

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

Model:GTM96600-60VV.V-T3

May 20, 2019

GTM96600-60VV.V-T3

Information

Model Number GTM96600-60VV.V-T3

Description GTM96600-60VV.V-T3, ITE / Medical Power Supply/Class 2/Household Power Supply, 60601-1-4th Ed. , Desktop/External, Regulated Switchmode AC-DC Power Supply AC Adaptor, , Input Rating: 100-240V~, 50-60Hz, IEC 60320/C14 AC Inlet Connector, Class I, Earth Ground, Output Rating: 60 Watts, Power rating with convection cooling (W) , 5-54V in 0.1V increments, Approvals: LPS; India; IP41; CB 60335; Fuse 60335; 230V CoC Tier 2; ETL; EAC; South Africa; UL 1310; cETLus; cETLus; CB 62368; S-Mark 60950; IRAM; Ukraine; CB 60950; Class I; ETL; NOM; CCC; RCM; CB 60601-1; S-Mark IEC/EN 60601-1; ETL; cULus; Taiwan BSMI; Korea (6.3VOnly); PSE; PSE; PSE; WEEE; VCCI; CE; Level VI; China RoHS; RoHS; FCC;

Model Picture



Agency

Documents <http://www.globtek.info/certs/GTM96600-TZ/>

CE

EC-Declaration https://www.globtek.com/pdf/ec_declaration/a0Oa000000MmCcmEAF

RoHS/RoHS2

Declaration https://www.globtek.com/pdf/rohs_cert/a0Oa000000MmCcmEAF

Declaration

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

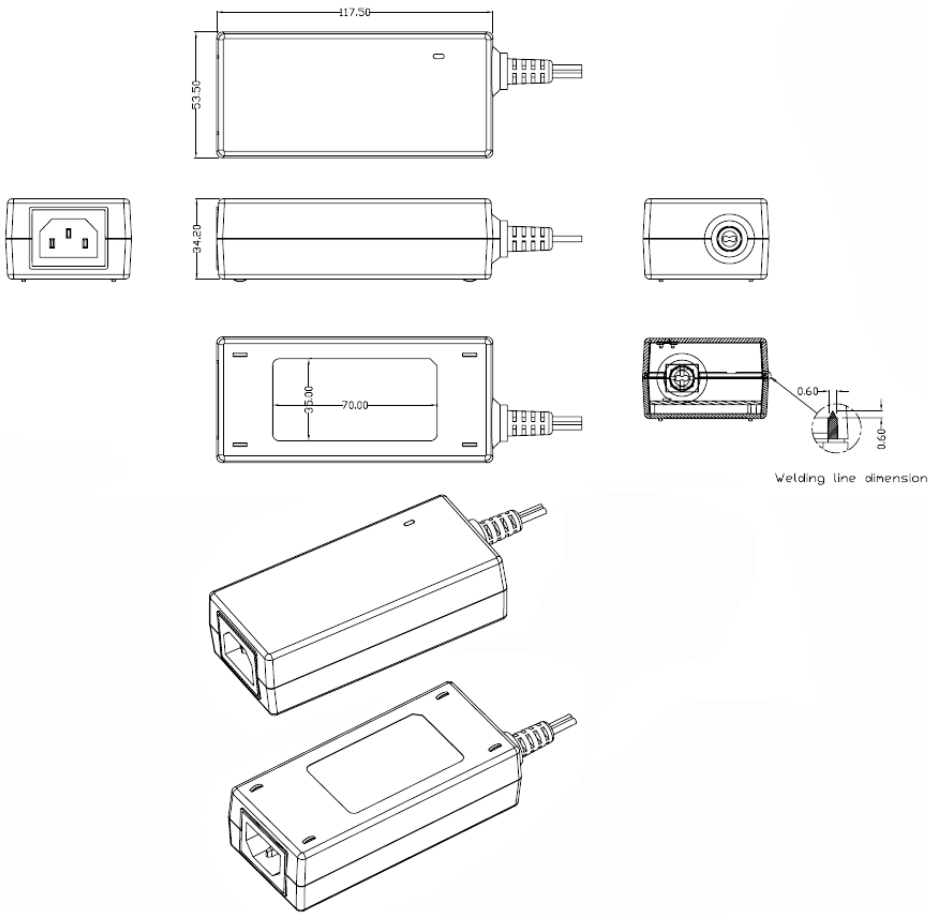
Type	Desktop/External
Technology	Regulated Switchmode AC-DC Power Supply AC Adaptor
Category	ITE / Medical Power Supply/Class 2/Household Power Supply
Input Voltage	100-240V~, 50-60Hz
I/P Amps (A)	1.5A
Wattage (W)	60.0
Vout Range (V)	5-54
Efficiency Level	VI
Ingress Protection	IP41
Size (mm)	117.5*53.5*34.2

