

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

Model:GTM961200P120VV.V-T3A

October 7, 2022

## GTM961200P120VV.V-T3A

### Information

#### Model Number

GTM961200P120VV.V-T3A

#### Description

GTM961200P120VV.V-T3A, 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/C6 AC Inlet Connector, Class I, Earth Ground ( aka "Mickey Mouse"), Output Rating: 120 Watts, Power rating with convection cooling (W) , 12-54V in 0.1V increments, Approvals: CB 61347; RCM; CCC; Morocco; EAC; cETLus; cETLus 60601-1-11; Malaysia; Taiwan BSMI (12,15,18,19,24,48,54V only); South Africa; ETL; S-Mark 60950; CB 61347; ETL; CB 60335; VCCI; CB 60601-1; S-Mark; WEEE; Ukraine; RoHS; ETL 62368; Level VI; China RoHS; CE;Class I; PSE; PSE; PSE; ETL (Brazil); S-Mark 62368; IRAM; Korea (12V and 13V Only); UKCA; Conforms to 62368-1; NrCAN (12V only); CB 60335; CB 62368;

#### Model Picture



#### Agency Documents

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

#### CE EC-Declaration

[https://www.globtek.com/pdf/ec\\_declaration/a003a00000NKYPKEA5](https://www.globtek.com/pdf/ec_declaration/a003a00000NKYPKEA5)

#### RoHS/RoHS2 Declaration

[https://www.globtek.com/pdf/rohs\\_cert/a003a00000NKYPKEA5](https://www.globtek.com/pdf/rohs_cert/a003a00000NKYPKEA5)

#### 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>

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

Model:GTM961200P120VV.V-T3A

October 7, 2022

**MODEL PARAMETERS**

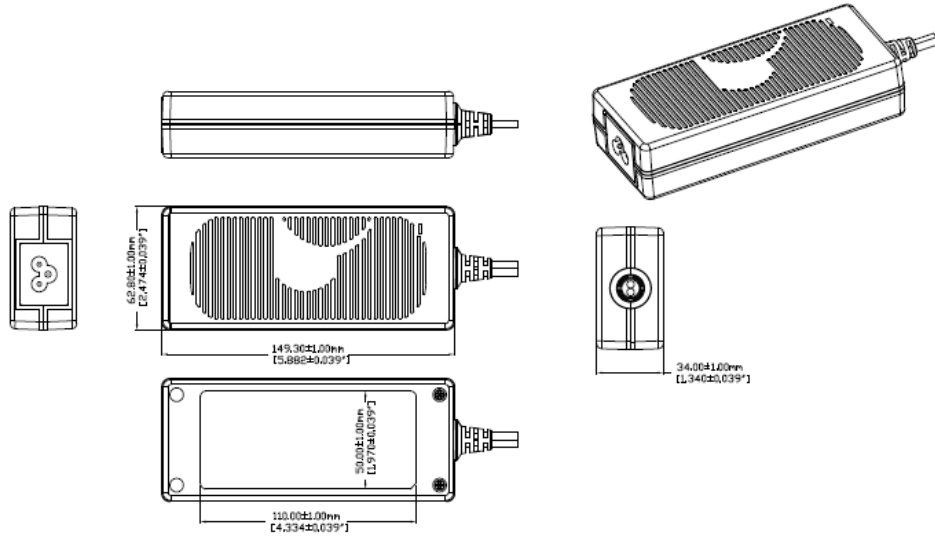
Type	Desktop/External
Technology	Regulated Switchmode AC-DC Power Supply AC Adaptor
Category	ICT / ITE / Medical Power Supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	1.5 A
Wattage (W)	120.0
Vout Range (V)	12-54
Efficiency Level	USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782
Ingress Protection	IP41
Size (mm)	149.30*62.80*34.00

