Model:GTM96183-WWPD-USB1C-Q October 25, 2021

36W USB-PD Adapter, Changeable input plugs, USB Type C Jack for Medical, ICT, Household use

Information

Model Number	GTM96183-WWPD-USB1C-Q
Description	GTM96183-WWPD-USB1C-Q, USB Adaptive Power Source ICT/ITE/Medical Power supply, Wall Plug-in, USB Adaptive Power Supply AC Adaptor, , Input Rating: 100-240V~, 50-60 Hz, Blade Options for Q Series Wall Plug-in Power Supplies, Output Rating: 36 Watts, Power rating with convection cooling (W) , 3.6-20V in 0.1V increments, Approvals: EAC; PSE; CAN ICES-3; RCM; China RoHS; Level VI; CB 60601-1; LPS 62368; RoHS; Ukraine; VCCI; WEEE; Double Insulation; CCC; FCC; cETLus 60601-1 3rd; 230V CoC Tier 2; CB 60950; CB 62368;
Model Picture	
Agency Documents	
CE EC-Declaration	https://www.globtek.com/pdf/ec_declaration/a0O3a00000M3yqaEAB
RoHS/RoHS2 Declaration	https://www.globtek.com/pdf/rohs_cert/a0O3a00000M3yqaEAB
REACH Declaration	https://www.globtek.com/pdf/iso_certificates/REACH.pdf
Conflict Minerals Declaration	https://www.globtek.com/pdf/conflict-minerals.pdf

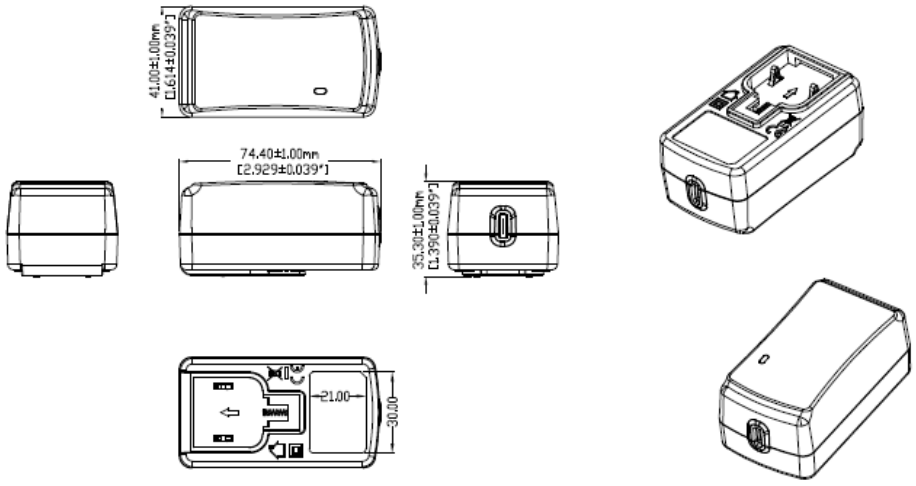
Model:GTM96183-WWPD-USB1C-Q October 25, 2021

MODEL PARAMETERS

Type	Wall Plug-in
Technology	USB Adaptive Power Supply AC Adaptor
Category	USB Adaptive Power Source ICT/ITE/Medical Power supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	0.6A
Wattage (W)	36.0
Vout Range (V)	3.6-20
Efficiency Level	USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782
Ingress Protection	Indoor Use
Size (mm)	41.0 x 70.0 x 35.1

Model:GTM96183-WWPD-USB1C-Q October 25, 2021

ENCLOSURE



Model:GTM96183-WWPD-USB1C-Q October 25, 2021

RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GTM96183-18PD-USB1C-Q	V			RFQ
GTM96183-36PD-USB1C-Q	V			RFQ
GTM96183-18PD-PPS-USB1C-Q	V			RFQ
GTM96183-36PD-PPS-USB1C-Q	V			RFQ