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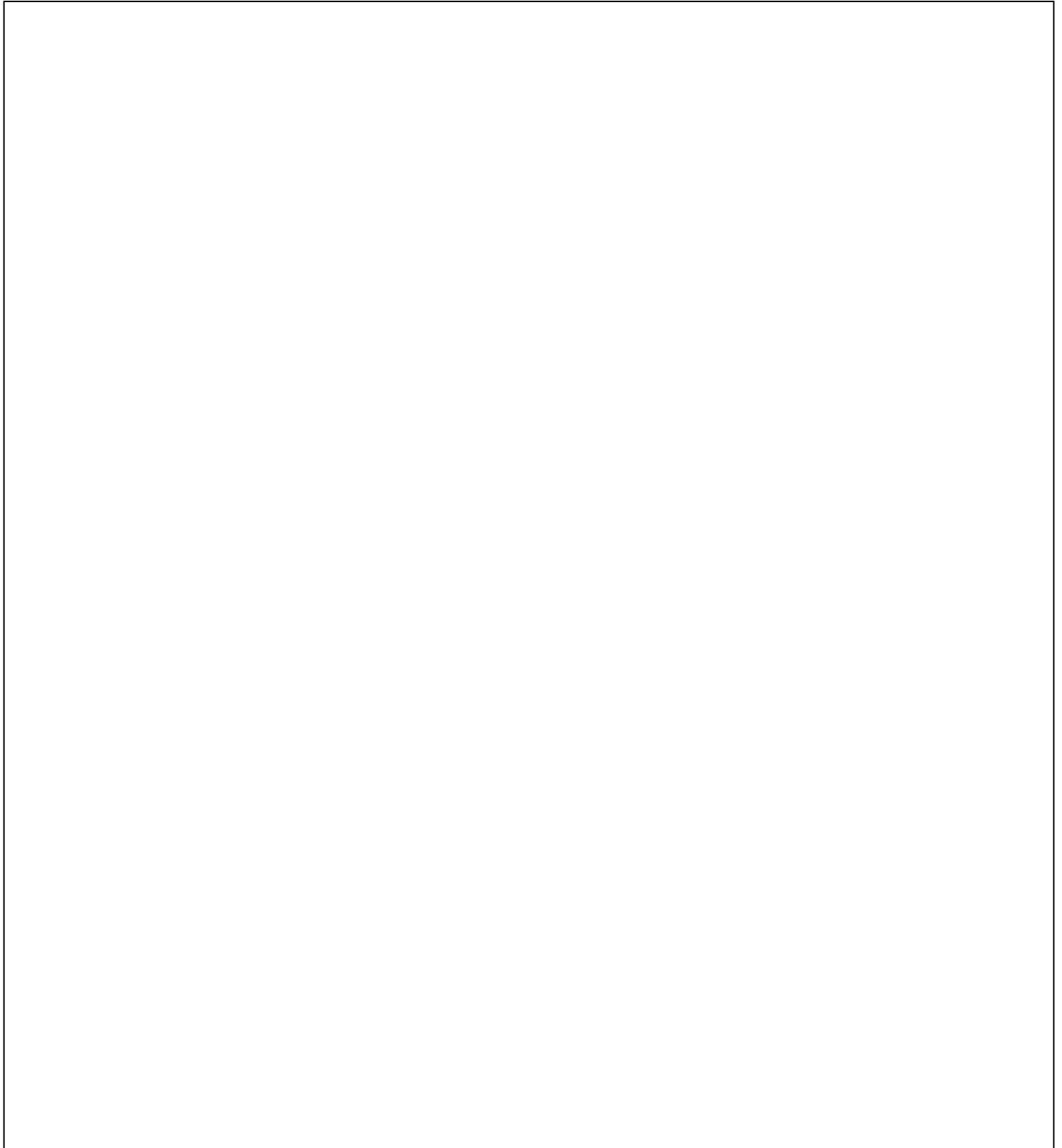
ENCLOSURE



