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Model:GTM961200P120VV.V-P2

August 17, 2019

## GTM961200P120VV.V-P2

### Information

Model Number GTM961200P120VV.V-P2

Description GTM961200P120VV.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: 120 Watts, Power rating with convection cooling (W) , 12-54V in 0.1V increments, Approvals: IP68; CB 61347;

Model Picture



Agency Documents <http://www.globtek.info/certs/GTM961200P/>

CE Declaration [https://www.globtek.com/pdf/ec\\_declaration/a000c00000PzQxxEAF](https://www.globtek.com/pdf/ec_declaration/a000c00000PzQxxEAF)

RoHS/RoHS2 Declaration [https://www.globtek.com/pdf/rohs\\_cert/a000c00000PzQxxEAF](https://www.globtek.com/pdf/rohs_cert/a000c00000PzQxxEAF)

REACH Declaration [https://www.globtek.com/pdf/iso\\_certificates/REACH.pdf](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**

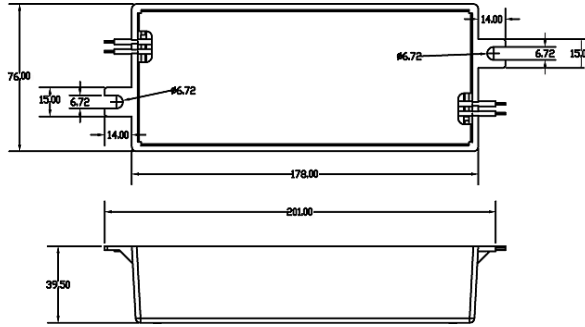
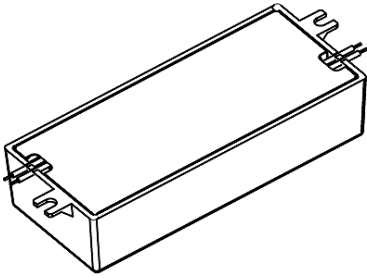
Type	Potted/Encapsulated in plastic housing
Technology	Regulated Switchmode AC-DC Power Supply AC Adaptor
Category	ITE / Medical Power Supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	
Wattage (W)	120.0
Vout Range (V)	12-54
Efficiency Level	VI
Ingress Protection	IP68
Size (mm)	178.0*76.0*39.5 +/- 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 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. Short Circuit/ Overload: Electronically Protected unit will auto recover upon removal of fault
  - Output Current Limit: Current limited to less than 170W / Vnom and 13A
  - (Vnom = nominal rated output voltage)
03. Over-Temperature : Latching Electronic Overtemperature protection. Cycle AC OFF to reset.
04. 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, 4<sup>th</sup> edition  
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

**PROPRIETARY INFORMATION**

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<http://en.globtek.com/datasheet/id/a000c00000PzQxx>

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## 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:

GTM961200P 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. 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. Custom Cordsets, various cordage types, and connector types

02. Custom Markings

03. Short term Output Surge Capability

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

05. Tightened output voltage tolerance

06. Reduced Output Ripple Level

07. LED Lighting, Class C Line Harmonics per 61000-3-2, from 85W to 120W output

08. Reduced output power marking/rating

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

## 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.

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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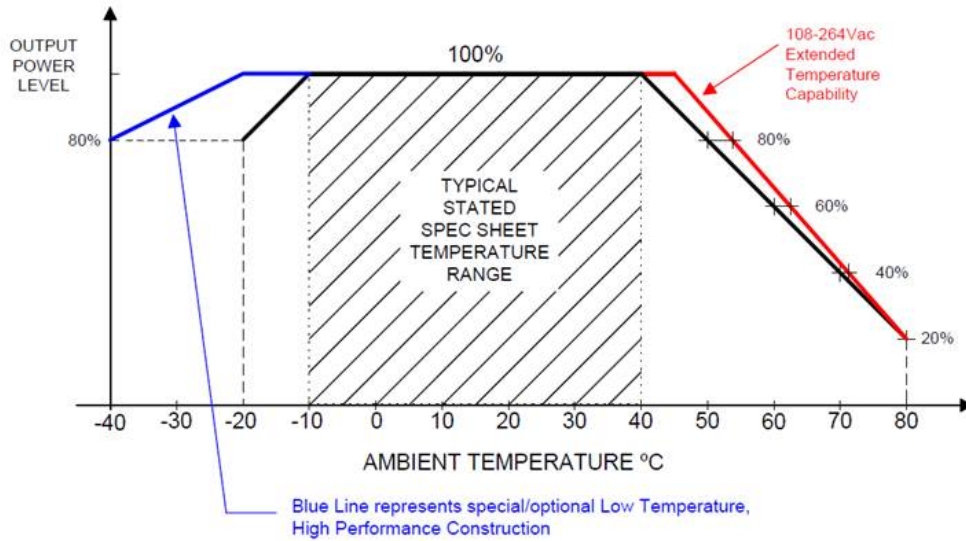
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DERATING CURVE

TYPICAL EXTERNAL POWER SUPPLY DERATING CURVE

(FOR EFFICIENCY LEVEL V AND EFFICIENCY LEVEL VI PRODUCTS)



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**Input Configuration**

Description 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 IEC61347-1:2015 + A1:2017 IEC61347-2-13:2014, A1:2016
IP68	Ingress Protection: ?IP68 to IEC60529:2001 Totally dust tight and Protected against long periods of immersion under pressure