

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

Model:GTM961200P120VV.V-TP(SR with fixed Plug 2 pin)

April 28, 2024

## GTM961200P120VV.V-TP(SR with fixed Plug 2 pin)

### Information

|                               |   |
|-------------------------------|---|
| Model Number                  | GTM961200P120VV.V-TP(SR with fixed Plug 2 pin)  |
| Description                   | GTM961200P120VV.V-TP(SR with fixed Plug 2 pin), ICT/ITE Power Supply, 60601-1-4th Ed. , Desktop/External, Regulated Switchmode AC-DC Power Supply AC Adaptor, , Input Rating: 100-240V~, 50-60 Hz, See "Blade/Cord Installed" section. Contact GlobTek for customization requests such as Molded country plugs, Molex or TE connectors, or IEC connectors mounted on any type of cable in any customer specified lengths., Output Rating: 120 Watts, Power rating with convection cooling (W) , 12-54V in 0.1V increments, Approvals: CB 62368; Morocco; PSE; VCCI; PSE; PSE; CE; WEEE; Ukraine; RoHS; Level VI; China RoHS; cETLus; cETLus 60601-1-11; EAC; S-Mark 62368; UKCA; Conforms to 62368-1; |
| Model Picture                 | .   |
| Agency Documents              | <a href="http://www.globtek.info/certs/GTM961200P/">http://www.globtek.info/certs/GTM961200P/</a>   |
| CE EC-Declaration             | <a href="https://www.globtek.com/pdf/ec_declaration/a0O3a00000M6b8TEAR">https://www.globtek.com/pdf/ec_declaration/a0O3a00000M6b8TEAR</a>   |
| RoHS/RoHS2 Declaration        | <a href="https://www.globtek.com/pdf/rohs_cert/a0O3a00000M6b8TEAR">https://www.globtek.com/pdf/rohs_cert/a0O3a00000M6b8TEAR</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**

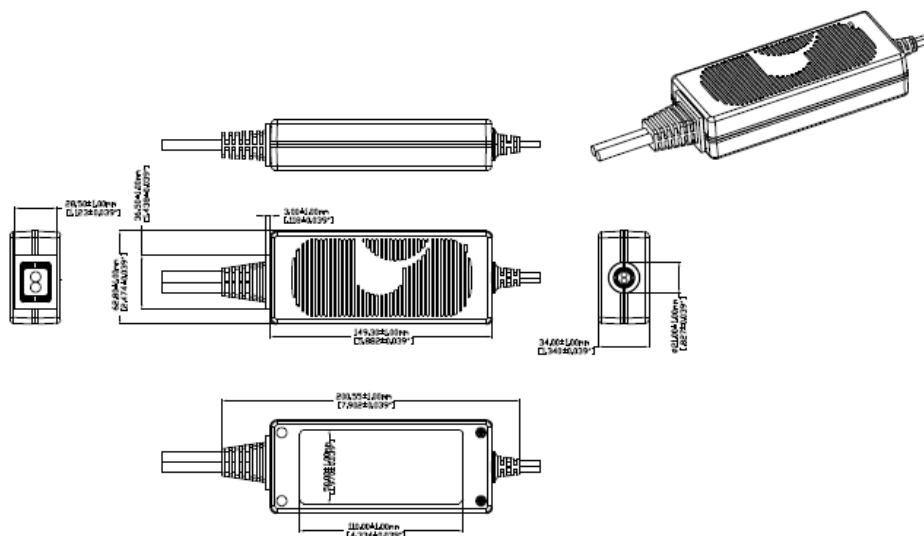
|                    |   |
|--------------------|---|
| Type               | Desktop/External  |
| Technology         | Regulated Switchmode AC-DC Power Supply AC Adaptor                  |
| Category           | ICT/ITE Power Supply  |
| Input Voltage      | 100-240V~, 50-60 Hz   |
| I/P Amps (A)       | 1.5A  |
| Wattage (W)        | 120.0   |
| Vout Range (V)     | 12-54   |
| Efficiency Level   | USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782 |
| Ingress Protection | IP42  |
| Size (mm)          | 149.30*62.80*34.0   |