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RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GTM96600-4005-T3	5 V	8	40.00	RFQ
GTM96600-4005.9-T3	5.9 V	6.77	39.94	RFQ
GTM96600-4808-T3	8 V	6	48.00	RFQ
GTM96600-5409-T3	9 V	6	54.00	RFQ
GTM96600-6010-T3	10 V	6	60.00	RFQ
GTM96600-6011-T3	11 V	5.454	59.99	RFQ
GTM96600-4812-T3	12 V	4	48.00	RFQ
GTM96600-6012-T3	12 V	5	60.00	RFQ
GTM96600-6013-T3	13 V	4.615	60.00	RFQ
GTM96600-6014-T3	14 V	4.285	59.99	RFQ
GTM96600-6015-T3	15 V	4	60.00	RFQ
GTM96600-6016-T3	16 V	3.75	60.00	RFQ
GTM96600-6017-T3	17 V	3.259	55.40	RFQ
GT-7TD-30-18	18 V	1.67	30.06	RFQ
GTM96600-6018-T3	18 V	3.333	59.99	RFQ
GTM96600-6019-T3	19 V	3.157	59.98	RFQ
GTM96600-6020-T3	20 V	3	60.00	RFQ
GTM96600-2424-T3	24 V	1	24.00	RFQ
GTM96600-6024-T3	24 V	2.5	60.00	RFQ
GTM96600-6027-T3	27 V	2.22	59.94	RFQ
GTM96600-6030-T3	30 V	2	60.00	RFQ
GTM96600-5133.5-T3	33.5 V	1.5	50.25	RFQ
GTM96600-6035-T3	35 V	1.714	59.99	RFQ
GTM96600-6048-T3	48 V	1.25	60.00	RFQ
GTM96650-6554-T3	54 V	1.203	64.96	RFQ
GTM96600-6054-T3	54 V	1.11	59.94	RFQ

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SPECIFICATIONS**A) ELECTRICAL SPECIFICATIONS:**

01. Input Voltage: Specified 90-264 Vac, Nameplate rated: 100-240Vac
 - 90-264 Vac range @ 100% of rated load current
 - 85-264 Vac range @ 85% of rated load current
 - 110-370 VDC range @ 100% of rated load current
02. Input Frequency: Specified 47-63 Hz, Nameplate rated 50-60Hz
03. Output Regulation: +/- 5% measured at the output connector
04. Line Voltage Regulation: +/- 0.5% typical measured at full load
05. Green Power On Indicator LED
06. Output Ripple (Vp-p): 1% or 100 mV whichever is greater, measured at 20 MHz bandwidth with 0.1 uf ceramic capacitor in parallel with a low impedance 47 uf electrolytic capacitor connected at the end of the output connector
07. Turn-ON/OFF Overshoot: 5% maximum, 1 mS typical recovery time for 40% to 70% step load
08. Turn-ON Delay: 1 second maximum @ full load, nominal line
09. Hold-Up Time: 8 mS typical @ nominal input voltage and full load
10. Inrush Current: 30A/60A maximum cold start @ 115/230Vac input
11. Efficiency: Compliant with Efficiency Level VI and CoC Tier 2 standards
12. No Load Standby Power: <0.075 W @ 230Vac for <= 49W output power rating,
<0.15W @ 230Vac for > 49W output power rating

B) PROTECTION

01. Input Protection: Input line fusing and 300Vac MOV
02. Short Circuit/ Overload: Electronically Protected unit will auto recover upon removal of fault
 - Output Current Limit: 110% to 160% of rated output current
(upper end of current limit range is determined by normal output power rating,
not derated output power level)
03. Output Over-Voltage: 110% to 130% of nominal output voltage