Model:GTM96183-WWPD-USB1C-Q October 25, 2021

SPECIFICATIONS

USB Power Delivery Capabilities

Protocol supported:	USB Power Delivery (PD) 2.0/3.0 + PPS
Advertised Power Data Objects (PDOs/APDOs):	Standard option: 5V, 5.8V, 9V, 12V, 15V, 15.1V, 20V PPS option (18W): 5V, 9V, 12V, 15V, 15.1V, 20V, PPS (5-21V) PPS option (36W): 5V, 9V, 15V, 20V, PPS (5-11V), PPS (5-16V), PPS (5-21V)
Note 1:	Custom fixed PDOs available upon request. PDO1 must be 5V. PDO2 through PDO7 may be set to any custom voltage from 5V to 20V, with a step size of 100mV.
Note 2:	In critical applications, the use of a non-authorized USB PD power supply may pose a substantial risk. Power supply authorization may be implemented using USB PD Vendor Defined Messages (VDMs) to prevent system operation with non-authorized power sources. Please see our article Product Security and Risk Mitigation for USB Power Delivery (PD) Based Systems for additional information.

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 @ 115VAC, < 60A @ 230VAC (cold start)
Efficiency:	DoE Efficiency Level VI and CoC Tier 2 compliant (tested according to DoE 10 CFR Part 430, Subpart B, Appendix Z)

Output

Turn-on Delay:	< 1 second @ 115VAC and full load
Output Regulation	± 4% max. (measured at the end of a 1m long output cord)
Line Regulation:	± 0.5% typ. (measured at the end of a 1m long output cord)
Ripple:	100mV max. (using a 47µF low-ESR electrolytic cap + 0.1µF ceramic cap, measured @ 20MHz BW, at the output connector)
Transient Response:	5% max. deviation, 1ms max. recovery time (with 25% load step),
Hold-up Time:	8ms min. (100VAC and full load)
Power Indicator:	Green LED

Protections

Input Protection:	MOV transient suppressor, input line fusing

Over-Voltage Protection:	Level 1: 110-130%, Auto-recovery, adaptive to selected PDO Level 2: 24-28V, Latched off, cycle AC to reset
Over-Current Protection:	110-130%, Auto-recovery, adaptive to selected PDO
Short-Circuit Protection:	Auto-recovery
Over-Temperature Protection:	Auto-recovery

Environmental

MTBF:	1,500,000 hours @ 25°C ambient, full load (Telcordia SR-332, Issue 3)
Operating Temperature:	-10°C to 40°C (full load)
Storage Temperature:	-40°C to 80°C
Humidity:	0% to 95% relative humidity, non-condensing
Altitude	5000m
Cooling:	Convection
RoHS:	Complies with EU 2011/65/EU and China SJ/T 11363-2006

Safety

Dielectric Withstand Voltage:	4000VAC or 5656VDC from input to output 10mA, 1 minute
Touch Current:	NC: 80µA max. SFC: 400µA max.
Earth Leakage Current	300µA max. NC/SFC (N/A for 2-conductor input models)
Means of Protection:	2 x MOPP
Output Isolation Options:	-Q suffix: Class II 2-conductor (interchangeable blades) -T2 suffix: Class II 2-conductor -T3 suffix: Class II, with functional earth (FE) Class I, earth wire connected directly to output negative
Note 3:	Review output isolation options with our article: PSU Isolation and Identify

EMC

Applicable Standards:	Medical: EN 60601-1-2 (4e) Emissions: EN55032, EN61000-6-3, EN61000-6-4 Immunity: EN55024, EN61000-6-1 (4e), EN61000-6-2 (4e)
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, 18KV air discharge, Criterion A
Radiated RF Immunity:	EN61000-4-3, 10V/m @ 80-1000MHz, 3V/m @ 1-2.7GHz, 80% 1KHz AM, Criterion A
EFT/Burst Immunity:	EN61000-4-4, 4KV/100KHz., Criterion A
Line Surge Immunity:	EN61000-4-5, 2KV differential, 4KV common-mode, Criterion A

