

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

Model:GTM962253PWWWVV-P3

May 6, 2024

## GTM962253PWWWVV-P3

### Information

Model Number	GTM962253PWWWVV-P3
Description	GTM962253PWWWVV-P3, ICT / ITE / Medical Power Supply, 60601-1-4th Ed. , Potted, Regulated Switchmode AC-DC Power Supply AC Adaptor, , Input Rating: 100-240V~, 50-60 Hz, Contact GlobTek for customization requests on any type of cable in any customer specified lengths., Output Rating: 225 Watts, Power rating with convection cooling (W) , 12-54V in 0.1V increments, Approvals: IP68;
Model Picture	
Agency Documents	<a href="http://www.globtek.info/certs/GTM96225xP%20/">http://www.globtek.info/certs/GTM96225xP%20/</a>
CE EC-Declaration	<a href="https://www.globtek.com/pdf/ec_declaration/a0O3a00000MIVt2EAF">https://www.globtek.com/pdf/ec_declaration/a0O3a00000MIVt2EAF</a>
RoHS/RoHS2 Declaration	<a href="https://www.globtek.com/pdf/rohs_cert/a0O3a00000MIVt2EAF">https://www.globtek.com/pdf/rohs_cert/a0O3a00000MIVt2EAF</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**

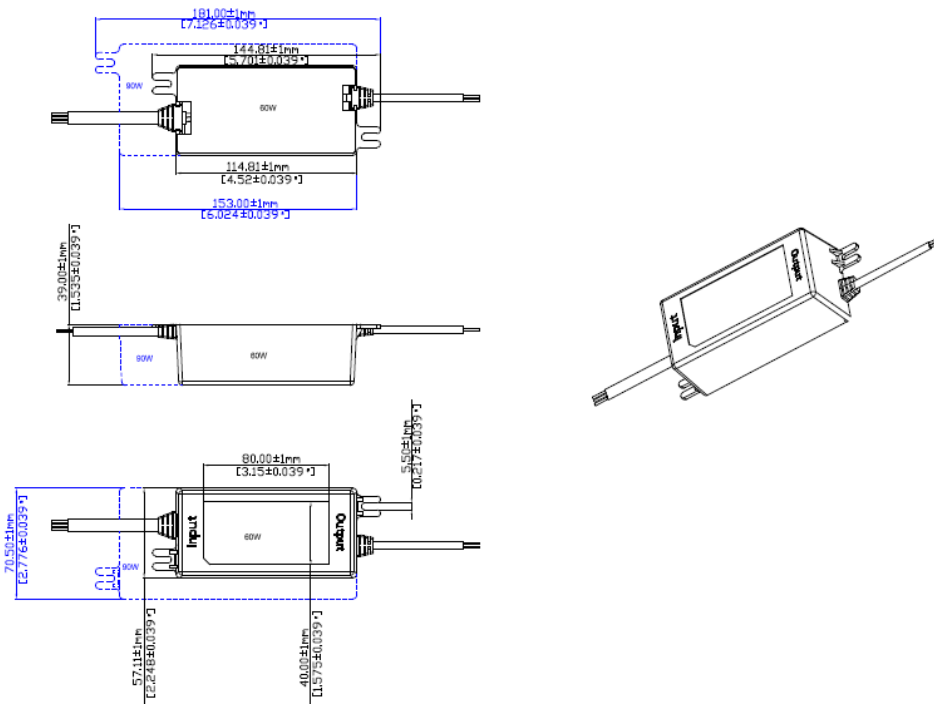
Type	Potted
Technology	Regulated Switchmode AC-DC Power Supply AC Adaptor
Category	ICT / ITE / Medical Power Supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	3A
Wattage (W)	225.0
Vout Range (V)	12-54
Efficiency Level	USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782
Ingress Protection	IP68
Size (mm)	181.0 (L) x 70.0(W) x 39.0 (H)

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## ENCLOSURE



The black outlined drawing represents a housing which is being phased out due to end of usable life of the mold used to make it. The blue outlined drawing is the replacement housing. Both may be used interchangeably and mixed within any given lot.

