

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

Model:GTM961005P-100PD-USBCJ-T2

October 7, 2022

GTM961005P-100PD-USBCJ-T2

Information

| | |
|-------------------------------|---|
| Model Number | GTM961005P-100PD-USBCJ-T2 |
| Description | GTM961005P-100PD-USBCJ-T2, USB Adaptive Power Source ICT/ITE/Medical Power supply, Desktop/External, Regulated Switchmode AC-DC Power Supply AC Adaptor, , Input Rating: 100-240V~, 50-60Hz, IEC 60320/C8 AC Inlet connector, Class II, Non-Earth Ground (aka "Figure-8"), Output Rating: 100 Watts, Power rating with convection cooling (W) , 3.3-21V in 0.1V increments, Approvals: PSE; Level VI; RoHS; VCCI; WEEE; Double Insulation; EAC; Morocco; China RoHS; CE; UKCA; Ukraine; |
| Model Picture | |
| Agency Documents | |
| CE EC-Declaration | https://www.globtek.com/pdf/ec_declaration/a003a00000NI5XSEA1 |
| RoHS/RoHS2 Declaration | https://www.globtek.com/pdf/rohs_cert/a003a00000NI5XSEA1 |
| REACH Declaration | 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

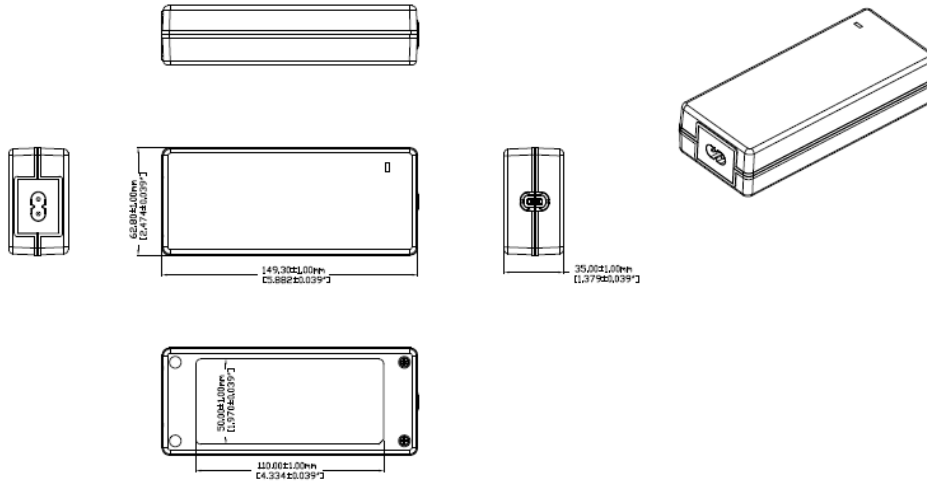
| | |
|--------------------|---|
| Type | Desktop/External |
| Technology | Regulated Switchmode AC-DC Power Supply AC Adaptor |
| Category | USB Adaptive Power Source ICT/ITE/Medical Power supply |
| Input Voltage | 100-240V~, 50-60Hz |
| I/P Amps (A) | 1.5A |
| Wattage (W) | 100.0 |
| Vout Range (V) | 3.3-21 |
| Efficiency Level | USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782 |
| Ingress Protection | IP41 |
| Size (mm) | 149.3 x 62.8 x 34.0 +/-1.0 |

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ENCLOSURE



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RATING TABLE

| Model Number | Voltage | Amps(A) | Watts(W) | RFQ |
|---------------------------|---------|---------|----------|---------------------|
| GTM961005P-100PD-USBCJ-T2 | V | | | RFQ |