Conducted RF Immunity:	EN61000-4-6, 10VRMS, 80% 1KHz AM, Criterion A
Voltage Dip Immunity:	EN61000-4-11, Criterion B/C
Note 4:	When a Class II power supply is connected to an earth-referenced system, conducted/radiated EMI levels tend to increase since the distant earth connection creates a long return path for common-mode EMI currents. This model includes an output common-mode choke to help alleviate system-level EMI issues. This choke can be removed for cost-sensitive applications.

Enclosure

Housing:	High impact plastic, 94V0 polycarbonate, non-vented
Markings:	Adhesive backed label or laser engraving

Security

USB Power Delivery:	Two non-standard voltage profiles are included: 5.8V and 15.1V. System designers may use these non-standard profiles to reduce the likelihood of system operation with non-GlobTek power supplies. 12.0V is also not standard, but is often included in other power supplies. The power supply will respond to a USB PD "Discover Identity" VDM with 0x4754 in the "ProductID" field. USB PD host systems may check this value before initiating/allowing power negotiation.
Note 5:	These measures do not guarantee a secure implementation, and are only suggested as a method of risk mitigation.
Note 6:	Please see our article Product Security and Risk Mitigation for USB Power Delivery (PD) Based Systems for additional information.

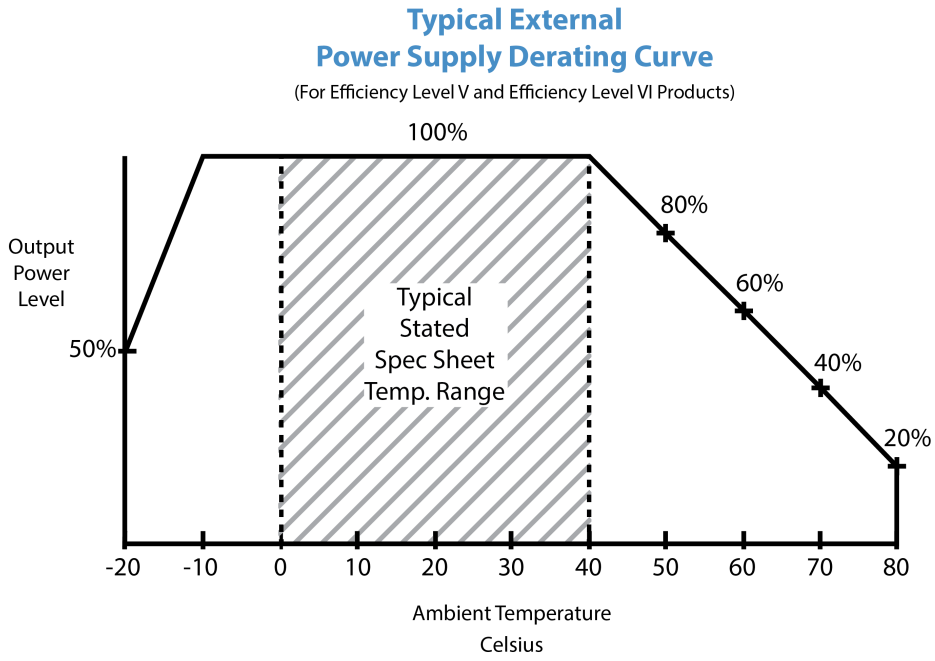
Special Options

Non-standard - Contact GlobTek

1. Custom housing and output cord colors
2. Custom fixed output cord length, for applicable models (1m, 2m, 3m lengths)
3. Custom markings and marking methods
4. Custom USB PD PDOs: Output voltages selectable between 5V and 20V, in 100mV increments

