

Model:GTM93021-20VV-P2 (Variable output connector)

May 5, 2024

## GTM93021-20VV-P2 (Variable output connector)

### Information

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Number                  | GTM93021-20VV-P2 (Variable output connector)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Description                   | GTM93021-20VV-P2 (Variable output connector), ICT / ITE / Medical Power Supply/Class 2/Household Power Supply, Potted/Encapsulated in plastic housing, Regulated Switchmode AC-DC Power Supply AC Adaptor, , Input Rating: 100-240V~, 50-60 Hz, , Output Rating: 20 Watts, Power rating with convection cooling (W) , 5-48V in 0.1V increments, Approvals: Fuse 60335; CB EN/IEC 60335-1; CB 61558-2-16; CE; cETLus UL1310; cETLus UL1310; China RoHS; Double Insulation; Fuse 60335; GOST-R; IP68; NEMKO EN/IEC 60335-1; PSE; RoHS; 61558-1; IEC 61558-1; Ukraine; UL 1310; UL 1310; VCCI; WEEE; UKCA; |
| Model Picture                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Agency Documents              | <a href="http://globtek.info/certs/GTM93021">http://globtek.info/certs/GTM93021</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CE EC-Declaration             | <a href="https://www.globtek.com/pdf/ec_declaration/a000c00000PGsbaEAD">https://www.globtek.com/pdf/ec_declaration/a000c00000PGsbaEAD</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| RoHS/RoHS2 Declaration        | <a href="https://www.globtek.com/pdf/rohs_cert/a000c00000PGsbaEAD">https://www.globtek.com/pdf/rohs_cert/a000c00000PGsbaEAD</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**

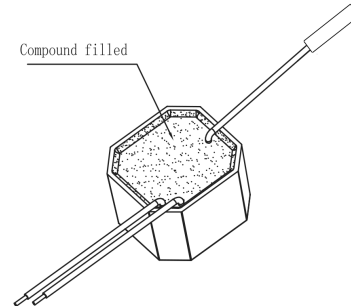
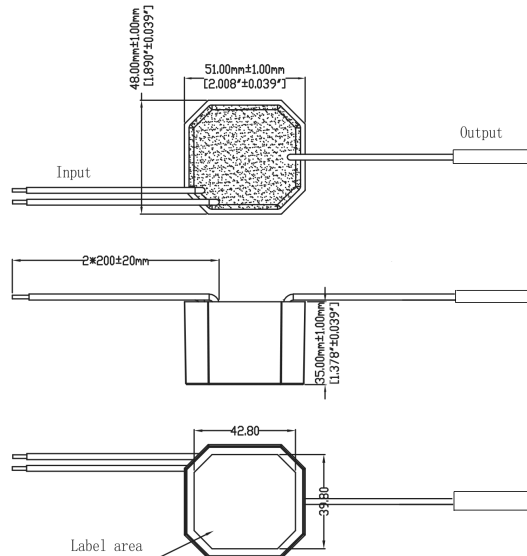
|                    |                                                                 |
|--------------------|-----------------------------------------------------------------|
| Type               | Potted/Encapsulated in plastic housing                          |
| Technology         | Regulated Switchmode AC-DC Power Supply AC Adaptor              |
| Category           | ICT / ITE / Medical Power Supply/Class 2/Household Power Supply |
| Input Voltage      | 100-240V~, 50-60 Hz                                             |
| I/P Amps (A)       | 0.6 A Max                                                       |
| Wattage (W)        | 20.0                                                            |
| Vout Range (V)     | 5-48                                                            |
| Efficiency Level   | V                                                               |
| Ingress Protection | IP68                                                            |
| Size (mm)          | 51.0*48.0*35.0                                                  |

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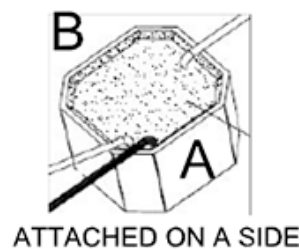
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## ENCLOSURE



BACKGROUND:BLACK  
TEXT:WHITE



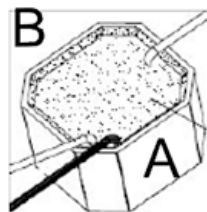
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BACKGROUND:BLACK  
TEXT:WHITE



ATTACHED ON B SIDE

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## RATING TABLE

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

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## 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. Output Regulation: +/- 5% measured at the output connector
04. Line Voltage Regulation: +/- 1% typical measured at full load
05. Output Ripple (Vp-p): +/-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
06. Turn-ON/OFF Overshoot: 5% maximum, 1 mS typical recovery time for 25% to 50% step load
07. Turn-ON Delay: 3000 mS, maximum @ full load, nominal line
08. Hold-Up Time: 8 mS typical @ nominal input voltage and full load
09. Inrush Current: 30A maximum cold start @ 240Vac input
10. Switching Frequency: 65 KHz typical

### B) PROTECTION

01. Over-Voltage: Electronically Protected Zener clamp across the output
02. Short Circuit: Electronically Protected unit will auto recover upon removal of fault
04. Input Protection: Input line and neutral fusing

### C) SAFETY

01. Dielectric Withstand Voltage: 4242Vdc from primary to secondary
02. Touch Current: Maximum allowed values: 100uA NC(Normal condition) 500uA SFC(single fault condition)
03. Earth continuity test:<0.1 Ohm or < 0.2 Ohm when with a non-detachable Power Supply cord, Class I Only
04. ROHS 2: Complies with EU 2011/65/EU and China SJ/T 11363-2006