C) SAFETY

01. Dielectric Withstand Voltage: 4000Vac or 5656Vdc from input to output,
On Class I models, 3000Vac or 4242Vdc from input to earth
02. Earth Leakage Current: Class I models < 300uA, N/A for Class II models
03. Touch Current: Class I models < 20uA, Class II models < 85uA, F2 Models < 20uA
04. Output Isolation Options:
 - a) C8 or C18 Inlet, Class II
 - b) C6 or C14 Inlet, Class II FE, Output Isolated from Earth contact
 - c) C6 or C14 Inlet, Class I, Output negative directly attached to Earth contact
05. Earth Continuity Test: < 0.1 Ohm between Earth Pin at AC input and PCB termination point (Class I models only)
06. Means of Protection: 2 x MOPP
07. Compliant Standards: See listings at end of this drawing for specifics

D) EMC

- EN 60601-1-2, 4th edition
Emissions, per EN 55032, EN 61000-6-3, EN 61000-6-4, CISPR11 and CISPR22
- Conducted Emissions: Class B, FCC Part 15, Class B
 - Radiated Emissions: Class B, FCC Part 15, Class B
- Line Frequency Harmonics EN61000-3-2, Class A
Voltage Fluctuations/Flicker EN61000-3-3
- Immunity, per EN 55024, EN 61000-6-1, EN 61000-6-2

PROPRIETARY INFORMATION

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<http://en.globtek.com/datasheet/id/a00a000000MmCcm>

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Static Discharge Immunity EN61000-4-2, 10kV Contact Discharge, 20kV 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, Criteria

E) OTHER:

01. MTBF: 1,000,000 Hours @ 40°C ambient temperature, Full Load
02. GTM96600 Family: -20°C to 40°C ambient temperature with full load
Regarding Operating Temperature,
 - a- See below derating table for output power capability at alternate temperature
 - b- Extended low end temperature range available as custom option
03. Operating Humidity: 0% to 95% relative humidity, non-condensing
04. Storage Temperature: -30°C to 80°C
05. Operating Altitude: 5000 Meters
06. ROHS: Compliant with latest regulations, see approvals section below

F) ENCLOSURE

01. Housing: High impact plastic, 94V0 polycarbonate, non-vented
02. Markings: Label or Laser Printed
03. AC Input mechanical options: Desktop C6, C8, C14 or C18 IEC Inlet.
Hybrid option (Desktop or Changeable Blade Wall Plug-in) Class I or Class II input

G) SPECIAL OPTIONS

01. Cost reduction, removal of LED
02. Custom Cordsets, various cordage types, and connector types
03. Custom Markings
04. Short term Output Surge Capability for motor loads, and other high peak current loads. Available to 120W for 1 second, and higher levels possible for limited input voltage range, or allowed voltage dip.
05. Reduced Leakage Current versions
06. Tightened output voltage tolerance
07. Reduced output ripple level
08. Reduced output power rating marking
09. High Rel PCB laminate with Plated through Holes for IPC610 Class 2 Compliance
10. Low Temperature operation, down to -40°C
11. Special Housing Colors and Cordset Colors
12. Back EMF applications, custom solutions. For unusual motor load aps and other high inductance reverse energy flow requirements
13. Improved Ingress Protection Rating

H) 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 <https://en.globtek.com/news/high-current-coaxial-barrel-plug-jacks-for-high-wattage-power-supplies> for a real time product offering of mating connectors.

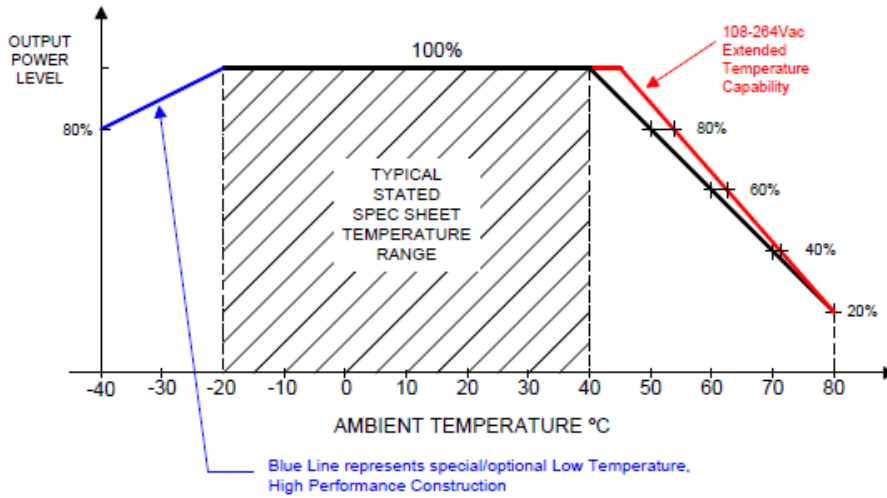
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DERATING CURVE