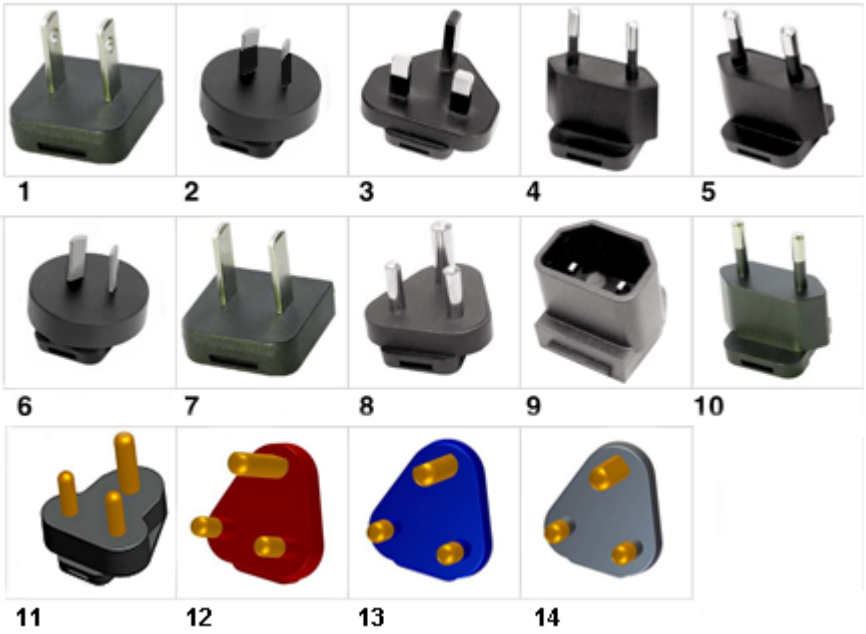
Model:GTM96183-WWPD-USB1C-Q October 25, 2021

DERATING CURVE



INPUT CONFIGURATION

Description Blade Options for Q Series Wall Plug-in Power Supplies
Data Sheet: http://en.globtek.com/interchangeable-blades.php
Insertion Instructions: http://www.globtek.com/pdf/Instructions-Interchangeable-Blades.pdf
Video: Q-Blade Style Instruction Video



INPUT CONNECTOR: Q-Socket (below are available blades configurations which are "not included" (unless stated above); can be purchased separately, package with power supply or as a separate "Q-KIT" if specified

01. United States / Canada / Japan NEMA 1-15P/ IEC PLUG Type A [WORKS IN PLUG B] configuration: NA 2 blades, Class II; US/CA/JP P/N: Q-NA(R)
02. Australian AS 3112 configuration: SAA 2 blade/ IEC TYPE I, Class II; AU P/N: Q-SAA(R)
03. UK BS 1363 configuration: UK 3 blade with dummy Ground/ IEC TYPE G, Class II; GB P/N: Q-UK(R)
04. European CEE 7/16 configuration: Europlug 2 pins/ IEC TYPE C [WORKS IN TYPE E&F], Class II; EU P/N: Q-EU(R)
05. Korean KS C8305 configuration: 2 pins/SIMILAR TO IEC TYPE C, Class II; KR P/N: Q-KR(R)
06. Argentina IRAM 2073 configuration: 2 blades/SIMILAR TO IEC TYPE I; AR P/N: Class II Q-AR(R)
07. China GB 2099 configuration: 2 blades/SIMILAR TO TYPE A, Class II; CN P/N:Q-CN(R)
08. India IS 1293 6A/BS546 configuration: 5A, 3 pins with Dummy Ground, Class II/IEC TYPE D; IN P/N: Q-IN(R)
09. IEC60320/C18 Inlet, Class II; P/N: Q-C18(R)
10. Brazilian NBR6147 configuration: 2 pins, Class II;SIMILAR TO IEC TYPE C BR P/N: Q-BR(R)
11. South Africa SABS164-1 and India IS 1293, IS694, 16A type plug, 3 round prongs, Class II + dummy ground, IEC TYPE M P/N: Q-SANS164-1-16A(R)
12. South Africa SABS164-4, 3 round prongs with a notched prong @ 0º, Class II + dummy ground, IEC TYPE M Red, P/N:
Q-SANS164-4L-16A(R)