### D) OTHER:

01. MTBF: 200,000 Hours @ 25°C ambient temperature
02. Operating Temperature: 0°C to 50°C ambient temperature
03. Humidity: 0% to 90% relative humidity
04. Storage Temperature: -10°C to 80°C
05. Cooling: Convection

### E) ENCLOSURE

01. Housing: High impact plastic, 94V0 polycarbonate, non-vented
02. Size: 48.0 Length x 51.0 Width x 35.0 High mm +/-1.0 mm suitable for installation in North American 1-Gang Old Work Electrical Box / typical unterputz Power Supply (netzteil) for "Hohlwanddose" per VDE0606 (Einbau-Netzteil Stromversorgung für Unterputz-Installation)
03. Markings: Label and/or Pad Printed and/or Molded in the case

## PROPRIETARY INFORMATION

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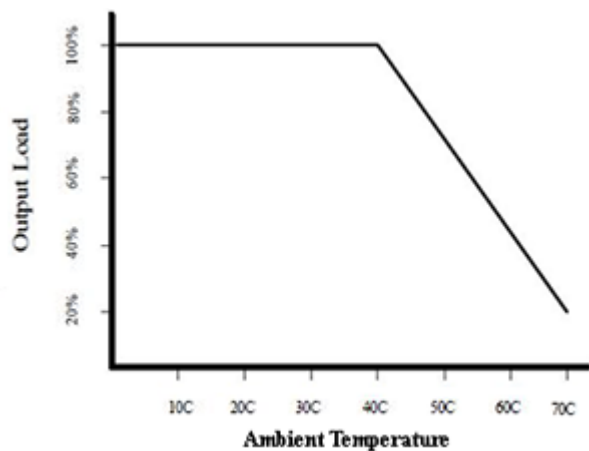
<https://www.globtek.com/ds/C75VQgs6zEp/cyBH7DThY4.html>

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## DERATING CURVE



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**INPUT CONFIGURATION****PROPRIETARY INFORMATION**

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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                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                      | Book 60335 up to 36 Volts                                                                                                                                                                                                                                                                                                  |
| No Logo Applicable                                                                                                    | CB to 60335-1 5th Edition (Safety of Household and Similar Electrical Appliances, Part 1: General Requirements) CB Report/ Certificate IEC 60335-1:2010 Up to 36 volts only                                                                                                                                                |
| No Logo Applicable                                                                                                    | CB report to IEC 61558-2-16_2009 1st Edition IEC 61558-1_2005 2nd Edition + A1_2009 EN 61558-1-16_2009 EN 61558-1_2005 + A1_2009.pdf                                                                                                                                                                                       |
|                                      | CE Certification                                                                                                                                                                                                                                                                                                           |
|                                    | Conforms to UL Std. 1310 CLASS 2 Power Units Cert. to CSA Std. C22.2 NO. 223 Up to 36 volts                                                                                                                                                                                                                                |
| <br>Intertek<br>Class 2 Power Unit | cETLus-Cert 4007497 UL1310 Recognized Component up to 42.4 volts                                                                                                                                                                                                                                                           |
|                                    | 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>                                                                                |
|                                    |                                                                                                                                                                                                                                                                                                                            |
| T1.6A 250VAC<br>                   | Fuse 60335 T1.6A 250VAC Up to 36 volts                                                                                                                                                                                                                                                                                     |
|                                    | GOST-R mark for Russia(Document: <a href="http://www.globtek.com/html/iso_certificates/GT_GOST-R.pdf">http://www.globtek.com/html/iso_certificates/GT_GOST-R.pdf</a> ).<br>03/15/2015. Due to lack of demand, GlobTek will not be renewing it's GOST certification. Please contact your sales engineer for pricing on EAC. |
|                                                                                                                       |                                                                                                                                                                                                                                                                                                                            |

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ta:50°C</b>                                                                                                                                                                                                                                         | IEC 61558-1 GTM93021 Maximum Ambient Temperature, Max 50°C                                                                                                                                                                                              |
|                                                                                                                                                                       | Indoor Use Only - Mark is on the label or Molded in the case                                                                                                                                                                                            |
| IP68                                                                                                                                                                                                                                                   | Ingress Protection: ?IP68 to IEC60529:2001 Totally dust tight and Protected against long periods of immersion under pressure                                                                                                                            |
| <br><b>IEC/EN60335-1</b>                                                                                                                                              | NEMKO IEC/EN 60335-1 (Safety of Household and Similar Electrical Appliances, Part 1: General Requirements) up to 36 Volts                                                                                                                               |
| <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>                                                           |
|                                                                                                                                                                     | Transformer Symbol IEC 61558-1 SMPS Short-Circuit –Proof Safety Isolating Transformer                                                                                                                                                                   |
|                                                                                                                                                                     | Transformer Symbol IEC 61558-1 SMPS Switch Mode Power supply                                                                                                                                                                                            |
|                                                                                                                                                                     | UKCA Certification                                                                                                                                                                                                                                      |
| <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> )                                                                                            |
|  <b>WARNING</b><br>RISK OF ELECTRIC SHOCK<br>DRY LOCATION USE ONLY<br>FOR INDOOR USE ONLY<br>See instructions if the input<br>plug does not fit the power<br>outlet | UL1310 Warning Label Up To 36 Volts For GTM93021 Only 1 of 2                                                                                                                                                                                            |
|                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                         |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>DO NOT REMOVE THE TAG</b><br><b>AVERTISSEMENT</b><br>Risque de choc électrique<br>Utilisation endroit sec<br>Pour une utilisation en intérieur | UL1310 Warning Label Up To 36 Volts For GTM93021 Only 2 of 2                                                                                                                                                      |
|                                                                                                                                                    | 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 |