

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

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

January 16, 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

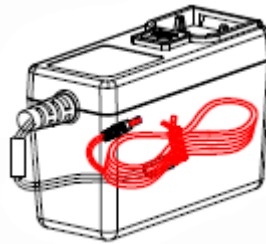
Model Number

GT-46401-WWVV-x.x-Q

Description

GT-46401-WWVV-x.x-Q, 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; 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>

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**MODEL PARAMETERS**

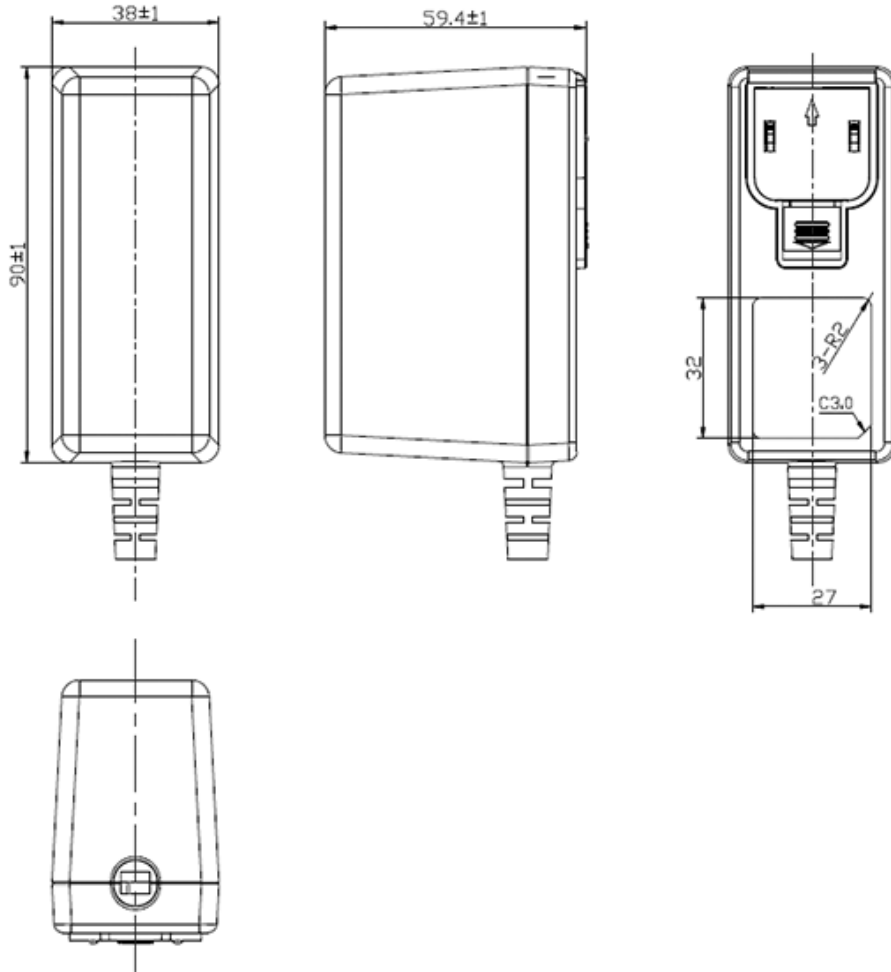
|                    |   |
|--------------------|---|
| Type               | Wall Plug-in  |
| Technology         | Regulated Switchmode AC-DC Power Supply AC Adaptor                  |
| Category           | ITE Power Supply  |
| Input Voltage      | 100-240V~, 50-60 Hz   |
| I/P Amps (A)       | 1.0A  |
| 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  |

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# ENCLOSURE



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**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

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<http://en.globtek.com/datasheet/id/a0Oa000000NrvmW>

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- 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**