13. South Africa SABS164-4, 3 round prongs with a notched prong @ -53º, Class II + dummy ground, Blue, IEC TYPE M, P/N:
Q-SANS164-4C-16A(R)
14. South Africa SABS164-4, 3 round prongs with a notched prong @ +53º, Class II + dummy ground, Black,IEC TYPE M P/N:
Q-SANS164-4R-16A(R)

Kits

01. Q-KIT: 1,2,3,4 above
02. Q-KIT-INTL: 2,3,4 above
03. Q-KIT-6: 1,2,3,4,5,6 above
04. Q-KIT-7: 1,2,3,4,5,6,7 above
05. Q-KIT-8: 1,2,3,4,5,6,7,8 above

Model:GTM96183-WWPD-USB1C-Q October 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.

Approvals

Logo	Description
No Logo Applicable	EU 230V CoC Tier 2, 278/2009, Mar 2014
No Logo Applicable	IEC 60601-1:2005 (Third Edition) + CORR. 1 (2006) + CORR. 2 (2007) + AM1 (2012) or IEC 60601-1 (2012 reprint) (Ed 3.1) for GTM96183 only (pending)
No Logo Applicable	CB for IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013 (pending)
No Logo Applicable	CB for IEC 62368-1:2014 (Second Edition) (pending)
	CCC to GB4943. 1-2011; GB9254-2008; GB17625. 1-2012 with Tropical and Altitude up to 5000 m approval. (pending)
	AAMI ES60601-1 Issued: 2012/08/20 Med Electrical Equipment - Part 1: CAN/CSA-C22.2 No.60601-1:14, 3rd Edition Issued: 2014/03/01 - Med Electrical Equipment - Part 1: IEC 60601-1-11 Ed. 2 Medical Elec. Equip.- Part 1-11: GTM96183 only (pending)
	CHINA SJ/T 11364-2014, China RoHS Chart: http://en.globtek.com/globtek-rohs.php
	Declaration ДС № ЕАЭС N RU Д-US.КА01.В.10453_19 Custom Union of Russia, Belarus and Kazakhstan http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration
	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.
CAN ICES-3(B)/NMB-3(B)	Compliance of this PSU with Industry Canada, Class B demonstrated with a standard output load. The ICES law stipulates that system-level testing is required to

	demonstrate compliance with the ICES-3 emission limits with the actual system load.
	Indoor Use Only - Mark is on the label or Molded in the case
	JAPAN TUV R-PSE, Cert. No. JD 50471561.pdf, to J62368-1(H30) , J55032(H29), J3000(H25) ,[15V?30V]. Please reference the following website for PSE regulations: http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/
	Efficiency: complies to section 301 of Energy Independence and Security Act (EISA) complies with Energy Star tier 2 (North America), ECP tier 2 (China), MEPS tier 2 (Australia), Code of Conduct (Europe)
LPS	Limited Power Source 62368
	Morocco SDoC declaration http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/
	Australia and New Zealand Regulatory Compliance, Mark (http://rcm.standards.org.au/rcmfaq/rcmfaq.htm (pending)
RoHS	Specifications of directive 2011/65/EU Annex VI (ROHS-2) with amendment 2015/863-EU (ROHS-3) http://www.ce-mark.com/Rohs%20final.pdf
	UKCA Certification
	Ukraine UKRSepro (Document: www.globtek.com/html/iso_certificates/GT_Ukraine.pdf)
	Japan: Voluntary Control Council for Interference (VCCI)
	WEEE: Complies with EU 2012/19/EU (http://ec.europa.eu/environment/waste/weee/index_en.htm) Mark is on the label or Molded in the case

Model:GTM96183-WWPD-USB1C-Q October 25, 2021