SPECIFICATIONS

USB Power Delivery Capabilities

| | |
|---------------------------------------|--|
| Protocol supported: | USB Power Delivery (PD) 2.0/3.0 + PPS |
| Advertised Power Data Objects (PDOs): | 5V, 9V, 12V, 15V, 15.1V, 20V, PPS (3.3 - 21V) |
| Note 1: | Custom fixed PDOs available upon request. PDO1 must be 5V. PDO2 through PDO7 may be set to any custom voltage from 3.3V to 21V, with a step size of 100mV. |
| Note 2: | In critical applications, the use of a non-authorized USB PD power adapter may pose a substantial risk. The power adapter's identity may be checked and validated prior to PD contract negotiation by using USB PD Vendor Defined Messages (VDMs). Please see our article Product Security and Risk Mitigation for USB Power Delivery (PD) Based Systems for additional information. |

Input

| | |
|----------------------|--|
| Input Voltage: | Specified: 85-264VAC, Nameplate: 100-240VAC 100% rated load current for 85-264VAC 100% rated load current for 110-370VDC |
| Input Frequency: | Specified: 47-63Hz, Nameplate: 50-60Hz |
| No Load Input Power: | < 150mW @ 230VAC (EU CoC Tier 2 compliant) |
| Inrush Current: | 60A @ 115VAC, 120A @ 230VAC typ. (at peak of AC line, cold start) |
| Efficiency: | DoE Efficiency Level VI and CoC Tier 2 compliant (tested according to DoE 10 CFR Part 430, Subpart B, Appendix Z) |

Output

| | |
|---------------------|---|
| Turn-on Delay: | < 1 second @ 115VAC and full load |
| Output Regulation | ± 4% max. (measured at the end of a 1m long output cord) |
| Line Regulation: | ± 0.5% typ. (measured at the end of a 1m long output cord) |
| Ripple: | 75mV max. (0 - 100% load, using a 47µF low-ESR electrolytic cap + 0.1µF ceramic cap, measured @ 20MHz BW, at the output connector) |
| Transient Response: | 5% ΔV max. ; 1ms recovery time max. (for 25% - 75% step, Vout > 9V) 10% ΔV max. ; 1ms recovery time max. (for 25% - 75% step, Vout ≤ 9V) |
| Hold-up Time: | 20ms typ. (100VAC, 100% load) 25ms min. (100VAC , 75% load) |
| Power Indicator: | Green LED |

Protections

| | |
|-------------------|---|
| Input Protection: | MOV transient suppressor, input line fusing Level 1: 110-130%, Auto-recovery, adaptive to selected PDO |
|-------------------|---|

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| | |
|------------------------------|--|
| Over-Voltage Protection: | Level 2: 24-28V, Latched off, cycle AC to reset |
| Over-Current Protection: | 110-130%, Auto-recovery, adaptive to selected PDO |
| Short-Circuit Protection: | Auto-recovery |
| Over-Temperature Protection: | Level 1: Auto-recovery, temperature readable via USB PD 3.0 Extended Messages Level 2: 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: | -40°C to 80°C |
| 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 |

Safety

| | |
|-------------------------------|---|
| Applicable Standards: | Medical: IEC60601-1(3.1e) ITE/ICT: IEC62368-1 (3e) |
| Dielectric Withstand Voltage: | 4000VAC or 5656VDC from input to output 10mA, 1 minute |
| Output Leakage Current: | Class II "F1" (two-conductor input): NC: 100µA max. SFC: 150µA max. Class II "F2" (functional earth (FE)): NC: 10µA max. SFC: 100µA max. Class I (earthed output): NC: 5µA max. SFC: 100µA max. |
| Earth Leakage Current | 300µA max. NC & SFC (N/A for 2-conductor input models) |
| Means of Protection: | 2 x MOPP |
| Output Isolation Options: | -T2 suffix: Class II (two-conductor input) -T3 suffix: Class II (with functional earth (FE)) ~or~ Class I (earth wire connected directly to output negative) |
| Note 3: | Review output isolation options with our article: PSU Isolation and Identify |

EMC

| | |
|-----------------------|--|
| Applicable Standards: | Medical: IEC60601-1-2 (4e) Emissions: EN55032, IEC61000-6-3, IEC61000-6-4 |
|-----------------------|--|

