

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

Model:GT-86120-WWVV-X.X-W2H

August 17, 2019

## GT-86120-WWVV-X.X-W2H

### Information

Model Number GT-86120-WWVV-X.X-W2H

Description GT-86120-WWVV-X.X-W2H, ITE Power Supply, Wall Plug-in, Regulated Switchmode AC-DC Power Supply AC Adaptor, , Input Rating: 100-240V- , 50/60Hz, The Brazilian NBR 14136:2002 is standard for Brazilian plugs and receptacle, Output Rating: 12 Watts, Power rating with convection cooling (W) , 4.2V-12VV in 0.1V increments, Approvals: CB 60950; CE; China RoHS; cULus; Double Insulation; PSE; Level VI; LPS; PSE; RoHS; SGS (GS); Ukraine; VCCI; WEEE; EAC;

Model Picture



Agency Documents <http://www.globtek.info/certs/GT-86120-WWVV-W2Z/>  
CE [https://www.globtek.com/pdf/ec\\_declaration/a000c00000PHJ0TEAX](https://www.globtek.com/pdf/ec_declaration/a000c00000PHJ0TEAX)  
EC-Declaration  
RoHS/RoHS2 [https://www.globtek.com/pdf/rohs\\_cert/a000c00000PHJ0TEAX](https://www.globtek.com/pdf/rohs_cert/a000c00000PHJ0TEAX)  
Declaration  
REACH [https://www.globtek.com/pdf/iso\\_certificates/REACH.pdf](https://www.globtek.com/pdf/iso_certificates/REACH.pdf)  
Declaration  
Conflict  
Minerals <https://www.globtek.com/pdf/conflict-minerals.pdf>  
Declaration

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**Model Parameters**

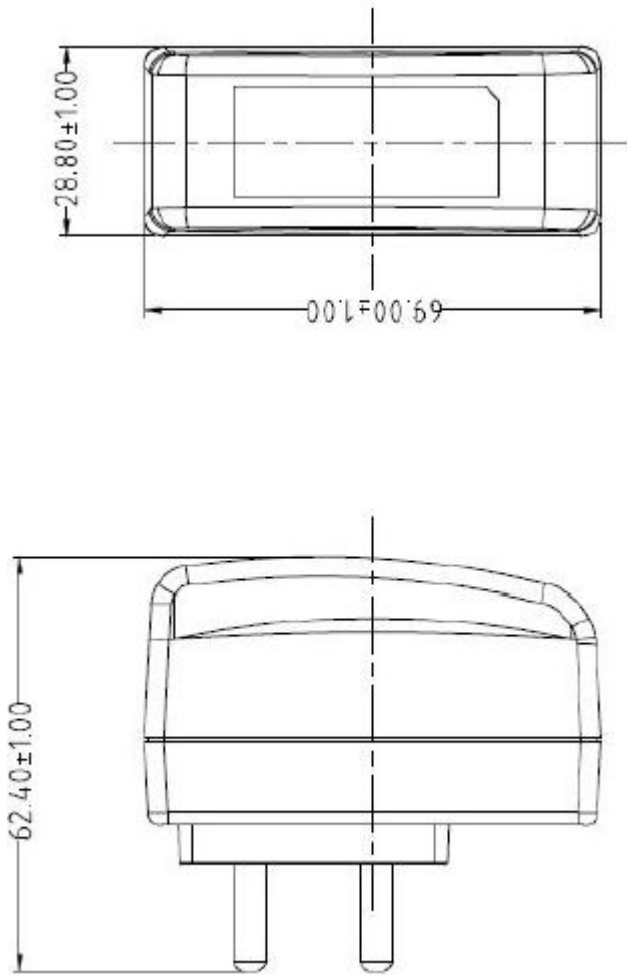
Type	Wall Plug-in
Technology	Regulated Switchmode AC-DC Power Supply AC Adaptor
Category	ITE Power Supply
Input Voltage	100-240V~, 50/60Hz
I/P Amps (A)	0.5A
Wattage (W)	12.0
Vout Range (V)	4.2V-12V
Efficiency Level	VI
Ingress Protection	IPX0
Size (mm)	62.4x28x28.8

