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Model:GTM96180-18VV-DW

July 25, 2021

GTM96180-18VV-DW

Information

Model Number	GTM96180-18VV-DW
Description	GTM96180-18VV-DW, ICT / ITE / Medical Power Supply, 60601-1-4th Ed. , Desktop/External, Regulated Switchmode AC-DC Power Supply AC Adaptor, , Input Rating: 100-240V~, 50-60 Hz, IEC 60320/C8 AC Inlet connector, Class II, Non-Earth Ground (aka "Figure-8"), Output Rating: 18 Watts, Power rating with convection cooling (W) , 5-48V in 0.1V increments, Approvals: CB 62368; EAC; cETLus 62368-1; Morocco; S-Mark 62368;
Model Picture	.
Agency Documents	http://www.globtek.info/certs/GTM96180-TZ/
CE EC-Declaration	https://www.globtek.com/pdf/ec_declaration/a0Oa000000FIE7OEAV
RoHS/RoHS2 Declaration	https://www.globtek.com/pdf/rohs_cert/a0Oa000000FIE7OEAV
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:GTM96180-18VV-DW

July 25, 2021

MODEL PARAMETERS

Type	Desktop/External
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)	0.6 A
Wattage (W)	18.0
Vout Range (V)	5-48
Efficiency Level	USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782
Ingress Protection	
Size (mm)	

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Model:GTM96180-18VV-DW

July 25, 2021

ENCLOSURE

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Model:GTM96180-18VV-DW

July 25, 2021

RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GTM96180-1812-FW (PCB Mounted)	12 V	1.5	18.00	RFQ

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Model:GTM96180-18VV-DW

July 25, 2021

SPECIFICATIONS

Input

Input Voltage:	Specified: 90-264VAC, Nameplate: 100-240VAC 100% rated load current for 90-264VAC 85% rated load current for 85-264VAC 100% rated load current for 110-370VDC
Input Frequency:	Specified: 47-63Hz, Nameplate: 50-60Hz
No Load Input Power:	<75mW @ 230VAC (EU CoC Tier 2 compliant)
Inrush Current:	30A/60A maximum, cold start @ 115VAC/230VAC input, respectively
Efficiency:	DoE Level VI compliant, EU CoC Tier 2 compliant

Output

Turn-on Delay:	1 second max. @ nominal line and full load
Output Regulation	± 5% max. (measured at the output connector)
Line Regulation:	± 0.5% typ. (measured at the output connector, full load)
Ripple:	1% or 100mV, whichever is greater (measured using a 47µF low-ESR cap + 0.1µF ceramic capacitor, measured @ 20MHz BW, at output connector)
Transient Response:	5% max. deviation (with 40-70% load step), 1ms typ. recovery time
Hold-up Time:	8ms typ. @ nominal line and full load
Power On Indicator:	Green LED

Protections

Input Protection:	MOV transient suppressor, input line fusing
Over-Voltage Protection:	110-130% of nominal output voltage
Short-Circuit Protection:	Auto-restart
Over-Current Protection:	110-160% of rated output current (Current limit range is determined by normal output power rating, not derated power level)

Environmental

MTBF:	1,500,000 hours @ 25°C ambient, full load (Telcordia SR-332, Issue 3)
Operating Temperature:	-20°C to 40°C (full load) See derating table for output power capability at other temperatures. Extended low temperature range available as a custom option.
Storage Temperature:	-30°C to 80°C
Humidity:	0% to 95% relative humidity, non-condensing
Altitude:	5000m
Ingress protection:	IP42 standard, IP52 available as a special option

PROPRIETARY INFORMATION

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<https://en.globtek.com/datasheet/id/a0Oa000000FIE7O>

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Model:GTM96180-18VV-DW

July 25, 2021

Cooling:	Convection
RoHS:	Complies with EU 2011/65/EU amended by EU 2015/863 and China SJ/T 11363-2006

Safety

Dielectric Withstand Voltage:	4000VAC or 5656VDC from input to output 3000VAC or 4242VDC from input to earth (Class I models)
Touch Current:	Class I models: < 20uA Class II models: <75uA
Earth Leakage Current:	Class I models: <300uA Class II models: N/A
Isolation Options:	Floating output or Class I earthed output (desktop models)
Earth Continuity Test:	< 0.1 ohm between AC inlet earth pin and PCB termination point
Means of Protection:	2 x MOPP
Compliant Standards:	See listing at the end of this document.

EMC

Applicable Standards:	Medical: EN60601-1-2, 4th edition Emissions: EN55032, EN61000-6-3, EN61000-6-4 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, 8KV 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

Enclosure

Housing:	High impact plastic, 94V0 polycarbonate, non-vented
AC Input Mechanical Options:	Wall plug-in, changeable blades (Class II only) Desktop housing, extended housing: C6, C8, C14, or C18 IEC inlet (Class I or Class II)
Markings:	Label or laser printed