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## ENCLOSURE



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## RATING TABLE

| Model Number       | Voltage | Amps(A) | Watts(W) | RFQ                 |
|--------------------|---------|---------|----------|---------------------|
| GTM961200P12042-TP | 42 V    | 2.85    | 119.70   | <a href="#">RFQ</a> |

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## SPECIFICATIONS

### Input

|                      |  |
|----------------------|--|
| Input Voltage:       | Specified: 90-264VAC, Nameplate: 100-240VAC  |
|                      | 100% rated load current for 90-264VAC        |
|                      | 90% rated load current for 85-264VAC         |
|                      | 100% rated load current for 90-370VDC        |
| Input Frequency:     | Specified: 47-63Hz, Nameplate: 50-60Hz       |
| Power Factor:        | 0.90 min. @ 230VAC, 0.97 min. @ 115VAC       |
| No Load Input Power: | < 150mW @ 115/230VAC                         |
| Inrush Current:      | < 65A @ 115VAC, < 130A @ 230VAC (cold start) |
| Efficiency:          | DoE Level VI and EU CoC Tier 2 compliant     |

### Output

|                      |  |
|----------------------|--|
| Turn-on Delay:       | 1 second typ.  |
| Output Regulation:   | ± 4% (measured at output connector)  |
| Line Regulation:     | ± 0.5% typ. (measured at output connector, full load)  |
| Ripple:              | 1% or 200mV, whichever is greater (using a 47µF low-ESR cap + 0.1µF ceramic capacitor, measured @ 20MHz BW, at output connector) |
| Startup Overshoot:   | 5% max.  |
| Transient Response:  | 5% max. deviation, 1ms typ. recovery time (with 25% to 50% load step)  |
| Hold-up Time:        | 20ms min.  |
| Power Indicator:     | Green LED  |
| Switching Frequency: | Variable, 25KHz - 125KHz, depending on load  |

### Protections

|                             |   |
|-----------------------------|---|
| Input Protection:           | 300VAC MOV transient suppressor, input line fusing  |
| Over-Current Protection     | Current limited to less than $< 170W / V_{out(nom.)}$ and $< 13A$ , auto-restart                    |
| Short-Circuit Protection:   | Auto-restart  |
| Over-Voltage Protection:    | 110 - 135% (60V max for models rated 45 - 54V), full load condition, latched off, cycle AC to reset |
| Over-Temperature Protection | Internal ambient NTC temperature sensor, latched off, cycle AC to reset                             |

### Environmental

|                        |   |
|------------------------|---|
| MTBF:                  | 1,500,000 hours @ 25°C ambient, full load (Telcordia SR-332, Issue 3) |
| Operating Temperature: | -10°C to 40°C (full load)   |
| Storage Temperature:   | -30°C to 80°C   |

#### PROPRIETARY INFORMATION

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<https://www.globtek.com/ds/NiUrbqbnan7/d5tEEhVKX4u.html>

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|           |   |
|-----------|---|
| Humidity: | 0% to 95% relative humidity, non-condensing   |
| Altitude: | 5000m   |
| Cooling:  | Convection  |
| RoHS:     | Complies with EU 2011/65/EU and China SJ/T 11363-2006   |
| Note 1:   | Regarding operating temperature   |
|           | a. See below de-rating table for output power capability at alternate temperature<br>b. Extended low-end temperature range available as a custom option |

## Safety

|   |  |
|---|--|
| Dielectric Withstand Voltage:             | 4000VAC or 5656VDC from input to output<br>3000VAC or 4242VDC from input to earth (Class I models only)  |
| Touch Current:                            | Class I: 20μA max.<br>Class II: 70μA max.  |
| Earth Leakage Current                     | Class I: 300μA max.<br>Class II: N/A   |
| Means of Protection:                      | 2 x MOPP   |
| Output Isolation Options:                 | Class I: C6 or C14 inlet (output negative tied to Earth contact)<br>Class II: C8 or C18 inlet<br>Class II FE: C6 or C14 inlet (output isolated from Earth contact)<br>Review isolation options by reading our white paper <a href="#">PSU Isolation and Identity</a> . |
| Primary-to-Secondary Bridging Capacitors: | Two IEC60384-14 Class Y1 capacitors  |
| Earth Continuity Test:                    | < 0.1Ω between earth pin (on AC inlet) and PCB termination point (Class I models only)   |
| Compliant Standards:                      | See listing at end of this datasheet for specific standards  |