**TYPICAL EXTERNAL POWER SUPPLY
DERATING CURVE**
(FOR EFFICIENCY LEVEL V AND EFFICIENCY LEVEL VI PRODUCTS)



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Input Configuration

Description IEC 60320/C14 AC Inlet Connector, Class I, Earth Ground



Mates with IEC 60320/C13 Plug

Optional Locking IEC60320 Receptacle and cord option available on some models by request.:



[Standard International IEC 320/C13 Cordsets](#)

Below are standard cordsets which are "not included" (unless stated above); these can be purchased separately or packaged with the power supply. Contact your Sales Engineer if the style required is not shown below. Many more available in different lengths, colors or cable material.

Stock Power Supply Cords

Part Number/ Link	Country	Plug	Termination	Length (mm)	(Ft)
3021457F701(R)	N. American (Type B)	NEMA 5-15P	IEC 320/C13	2150	7
1191068F0701(R)	N. American (Type B)	NEMA 5-15P Hospital	IEC 320/C13	2459	8
2194272M5701-T(R)	Argentina (Type I)	IRAM 2073	IEC 320/C13	2500	8
5502022M5701A(R)	Australian (Type I)	AS3112 / 3 PRONG	IEC 320/C13	2500	8
204B4272M5701(R)	Brazil (Type N)	BRAZIL	IEC 320/C13	2500	8
6023602M5701(R)	China (Type I)	CCC GR2099	IEC 320/C13	2500	8
G8014272M5701(R)	Danish (Type K)	AFSNIT SECTION 107-2-D1	IEC 320/C13	2500	8
23144272M5701-T(R)	Europe (Type E)	CEE 7/7	IEC 320/C13	2500	8
205IN4272M5701(R)	India (Type D)	India IS 1293 (also known as IA16A3 or BS546)	IEC 320/C13	2500	8
208IN4272M5701(R)	India (Type M)	India IS 1293 (also known as IA16A3 or BS546)	IEC320/C13	2500	8
377C4272M5701(R)	Israel (Type H)	ISL 377C	IEC 320/C13	2500	8
23024272M5701(R)	Italy (Type L)	CEI 23-16/VII	IEC 320/C13	2500	8
3003339F701(R) [3x1.25mm2]	Japan (Type B)	JIS 8303 / 3 PINS	IEC 320/C13	2500	8