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ENCLOSURE



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**RATING TABLE**

Model Number Voltage Amps(A) Watts(W) RFQ

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## SPECIFICATIONS

### 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. Output Regulation: +/- 5%
04. Ripple and Noise (Vp-p): 100 mVp-p maximum, At 20 MHz, and output parallel with 0.1uF & 47uF capacitors to ground. Temperature at 25 °C, and nominal input voltage
05. Efficiency: Compliant with Efficiency Level VI and ErP European Commission's Ecodesign Directive (2005/32/EC) / CoC Tier 2 Compliant
06. No Load Standby Power: <0.075W @ 230Vac
07. Turn-ON Delay: 3 Seconds maximum at nominal input voltage
08. Rise Time: 100mS maximum at nominal input voltage

### B) PROTECTION

01. Over-Voltage: 10VDC maximum
02. Over current protection: 4A maximum with auto-recovery function
03. Short Circuit: Short circuit protection is to be included in the construction of the adaptor. The adaptor is designed to withstand continuous current of a short circuit on the output. The adaptor will be short circuit tolerant for an indefinite period.

### C) SAFETY

01. Dielectric Withstand Voltage: 3000VAC 10mA 1minute or 4242VDC 10mA 1minute from primary to secondary
02. Leakage current: 0.25mA maximum, at nominal AC input voltage and frequency
03. Static Discharge Immunity of 8kV Contact Discharge, 15kV air discharge.

### 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 50°C ambient temperature (RFP7139)
03. Humidity: 5% to 90% relative humidity
04. Storage Temperature: -20°C to 60°C
05. Cooling: natural convection cooling
06. ROHS 2: Complies with EU 2011/65/EU and China SJ/T 11363-2006

### F) ENCLOSURE

01. Housing: High impact plastic, 94V0 polycarbonate, non-vented
02. Markings: Label and/or Pad Printed and/or Molded in the case

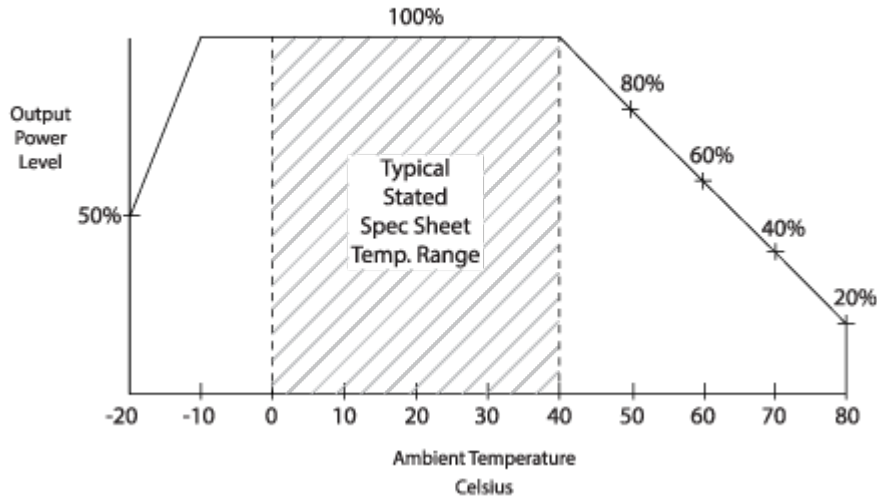
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**DERATING CURVE**

**Typical External  
Power Supply Derating Curve**  
(For Efficiency Level V and Efficiency Level VI Products)



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### Input Configuration

DescriptionThe Brazilian NBR 14136:2002 is standard for Brazilian plugs and receptacle

This standard is based on the international IEC 60906-1 standard, developed to encourage countries to adopt one plug and receptacle for global use. The standard does not include a medical grade plug. Brazil uses 110-220 Volts and 60 Hz.

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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
	Attention Mark / Refer to operating manual for operating and service instructions
No Logo Applicable	CB report to IEC 60950-1:2005 (2nd Edition) +A1:2009 + A2:2013
	CE Mark: tested to comply with EN55022:2006/A1:2007 Class B, EN610003-2, EN610003-3 including EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6N EN61000-4-11; EMI: Complies with EN55011 CLASS B and FCC Part 15B - On label or Molded in case
	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, 2nd Edition, 2014-10-14 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements)
	Declaration ДС № EA3C 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>
	Indoor Use Only - Mark is on the label or Molded in the case
 GlobTek, Inc.	JAPAN TUV R-PSE, Cert. No. JD 50315866, to J60950-1(H26) , J55022(H22),[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>
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  GlobTek, Inc.	Limited Power Source  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> .
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>
	SGS GS to EN 60950-1:2006 + A11:2009+A1:2010+A12:2011+A2:2013
 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> )
	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