## EMC

|  |  |
|--|--|
| Applicable Standards:                    | Medical: EN60601-1-2, 4th edition<br>Emissions: EN55032, EN61000-6-3, EN61000-6-4, CISPR11, CISPR22<br>Immunity: EN55024, EN61000-6-1, EN61000-6-2 |
| Conducted Emissions:                     | Class B, FCC Part 15, Class B (with resistive load)  |
| Radiated Emissions:                      | Class B, FCC Part 15, Class B (with resistive load)  |
| Harmonic Current Voltage Distortion:     | EN61000-3-2, Class A   |
| Voltage Fluctuations/Flicker:            | EN61000-3-3  |
| Electrostatic Discharge (ESD) Immunity:  | EN61000-4-2, 10KV contact discharge, 18KV 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   |

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## Enclosure

|                              |  |
|------------------------------|--|
| Housing:                     | High impact plastic, 94V0 polycarbonate, non-vented    |
| Size:                        | 149.4 * 62.6 * 33.5mm, $\pm$ 1.0mm                     |
| AC Input Mechanical Options: | C6, C8, C14, or C18 IEC inlet                          |
| Markings:                    | Label and/or pad printed and/or laser-etched into case |

## Special Options

1. Reduced leakage current to meet IEC60601-1 Type-CF limits
2. Improved EN61000-4-5 line surge immunity (3KV differential, 5KV common-mode)
3. Reduced harmonic current levels for LED lighting (EN61000-3-2 Class C) for 85 - 120W load
4. Short term output surge capability for motors or other high peak current loads
5. Ruggedized construction with improved shock and vibration resistance
6. Compliance to IPC-600, IPC-610, IPC-6012 Class 2 or 3
7. Custom cordsets, special cordage and connector types
8. Custom housing markings
9. Custom housing/cordage colors
10. Tightened output voltage tolerance
11. Reduced output ripple level
12. Reduced output power rating
13. Low temperature option, down to -40°C
14. Epoxy potted version "P2" or "P3" suffix, with flying wires or custom cables
15. "Back EMF" upgrade, for motor loads and other high inductance applications with reverse energy flow requirements
16. Improved ingress protection (IP) rating

## Output Connectors

- Several output connector options are available with various output current ratings. GlobTek can supply 10A rated 2.1mm and 2.5mm style DC Power Jacks, to complement our 10A output rated 2.1mm and 2.5mm DC power plugs used on our output cordsets.
- Please visit our real-time listing of mating connector product offering:  
<https://en.globtek.com/news/high-current-coaxial-barrel-plug-jacks-for-high-wattage-power-supplies>

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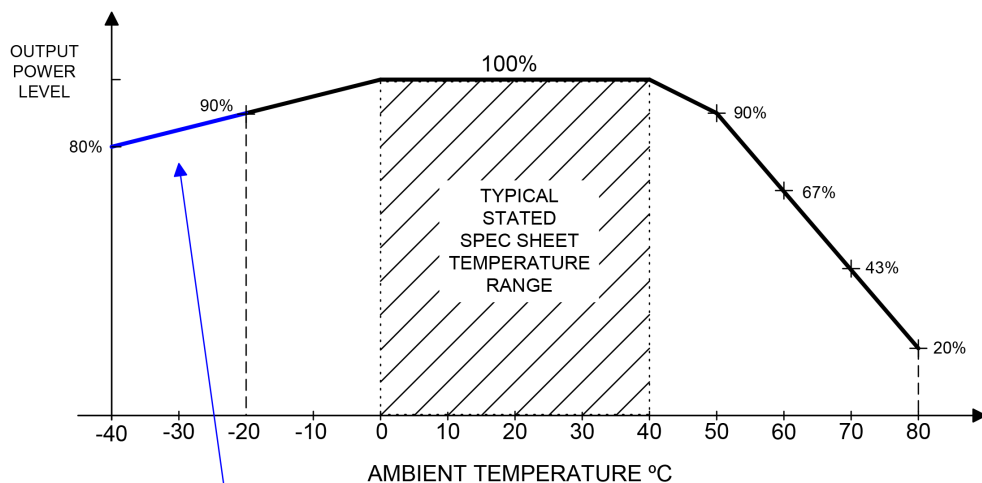
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## DERATING CURVE