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3003068F2701-HK(R) [3 x 2.0mm2]						
302J115J6F0701J(R)	Japan / North America (Type B – 12A)	JIS 8303 / 3 PINS and NEMA 5-15P (PSE and UL/CUL appr)	IEC 320/C13	1830	6	
302J104J6F0701J(R)	Japan / North America (Type B – 15A)	JIS 8303 / 3 PINS and NEMA 5-15P (PSE and UL/CUL appr)	IEC 320/C13	1830	6	
2313K3432M5701(R)	Korea (Type F)	KS C 8305	IEC 320/C13	2500	8	
5804272M5701(R)	Russia (Type F)	GOST 7396	IEC 320/C13	2500	8	
205SA4272M5701(R)	South Africa (Type D)	South Africa SABS164-1 (6A type)	IEC 320/C13	2500	8	
2084272M5701(R)	South Africa (Type M)	South Africa SABS164-1 (16A type)	IEC 320/C13	2500	8	
23214272M5701(R)	Switzerland (Type J)	SEV 1011	IEC 320/C13	2500	8	
3003322M5701(R)	Taiwan (Type B)	BSMI	IEC 320/C13	2500	8	
PZ0800100-2M5BK13H(R)	UK, Hong Kong, Singapore, Gulf States (Type G)	BS 1363A	IEC 320/C13	2500	8	
7055002M5701A(R)	International	IEC 320 C14-C13	IEC 320/C13	2500	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
No Logo Applicable	EU 230V CoC Tier 2, 278/2009, Mar 2014
	Book 60335 up to 36 Volts
 R32282 RoHS(Pb)	Taiwan BSMI GTM41076 R32282 GTM96600-3606.3-T3; GTM96600-4005-T3; GTM96600-6012-T3 http://www.bsmi.gov.tw/wSite/ct?xItem=4072&ctNode=8167=2
No Logo Applicable	CB for IEC 60601-1:2005+A1
No Logo Applicable	CB for IEC 60335-1:2010+A1
No Logo Applicable	CB for IEC 60950-1:2005+A1+A2
No Logo Applicable	CB for IEC 62368-1:2014 (Second Edition)
	CCC Altitude up to 5000 m GB17625.1-2012, GB4943.1-2011, GB/T9254-2008
	Test standard: EN 55032:2012+AC:2013 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 55024:2010 EN 60601-1-2:2015
	CHINA SJ/T 11364-2014, China RoHS Chart: http://en.globtek.com/globtek-rohs.php
Conforms to AAMI STD.ES60601-1,IEC 60601-1-11	Conforms to AAMI STD.ES60601-1,IEC 60601-1-11
Certified to CAN/CSA STD.C22.2 NO.60601-1	Certified to CAN/CSA STD.C22.2 NO.60601-1
Conforms to UL STD. 1310	Conforms to UL STD. 1310
Certified to CSA STD. C22.2 NO.223	Certified to CSA STD. C22.2 NO.223
Conforms to UL STD. 60950-1	Conforms to UL STD. 60950-1
Certified to CSA STD C22.2 NO.60950-1	Certified to CSA STD C22.2 NO.60950-1
	UL 60950-1, 2nd Edition, 2014-10-14 (Information Technology Equipment - Safety - Part 1: eneral Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements) (for 5V only)
	Declaration # EAЭC N RU Д-US.АД75.B.01052 Custom Union of Russia, Belarus and Kazakhstan http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration

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 Intertek  Intertek  Intertek Class 2 Power Unit	Medical Electrical Equipment - Part 1: General Requirements For Basic Safety And Essential Performance [AAMI ES60601-1:2005 +A1]
 IS 13252 (Part 1) IEC 60950-1  R-41017175 www.bis.gov.in	Information Technology Equipment Safety Part 1: General Requirements >Valid without technical revision:01Jan2022< [UL 60950-1:2007 Ed.2 +R:14Oct2014]
 IP41	Class 2 Power Units [UL 1310:2011 Ed.6 +R:12Dec2014] Power Supplies With Extra-Low Voltage Class 2 Outputs [CSA C22.2 No.223:2015 Ed.3]
  DC-E-G71 002.9 PRECAUCION: PARA USO EN EQUIPOS ELECTRONICOS SOLAMENTE	Compliance of this power supply with FCC Part 15, Class B has been demonstrated with a standard output load. The FCC law stipulates that system-level testing is required to demonstrate compliance with the FCC emission limits with the actual system load. Bureau Of Indian Standards for GTM96600-6012-R3A, GTM96600-4005-R3A, GTM96600-6024-R3A, GTM96600-4005-T3, GTM96600-6012-T3, GTM96600-6015-T3, GTM96600-6019-T3, GTM96600-6024-T3, GTM96600-6048-T3
 GlobTek, Inc.  GlobTek, Inc.  GlobTek, Inc.	Indoor Use Only - Mark is on the label or Molded in the case Ingress Protection: ?IP41 to IEC60529:2001 Protection against granular foreign bodies - Protected against vertically falling drops of water IRAM certificate DC-E-G71-002.9 to IEC 60950-1:2005 + A1:2009 +A2:2013 JAPAN TUV R-PSE, Cert. No. JD 50313287, to J60950-1(H26) , J55022(H22),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/ JAPAN TUV R-PSE, Cert. No. JD 50313287, to J60950-1(H26) , J55022(H22),J3000(H25)[DC15?30V]. Please reference the following website for guidelines on PSE regulations: http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/ JAPAN TUV R-PSE, Cert. No. JD 50313287, to J60950-1(H26) , J55022(H22),J3000(H25)[DC30?60V]. Please reference the following website for guidelines on PSE regulations: http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/