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| | |
|---|---|
| | Immunity: EN55024, IEC61000-6-1 (4e), IEC61000-6-2 (4e) |
| Conducted Emissions: | EN55032, Class B (with resistive load) |
| Radiated Emissions: | EN55032, Class B (with resistive load) |
| Harmonic Current Voltage Distortion: | IEC61000-3-2, Class A |
| Voltage Fluctuations/Flicker: | IEC61000-3-3 |
| Electrostatic Discharge (ESD) Immunity: | IEC61000-4-2, 10KV contact discharge, 18KV air discharge, Criterion A |
| Radiated RF Immunity: | IEC61000-4-3, 10V/m @ 80-1000MHz, 3V/m @ 1-2.7GHz, 80% 1KHz AM, Criterion A |
| EFT/Burst Immunity: | IEC61000-4-4, 4KV/100KHz., Criterion A |
| Line Surge Immunity: | IEC61000-4-5, 2KV differential, 4KV common-mode, Criterion A |
| Conducted RF Immunity: | IEC61000-4-6, 10VRMS, 80% 1KHz AM, Criterion A |
| Voltage Dip Immunity: | IEC61000-4-11, Criterion B/C |

Enclosure

| | |
|-----------|---|
| Housing: | High impact plastic, 94V0 polycarbonate, non-vented |
| Markings: | Adhesive backed label or laser engraving |

Prevention of Unauthorized Use

| | |
|---------------------|--|
| | In critical applications, the use of a non-authorized USB PD power adapter may pose a substantial risk to system safety or performance. |
| USB Power Delivery: | The power adapter's identity may be checked and validated prior to PD contract negotiation by use of USB PD Vendor Defined Messages (VDMs). The power adapter will respond to a USB PD "Discover Identity" VDM with 0x4754 in the "ProductID" field. Additionally, a non-standard 15.1V PDO is included. Host systems may be designed to reject a power adapter which does not contain a 15.1V PDO. |
| Note 5: | These measures do not ensure a secure implementation, and are only suggested as a method of risk mitigation. |
| Note 6: | Please see our article Product Security and Risk Mitigation for USB Power Delivery (PD) Based Systems for additional information. |

Special Options

Non-standard - Contact GlobTek

1. Custom housing and output cord colors
2. Custom fixed output cord length (1m, 2m, 3m lengths)
3. Custom markings and marking methods
4. Custom USB PD PDOs: Output voltages selectable between 3.3V and 21V, in 100mV increments

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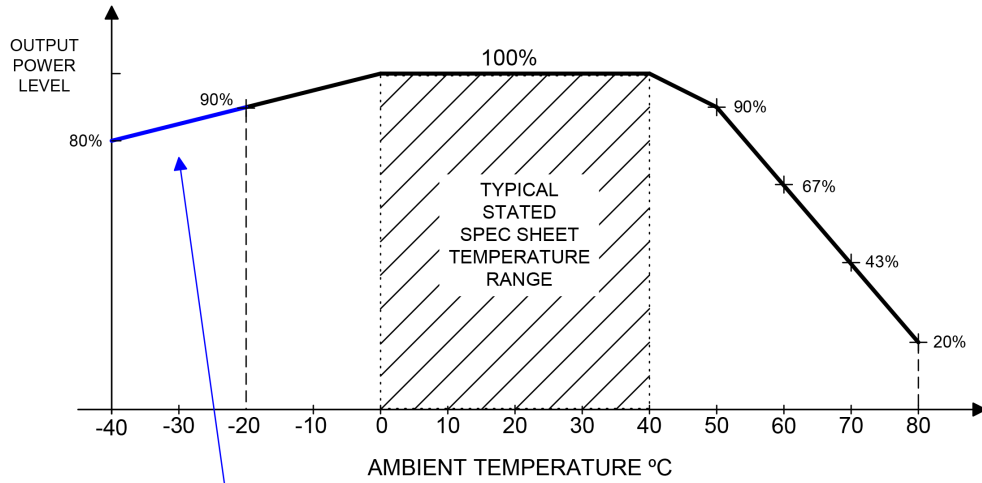
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DERATING CURVE