### TYPICAL EXTERNAL POWER SUPPLY DERATING CURVE

(GTM96900 LPS PRODUCTS)



Blue Line represents special/optional Low Temperature,  
High Performance Construction

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**INPUT CONFIGURATION**Description

See "Blade/Cord Installed" section. Contact GlobTek for customization requests such as Molded country plugs, Molex or TE connectors, or IEC connectors mounted on any type of cable in any customer specified lengths.

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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  | CB for IEC 62368-1:2014 (Second Edition)   |
|                    | Test standard:<br>EN 55032: 2012+AC: 2013<br>EN 61000-3-2:2014<br>EN 61000-3-3:2013<br>EN 55024:2010<br>EN 60601-1-2:2015  |
|                    | 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%205-20-22.pdf">http://www.globtek.com/pdf/F-GT-DJD-8.4.1-006%20China%20RoHS%20Declaration%205-20-22.pdf</a>              |
| Conforms to AAMI<br>STD.ES60601-1,IEC<br>60601-1-11<br>Certified to CAN/CSA<br>STD.C22.2 NO.60601-1 | Conforms to AAMI STD.ES60601-1,IEC 60601-1-11<br>Certified to CAN/CSA STD.C22.2 NO.60601-1   |
| Conforms to UL STD.<br>60950-1<br>Certified to CSA STD<br>C22.2 NO.60950-1                          | Conforms to UL STD. 60950-1<br>Certified to CSA STD C22.2 NO.60950-1   |
| Conforms to UL STD.<br>62368-1<br>Certified to CSA STD<br>C22.2 NO.62368-1                          | Conforms to UL STD. 62368-1<br>Certified to CSA STD C22.2 NO.62368-1   |
|                  | Declaration ДС № EAЭС 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   |
|   | JAPAN TUV R-PSE, Cert. No. JD 50469658, to J62368-1(H30) , J55032(H29),J3000(H25)[15V or   |

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|---|--|
| <br>GlobTek, Inc.  | less]. Please reference the following website for guidelines on PSE regulations:<br><a href="https://www.globtek.com/r2/Szj4Vb">https://www.globtek.com/r2/Szj4Vb</a>  |
| <br>GlobTek, Inc.  | JAPAN TUV R-PSE, Cert. No. JD 50469658, to J62368-1(H30) , J55032(H29),J3000(H25)[DC30?60V]. Please reference the following website for guidelines on PSE regulations: <a href="https://www.globtek.com/r2/Szj4Vb">https://www.globtek.com/r2/Szj4Vb</a> |
| <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)   |
|    | Morocco SDoC declaration<br><a href="http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/">http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/</a>  |
| <br>GlobTek, Inc.  | 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:<br><a href="https://www.globtek.com/r2/Szj4Vb">https://www.globtek.com/r2/Szj4Vb</a>  |
| RoHS  | Specifications of directive 2011/65/EU Annex VI (ROHS-2) with amendment 2015/863-EU (ROHS-3)<br><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 62368-1:2014 + A11 ( <a href="http://www.intertek.com/marks/s/">http://www.intertek.com/marks/s/</a> )   |
| <br>RoHS000158101/07<br>RoHS Symbol      Serial NO.      YEAR      WEEK<br>Class NO for production | Serial Number Information  |
|    | UKCA Certification   |
|   |  |

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|--|---|
| <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_en.htm">http://ec.europa.eu/environment/waste/weee/index_en.htm</a> )<br>Mark is on the label or Molded in the case |