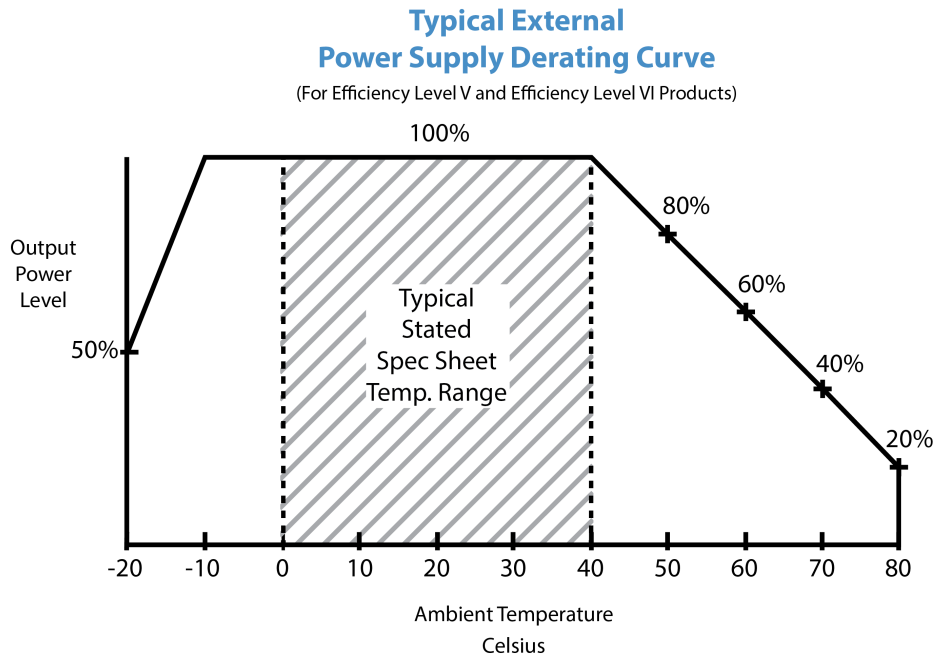
- 01. Housing: High impact plastic, 94V0 polycarbonate, non-vented
- 02. Size: 90.0 x 38.0 x 59.4 +/-1.0 mm
- 03. Markings: Label and/or Pad Printed and/or Molded in the case

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## DERATING CURVE



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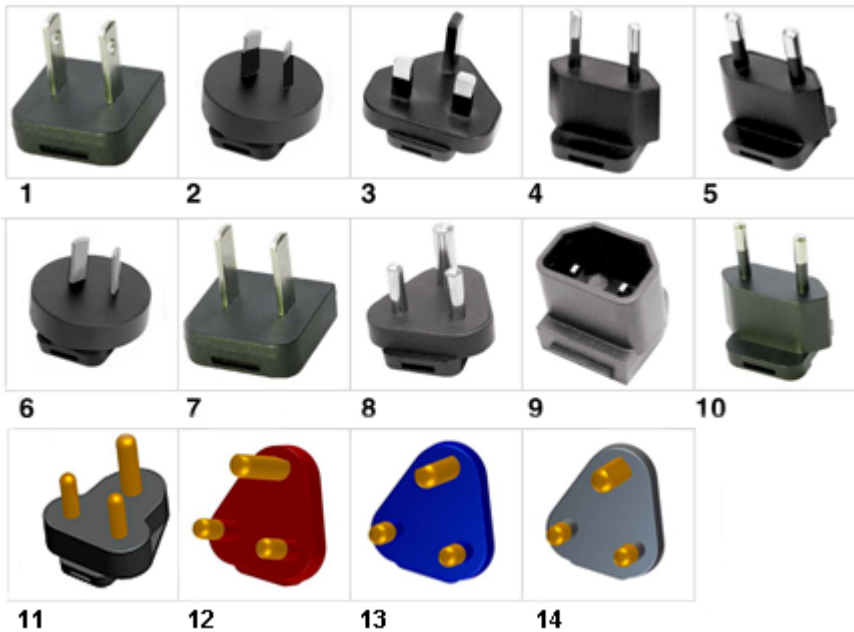
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**INPUT CONFIGURATION**

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, 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,

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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

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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  |
| 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   |
| <br>仅适用于在海拔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>  |
|                      | UL 60950-1, (Information Technology Equipment - Safety - Part 1: General Requirements).<br>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<br><a href="http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration">http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration</a> |
|                      | FCC PART 15 CLASS B   |
| 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  |

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|  |  |
|--|--|
| IP40   | Ingress Protection: ?IP40 to IEC60529:2001 Protection against granular foreign bodies  |
| <br>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:<br><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> |
| <br>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:<br><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>   |
| <br>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:<br><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:<br>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   |
| <b>EFFICIENCY LEVEL VI</b>   | 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   |
| 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>  |
|                 | NOM MEXICO ANCE for GT-46401   |
|  | JAPAN TUV Rheinland-PSE GlobTek Inc to J60950-1(H26) ,   |

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|   |   |
|---|---|
| <br>GlobTek, Inc.      | 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> . |
|  <b>SAA-2027 11-EA</b> | 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>                            |
| <br>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> )   |
|                        | UKCA Certification  |
| <br>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> )   |
|                      | 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> )<br>Mark is on the label or Molded in the case     |