TYPICAL EXTERNAL POWER SUPPLY DERATING CURVE

(GTM96900 LPS PRODUCTS)



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

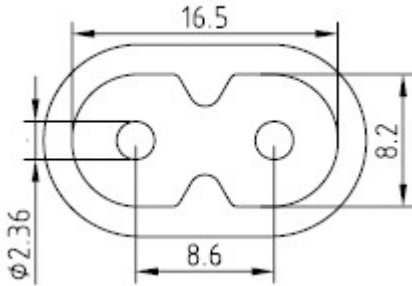
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INPUT CONFIGURATION

Description IEC 60320/C8 AC Inlet connector, Class II, Non-Earth Ground (aka "Figure-8")



Mates with IEC 60320/C7 Plug

Below are standard cordsets which are "not included" (unless stated above); these may be purchased separately or packaged with the power supply. Please 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 | Type | Standard | Connector | Length (mm) | Length (feet) |
|-------------------------------------|--|------------|------------|-------------|---------------|
| 2094112M703(R) | Argentina (Type I) | IRAM 2063 | IEC 320/C7 | 2000 | 7 |
| 5014112M703A(R) | Australian (Type I) | AS 3112 | IEC 320/C7 | 2000 | 7 |
| 207B4111M8703(R) | Brazil (Type N) | NBR14136 | IEC 320/C7 | 1800 | 6 |
| 4533501M8703(R) | China (Type A) | GB 2099.1 | IEC 320/C7 | 1830 | 6 |
| 2074112M703A(R) | European (Type C) | CEE 7/16 | IEC 320/C7 | 2000 | 7 |
| 2074112M703AEUSA(R) | European/South Africa Combo(Type C) | CEE 7/16 | IEC 320/C7 | 2000 | 7 |
| 2084111M8703B(R) | India (Type D) | IS 1293 | IEC 320/C7 | 1800 | 6 |
| 451J3401M8703(R) | Japan (Type A) | JIS 8303 | IEC 320/C7 | 1830 | 6 |
| 2044112M703A(R) | Korea (Type C) | KS C8305 | IEC 320/C7 | 2000 | 7 |
| 4511116F703A(R) | North America (Type A) | NEMA 1-15P | IEC 320/C7 | 1830 | 6 |
| 2084111M8703(R) | South Africa (Type M) | BS 546 | IEC320/C7 | 1830 | 6 |
| 4033401M8703A(R) | Taiwan (Type A) | CNS690 | IEC 320/C7 | 1830 | 6 |
| 6104112M703A(R) | UK, Hong Kong, Singapore, Gulf States (Type G) | BS1363 | IEC 320/C7 | 2000 | 7 |

PROPRIETARY INFORMATION

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<https://www.globtek.com/datasheet/w188028>

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| | | | | |
|----------------------------------|---|--------------|---------------|---|
| 451G1116F703A(R) | Gulf States (Kuwait, Bahrain, Oman, Qatar, Saudi Arabia, Yemen and the United Arab Emirates (UAE)(Type A) | Nema 1-15P | IEC320/C71830 | 6 |
| 6303742M5703(R) | Thailand (Type C) | TIS 166-2549 | IEC320/C72500 | 8 |

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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 |
|--|--|
|  | CE Certification |
|  | CHINA SJ/T 11364-2014, China RoHS Chart: http://en.globtek.com/globtek-rohs.php |
|  | |
|  | Declaration ДС № EAЭC N RU Д-US.KA01.B.10453_19 Custom Union of Russia, Belarus and Kazakhstan http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration |
|  GlobTek, Inc. | JAPAN TUV R-PSE, Cert. No. JD 50469658, to J62368-1(H30) , J55032(H29),J3000(H25)[15V or less]. Please reference the following website for guidelines on PSE regulations: http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/ |
|  | 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 http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/ |
| 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 |
|  | UKCA Certification |
| | |

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| | |
|--|--|
|  10276 | 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 |