Special Options

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Model:GTM96180-18VV-DW

July 25, 2021

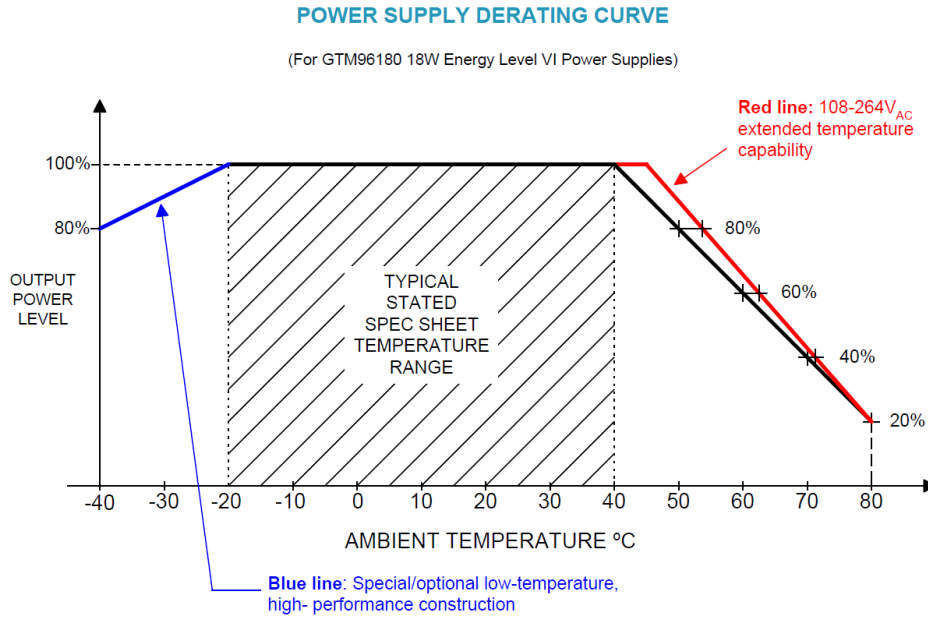
1. Removal of LED (optional)
 2. Custom cord-sets (custom cord and/or connector types). Note: 5VDC USB power supplies with Micro-B or Type-C connectors have a voltage regulation specification of $\pm 8\%$ (4.6V to 5.4V).
 3. Custom markings
 4. Short term output surge capability
 5. Reduced leakage current versions (10uA max) for Type-CF medical applications and/or for AC noise sensitive equipment. (15W or less, 5 to 24V output voltage range.)
 6. Tightened output voltage tolerance
 7. Reduced output voltage ripple
 8. Improved reliability PCB laminate with plated-through-holes for IPC610 Class 2 compliance
 9. Custom housing colors
 10. Quasi constant-current output for SLA (lead-acid) battery charging applications
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Model:GTM96180-18VV-DW

July 25, 2021

DERATING CURVE



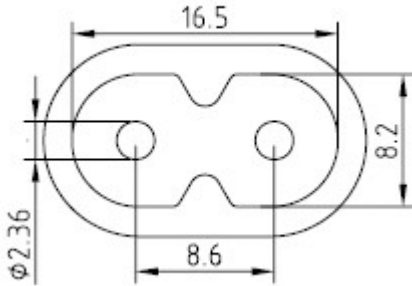
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Model:GTM96180-18VV-DW

July 25, 2021

INPUT CONFIGURATION

Description IEC 60320/C8 AC Inlet connector, Class II, Non-Earth Ground (aka "Figure-8")



Mates with IEC 60320/C7 Plug

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

Standard International IEC 320/C7 Cordsets

Part Number	Type	Standard	Connector	Length (mm)	Length (feet)
2094112M703(R)	Argentina (Type I)	IRAM 2063	IEC 320/C7	2000	7
5014112M703A(R)	Australian (Type I)	AS 3112	IEC 320/C7	2000	7
207B4111M8703(R)	Brazil (Type N)	NBR14136	IEC 320/C7	1800	6
4533501M8703(R)	China (Type A)	GB 2099.1	IEC 320/C7	1830	6
2074112M703A(R)	European (Type C)	CEE 7/16	IEC 320/C7	2000	7
2084111M8703B(R)	India (Type D)	IS 1293	IEC 320/C7	1800	6
451J3401M8703(R)	Japan (Type A)	JIS 8303	IEC 320/C7	1830	6
2044112M703A(R)	Korea (Type C)	KS C8305	IEC 320/C7	2000	7
4511116F703A(R)	North America (Type A)	NEMA 1-15P	IEC 320/C7	1830	6
	South Africa (Type				

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Model:GTM96180-18VV-DW

July 25, 2021

2084111M8703(R)	M)	BS 546	IEC320/C7	1830	6
4033401M8703A(R)	Taiwan (Type A)	CNS690	IEC 320/C7	1830	6
6104112M703A(R)	UK, Hong Kong, Singapore, Gulf States (Type G)	BS1363	IEC 320/C7	2000	7
451G1116F703A(R)	Gulf States (Kuwait, Bahrain, Oman, Qatar, Saudi Arabia, Yemen and the United Arab Emirates (UAE)(Type A)	Nema 1-15P	IEC320/C7	1830	6

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Model:GTM96180-18VV-DW

July 25, 2021

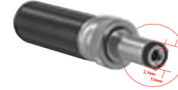
OUTPUT CONFIGURATION

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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July 25, 2021

Approvals

Logo	Description
No Logo Applicable	CB for IEC 62368-1:2014 (Second Edition)
Conforms to UL STD. 62368-1 Certified to CSA STD C22.2 NO.62368-1	Conforms to UL STD. 62368-1 Certified to CSA STD C22.2 NO.62368-1
	Declaration ДС № EAЭC N RU Д-US.KA01.B.10453_19 Custom Union of Russia, Belarus and Kazakhstan http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration
	Morocco SDoC declaration http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/
	S-Mark Certificate EN 62368-1:2014 + A11 (http://www.intertek.com/marks/s/)