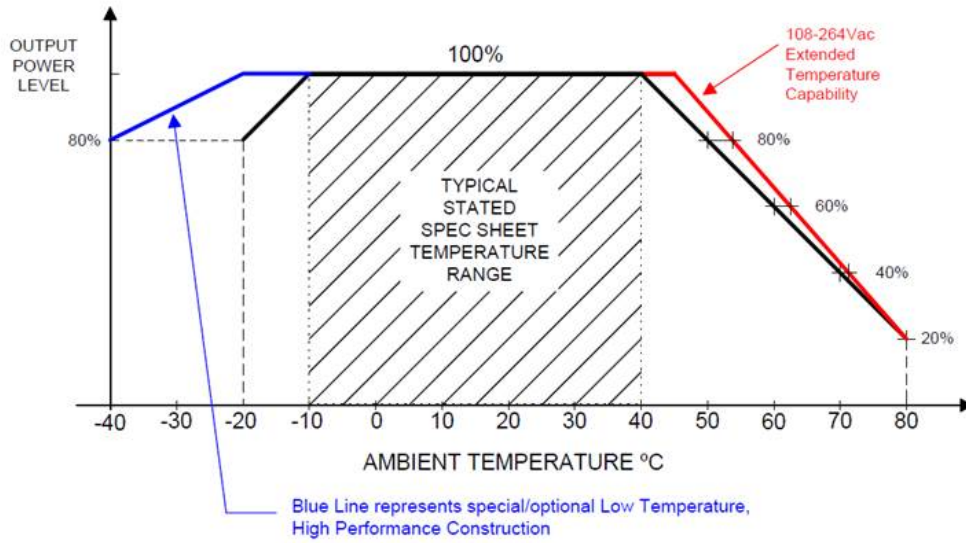
Model:GTM96300-36VV-R2

May 20, 2019

DERATING CURVE

**TYPICAL EXTERNAL POWER SUPPLY
DERATING CURVE**

(FOR EFFICIENCY LEVEL V AND EFFICIENCY LEVEL VI PRODUCTS)



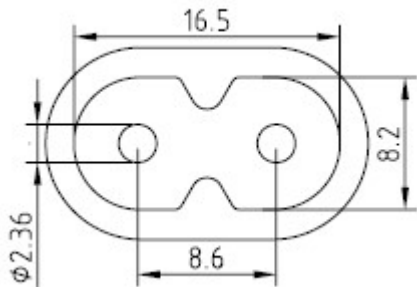
Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTM96300-36VV-R2

May 20, 2019

Input Configuration

Description IEC 60320/C8 AC Inlet connector

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


Mates with IEC 60320/C8 Plug

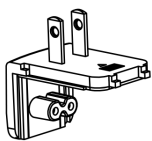
This series of Interchangeable Blade products may be used with Proprietary Interchangeable Blades as described below or with standard international power cords.

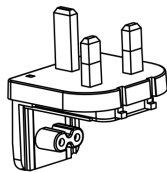
Optional INPUT BLADES: R-Socket: below are available blades configurations which are "not included" (unless stated above); may be purchased separately, packaged with power supply, or as a separate "R-KIT" if specified

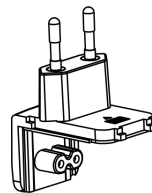
1. Class II model NEMA 1-15P AC power plug with 2 prongs, R-NA-2(R)
2. Australian AS 3112 configuration: SAA 2 pins Class II, R-SAA-2(R)
3. UK BS 1363 configuration: UK 2 pins (dummy Ground) Class II, R-UK-2(R)
4. European CEE 7/16 configuration: Europlug 2 PINS, Class II, R-EU-2(R)
5. China GB 2099 configuration: 2 blades, Class II; CN P/N:R-CN-2(R)
6. Desktop Insert

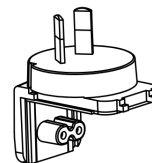
Kits

05. R-KIT: 1,2,3,4 above
06. R-KIT-INTL: 2,3,4 above


UL 2P

 P/N: R-NA-2(R)
 NORTH AMERICA
 JAPAN

UK 2P

 P/N: R-UK-2(R)
 UNITED KINGDOM
 HONG KONG
 SINGAPORE

EU 2P

 P/N: R-EU-2(R)
 EUROPE
 SOUTH AMERICA

AUS 2P

 P/N: R-SAA-2(R)
 AUSTRALIA

Standard Cordsets

Below are standard cordsets which are "not included" (unless stated above); these may be purchased separately or packaged with the pow