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## RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GTM962253P22516-P3	16 V	14.06	224.96	<a href="#">RFQ</a>
GTM962253P22518-P3	18 V	12.5	225.00	<a href="#">RFQ</a>
GTM962253P22536-P3	36 V	6.25	225.00	<a href="#">RFQ</a>

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## SPECIFICATIONS

### Features

- High power density potted construction
- Low conducted & radiated EMI: Class B without external filters or ferrites (all input configurations, into resistive load)
- Class I, Class II, or Class II with Functional Earth input configurations
- ITE/ICT and medical (2 x MOPP) certified (suitable for Type-B or Type-BF applications)
- Auxiliary +12V output

### Input

Input Voltage:	Specified: 85-264VAC, Nameplate: 100-240VAC
Input Frequency:	Specified: 47-63Hz, Nameplate: 50-60Hz
Input Current:	2.75A typ. @ 85VAC, 1.0A typ. @ 230VAC (full load)
No Load Input Power:	<150mW
Inrush Current:	<75A @ 230VAC (cold start @ 25°C)
Efficiency:	90 - 95% typ. (full load)
Power Factor:	>0.90 @ 115VAC, >0.85 @ 230VAC, 140W output

### Output

Output Power:	140W continuous
Turn-on Delay:	< 1 second @ 85VAC
Output Voltage Tolerance:	± 2.0% (worst case, set point + load/line regulation)
Load Regulation:	± 0.5% (measured at connector)
Line Regulation:	± 0.2% (measured at connector)
Ripple:	1% pk-pk (using a 47µF low-ESR cap + 0.1µF ceramic capacitor, measured @ 20MHz BW)
Transient Response:	<5% deviation (with 25% load step), recovery to within 1% in 1ms
Startup Overshoot:	<5% (full load)
Hold-up Time:	10ms min. (full load)
	12V ± 2V (10V min. / 14V max.), for $0A \leq I_{Aux} \leq 0.8A$
Aux Output Voltage Regulation:	Aux regulation guaranteed when main output power ≥ 25% of 140W rating (~34W).  For main output power < 25%, aux output voltage may drop to < 50% of nominal rating, depending on aux output load. Please check with your system. For main output = 12V, aux output voltage is same as main output.
Aux Output Current:	0.8A

### Protections

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<https://www.globtek.com/ds/eCxoKwdohs8/2nWGXgF5Wy8.html>

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Input Protection:	MOV transient suppressor, dual fuses (line + neutral)
Over-Voltage Protection:	110-130%, latched-off, cycle AC to reset
Over-Current Protection:	130% typical, auto-recovery
Short Circuit Protection:	Auto-recovery
Over-Temperature Protection:	NTC temperature sensor embedded in transformer, trip between 115 - 120°, latched-off, cycle AC to reset (auto-recovery available as special option)

## Environmental

MTBF:	1,500,000 hours @ 25°C ambient, full load (Telcordia SR-332, Issue 3)
Operating Temperature:	-20°C to 50°C (full output power), -25°C to 80°C (de-rated)
Storage Temperature:	-30°C to 85°C
Humidity:	0% to 95% relative humidity, non-condensing
Altitude:	5000m max.
Vibration:	Conforms to EN60068-2-6, ISO80601-2, EN1789

## Safety

Dielectric Withstand Voltage:	4000VAC or 5656VDC from input to output 3000VAC or 4242VDC from input to earth
Intended Medical Application:	Type-B or Type-BF
Touch Current:	3-conductor input - NC: <25µA, SFC: <200µA 2-conductor input - NC: <65µA, SFC: <140µA
Earth Leakage Current	3-conductor input: <200µA 2-conductor input: N/A
Means of Protection:	2 x MOPP
Primary-Secondary Bridging Capacitance:	Two IEC60384-14 certified Y1 capacitors in series

