

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

Model:GTM96900P90VV.V-P2

November 25, 2020

GTM96900P90VV.V-P2

Information

Model Number

GTM96900P90VV.V-P2

Description

GTM96900P90VV.V-P2, ITE / Medical Power Supply, Potted/Encapsulated in plastic housing, 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: 90 Watts, Power rating with convection cooling (W) , 12-54V in 0.1V increments, Approvals: CB 61347; CB 62368; S-Mark 62368; IRAM; IRAM; S-Mark; Morocco;

Model Picture



Agency Documents

<http://www.globtek.info/certs/GTM96900P90VV.V/>

CE EC-Declaration

https://www.globtek.com/pdf/ec_declaration/a0O0c00000PzQpPEAV

RoHS/RoHS2 Declaration

https://www.globtek.com/pdf/rohs_cert/a0O0c00000PzQpPEAV

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

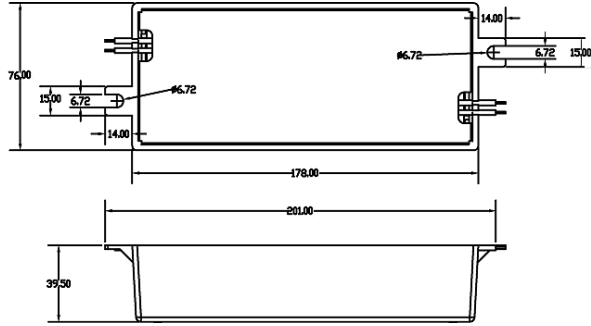
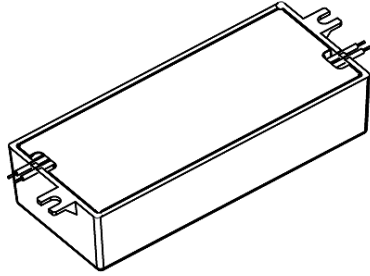
Type	Potted/Encapsulated in plastic housing
Technology	Regulated Switchmode AC-DC Power Supply AC Adaptor
Category	ITE / Medical Power Supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	
Wattage (W)	90.0
Vout Range (V)	12-54
Efficiency Level	VI
Ingress Protection	IP68
Size (mm)	178.0*76.0*39.5 +/- 1.0 mm

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ENCLOSURE



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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
 - 90-264Vac range @ 100% of rated load current
 - 85-264 Vac range @ 90% of rated load current
 - 90-370 VDC range @ 100% of rated load current
02. Input Frequency: Specified 47-63 Hz, Nameplate rated 50/60Hz
03. Power Factor: 0.90 minimum @ 230Vac, 0.97 minimum @ 115Vac
04. Output Type: LPS (Limited Power Source), limited to less than 8A and 100W
04. Output Regulation: +/- 4% measured at the output connector
05. Line Voltage Regulation: +/- 0.5% typical measured at full load
06. Green Power On Indicator LED
07. Output Ripple (Vp-p): 1% or 200 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 at nominal line
08. Turn-ON/OFF Overshoot: 8% maximum, 1 mS typical recovery time for 25% to 50% step load
09. Turn-ON Delay: 1 second typical
10. Hold-Up Time: 20 mS minimum
11. Inrush Current: 30A maximum at 115Vac input and 60A maximum at 230 Vac input
12. Switching Frequency: Varies from 25KHz to 125KHz
13. Efficiency: Compliant with Efficiency Level VI Standard and 230 CoC Tier 2 Limits
14. No Load Standby Power: <0.15 W @ 230Vac

B) PROTECTION

01. Input Protection: Input line fusing and 300Vac rated MOV
02. Non-LPS version: Current Limited to 110% to 160% of rated output current
03. LPS version: Short Circuit/Overload limited to less than 8A and 100W (add Z suffix in model #)
04. Over-Temperature : Inherently protected against continuous overload at high temperature
05. Output Over-Voltage: 110% to 135% of nominal output voltage under full load condition, and less than 60V max. Latching protection, cycle AC OFF to reset.

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 < 70uA
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. Primary to Secondary Bridging Capacitance: Two IEC60384-14 certified Y1 type capacitors in series
08. Compliant Standards: See listings at end of this drawing for specifics

D) EMC

EN 60601-1-2, 4th edition

PROPRIETARY INFORMATION

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<http://en.globtek.com/datasheet/id/a000c00000PzQpP>

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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

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

Static Discharge 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, Criteria

E) OTHER:

01. MTBF: 500,000 Hours @ 40°C ambient temperature, Full Load

02. Operating Temperature:

GTM96900P Family: 0°C to 50°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. Humidity: 0% to 95% relative humidity, non-condensing

04. Storage Temperature: -30°C to 80°C

05. Cooling: Convection

06. ROHS: Compliant with latest regulations, see approvals section below

07. Operational Altitude: 5000M

F) ENCLOSURE

01. Markings: Label or Laser printed

G) SPECIAL OPTIONS

01. LPS or non-LPS versions (Z suffix for LPS model)

02. Custom Cordsets, various cordage types, and connector types

03. Custom Markings

04. Short term Output Surge Capability, as a non-LPS version

05. Reduced Leakage Current version, medical CF leakage current compliance

06. Tightened output voltage tolerance

07. Reduced Output Ripple Level

08. Reduced output power Marking/Rating

09. LED Lighting, Class C Line Harmonics per 61000-3-2

Three Power Ranges available: 27-51W, 40-65W and 57-90W

10. High Rel PCB laminate with Plated through Holes for IPC610 Class 2 Compliance

11. Low Temperature operation, down to -40°C

12. Special Housing Colors and Cordset Colors

H) OUTPUT CONNECTORS**PROPRIETARY INFORMATION**

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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.

2.1mm PCB DC Power Jack ordering code: **JACK-C-PC-10A-RA(R)**

2.5mm PCB DC Power Jack ordering code: **JACK-L-PC-10A-RA(R)**

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DERATING CURVE



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INPUT CONFIGURATIONDescription

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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 IEC61347-1:2015 + A1:2017 IEC61347-2-13:2014, A1:2016
No Logo Applicable	CB for IEC 62368-1:2014 (Second Edition)
 <p>DC-E-G71-005.2</p> <p>PRECAUCION: PARA USO EN EQUIPOS ELECTRONICOS SOLAMENTE</p>	IRAM certificateDC-E-G71-005.1 to IEC 62368-1:2014
 <p>DC-E-G71-005.2</p> <p>PRECAUCION: PARA USO EN EQUIPOS ELECTRONICOS SOLAMENTE</p>	IRAM certificateDC-E-G71-005.1 to IEC 62368-1:2014
	Morocco SDoC declaration http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/
	S-Mark Certificate EN 60601-1:2006 + A1:2013 + A12:2014 EN 60601-1-11:2015 http://www.intertek.com/marks/s/

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 Intertek	S-Mark Certificate EN 62368-1:2014 + A11 (http://www.intertek.com/marks/s/)
	UKCA Certification