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

Model:GTM96300-36VV-R2

May 20, 2019

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/C7 Cordsets](#)

Part Number	Country	Plug	Connector	Length (mm)	Length (feet)
<u>2094112M703(R)</u>	Argentina (Type I)	IRAM 2063	IEC 320/C7	2000	7
<u>5014112M703A(R)</u>	Australian (Type I)	AS 3112	IEC 320/C7	2000	7
<u>207B4111M8703(R)</u>	Brazil (Type N)	NBR14136	IEC 320/C7	1800	6
<u>4533501M8703(R)</u>	China (Type A)	GB 2099.1	IEC 320/C7	1830	6
<u>2074112M703A(R)</u>	European (Type C)	CEE 7/16	IEC 320/C7	2000	7
<u>2084111M8703(R)</u>	India (Type M)	BS 546	IEC 320/C7	1800	6
<u>451J3401M8703(R)</u>	Japan (Type A)	JIS 8303	IEC 320/C7	1830	6
<u>2044112M703A(R)</u>	Korea (Type C)	KS C8305	IEC 320/C7	2000	7
<u>4511116F703A(R)</u>	N. American (Type A)	NEMA 1-15P	IEC 320/C7	1830	6
<u>4033401M8703A(R)</u>	Taiwan (Type A)	CNS690	IEC 320/C7	1830	6
<u>6104112M703A(R)</u>	UK, Hong Kong, Singapore, Gulf States (Type G)	BS1363	IEC 320/C7	2000	7

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

Model:GTM96300-36VV-R2

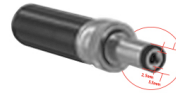
May 20, 2019

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:GTM96300-36VV-R2

May 20, 2019













Approvals

Logo	Description
No Logo Applicable	EU 230V CoC Tier 2, 278/2009, Mar 2014
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 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
	CE Certification
	CE Mark: tested to comply with EN 55032.2012+AC.2013 EN 61000-3-2.2014 EN 61000-3-3.2013 EN 60601-1-2.2015 EN 55024.2010
	CE Certification Class II
	CE Mark: tested to comply with EN 55032.2012+AC.2013 EN 61000-3-2.2014 EN 61000-3-3.2013 EN 55024.2010
	CHINA SJ/T 11364-2014, China RoHS Chart: http://en.globtek.com/globtek-rohs.php
Conforms to AAMI STD.ES60601-1,IEC 60601-1-11	Conforms to AAMI STD.ES60601-1,IEC 60601-1-11
Certified to CAN/CSA STD.C22.2 NO.60601-1	Certified to CAN/CSA STD.C22.2 NO.60601-1
Conforms to UL STD. 1310	Conforms to UL STD. 1310
Certified to CSA STD. C22.2 NO.223	Certified to CSA STD. C22.2 NO.223
Conforms to UL STD. 60950-1	Conforms to UL STD. 60950-1
Certified to CSA STD C22.2 NO.60950-1	Certified to CSA STD C22.2 NO.60950-1
	Declaration # EA3C N RU Д-US.AД75.B.01052 Custom Union of Russia, Belarus and Kazakhstan http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration
	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

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

Model:GTM96300-36VV-R2

May 20, 2019

	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	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 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
	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:
GlobTek, Inc.	http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/
	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:
GlobTek, Inc.	http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/
	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:
GlobTek, Inc.	http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/
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) http://www.ce-mark.com/Rohs%20final.pdf
	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
	S-Mark Certificate EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 +A2:2013 (http://www.intertek.com/marks/s/)
	Ukraine UKRSepro (Document: www.globtek.com/html/iso_certificates/GT_Ukraine.pdf)
	Japan: Voluntary Control Council for Interference (VCCI)
	WEEE: Complies with EU 2012/19/EU (http://ec.europa.eu/environment/waste/weee/index_en.htm) Mark is on the label or Molded in the case