## EMC

Applicable Standards:	Medical: EN60601-1-2, 4th edition Emissions: EN55032, EN 55011, EN61000-6-3, EN61000-6-4, CISPR11/CISPR22 Immunity: EN55024, EN61000-6-1, EN61000-6-2
Conducted Emissions:	Class B, FCC Part 15, Class B (with resistive load)
Radiated Emissions:	Class B, FCC Part 15, Class B (with resistive load)
Harmonic Current Voltage Distortion:	EN61000-3-2, Class A
Voltage Fluctuations/Flicker:	EN61000-3-3
Electrostatic Discharge (ESD) Immunity:	EN61000-4-2, 10KV contact discharge, 20KV air discharge (applied to input or output terminals)
Radiated RF Immunity:	EN61000-4-3, 20V/m 80-2700MHz, 80% 1KHz AM, 80% 5Hz AM
EFT/Burst Immunity:	EN61000-4-4, 4KV/100kHz.
Line Surge Immunity:	EN61000-4-5, 2KV differential, 4KV common-mode

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Conducted RF Immunity:	EN61000-4-6, 3VRMS, (6VRMS in ISM/amateur bands), 80% 1KHz AM
Power Frequency Magnetic Field Immunity:	EN61000-4-8, 30A/m
Voltage Dip Immunity:	EN61000-4-11

## Special Options

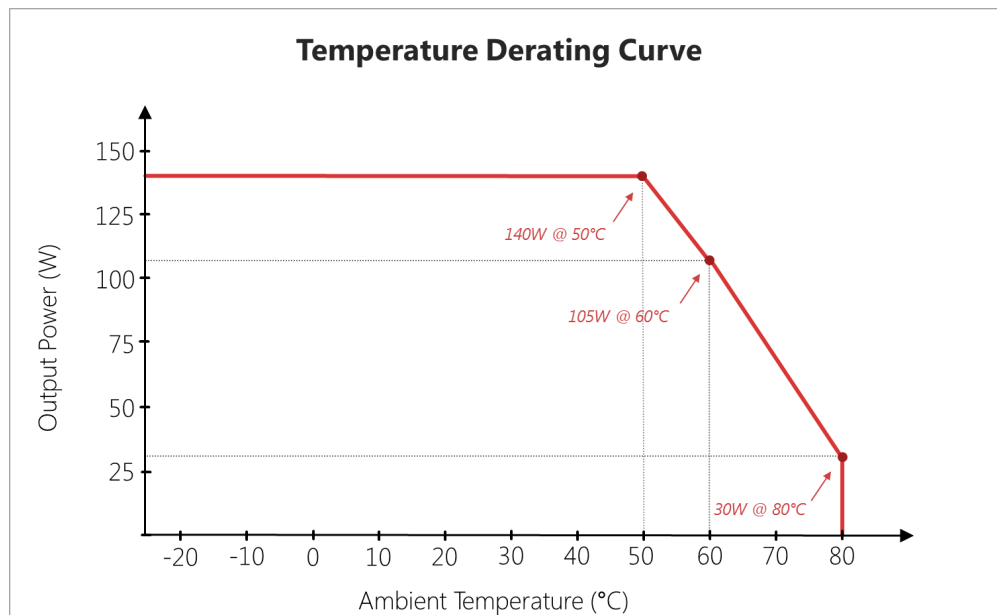
- Custom labels/markings
- Custom input/output cable assemblies
- Short term output surge capability
- Reduced touch current
- Reduced output ripple
- Compliance to IPC-600, IPC-610, IPC-6012 Class 2 or 3
- IEC61000-3-2 Class-C line harmonics for LED lighting applications
- Non-latching (auto-recover) over-temperature protection
- Potentiometer to adjust/trim output voltage
- Custom aux output voltages (5V to 12V), available for main output voltages from 12-24V

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## DERATING CURVE





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**INPUT CONFIGURATION**

Description	
	Contact GlobTek for customization requests on any type of cable in any customer specified lengths.

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## Approvals

Logo	Description
IP68	Ingress Protection: ?IP68 to IEC60529:2001 Totally dust tight and Protected against long periods of immersion under pressure