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

Model:GTM961200P120VV.V-T3A

October 7, 2022

# ENCLOSURE



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

Model:GTM961200P120VV.V-T3A

October 7, 2022

**RATING TABLE**

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GTM961200P11012-T3A	12 V	9.2	110.40	<a href="#">RFQ</a>
GTM961200P12015-T3A	15 V	8	120.00	<a href="#">RFQ</a>
GTM961200P12019-T3A	19 V	6.316	120.00	<a href="#">RFQ</a>
GTM961200P12024-T3A	24 V	5	120.00	<a href="#">RFQ</a>
GTM961200P12028-T3A	28 V	4.28	119.84	<a href="#">RFQ</a>
GTM961200P12030-T3A	30 V	4	120.00	<a href="#">RFQ</a>
GTM961200P12036-T3A	36 V	3.33	119.88	<a href="#">RFQ</a>
GTM961200P12038-T3A	38 V	3.15	119.70	<a href="#">RFQ</a>
GTM961200P12048-T3A	48 V	2.5	120.00	<a href="#">RFQ</a>
GTM961200P12054-T3A	54 V	2.22	119.88	<a href="#">RFQ</a>

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

Model:GTM961200P120VV.V-T3A

October 7, 2022

## SPECIFICATIONS

### Input

Input Voltage:	Specified: 90-264VAC, Nameplate: 100-240VAC 100% rated load current for 90-264VAC 90% rated load current for 85-264VAC 100% rated load current for 90-370VDC
Input Frequency:	Specified: 47-63Hz, Nameplate: 50-60Hz
Power Factor:	0.90 min. @ 230VAC, 0.97 min. @ 115VAC
No Load Input Power:	< 150mW @ 115/230VAC
Inrush Current:	< 65A @ 115VAC, < 130A @ 230VAC (cold start)
Efficiency:	DoE Level VI and EU CoC Tier 2 compliant

### Output

Turn-on Delay:	1 second typ.
Output Regulation:	± 4% (measured at output connector)
Line Regulation:	± 0.5% typ. (measured at output connector, full load)
Ripple:	1% or 200mV, whichever is greater (using a 47µF low-ESR cap + 0.1µF ceramic capacitor, measured @ 20MHz BW, at output connector)
Startup Overshoot:	5% max.
Transient Response:	5% max. deviation, 1ms typ. recovery time (with 25% to 50% load step)
Hold-up Time:	20ms min.
Power Indicator:	Green LED
Switching Frequency:	Variable, 25KHz - 125KHz, depending on load

### Protections

Input Protection:	300VAC MOV transient suppressor, input line fusing
Over-Current Protection	Current limited to less than $< 170W / V_{out(nom.)}$ and $< 13A$ , auto-restart
Short-Circuit Protection:	Auto-restart
Over-Voltage Protection:	110 - 135% (60V max for models rated 45 - 54V), full load condition, latched off, cycle AC to reset
Over-Temperature Protection	Internal ambient NTC temperature sensor, latched off, cycle AC to reset

### 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:	-30°C to 80°C

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

Model:GTM961200P120VV.V-T3A

October 7, 2022

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
Note 1:	Regarding operating temperature a. See below de-rating table for output power capability at alternate temperature b. Extended low-end temperature range available as a custom option

## Safety

Dielectric Withstand Voltage:	4000VAC or 5656VDC from input to output 3000VAC or 4242VDC from input to earth (Class I models only)
Touch Current:	Class I: 20µA max. Class II: 70µA max.
Earth Leakage Current	Class I: 300µA max. Class II: N/A
Means of Protection:	2 x MOPP
Output Isolation Options:	Class I: C6 or C14 inlet (output negative tied to Earth contact) Class II: C8 or C18 inlet Class II FE: C6 or C14 inlet (output isolated from Earth contact) Review isolation options by reading our white paper <a href="#">PSU Isolation and Identity</a> .
Primary-to-Secondary Bridging Capacitors:	Two IEC60384-14 Class Y1 capacitors
Earth Continuity Test:	< 0.1Ω between earth pin (on AC inlet) and PCB termination point (Class I models only)
Compliant Standards:	See listing at end of this datasheet for specific standards

## EMC

Applicable Standards:	Medical: EN60601-1-2, 4th edition Emissions: EN55032, 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, 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

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

Model:GTM961200P120VV.V-T3A

October 7, 2022

## Enclosure

---

Housing:	High impact plastic, 94V0 polycarbonate, non-vented
Size:	149.4 * 62.6 * 33.5mm, ± 1.0mm
AC Input Mechanical Options:	C6, C8, C14, or C18 IEC inlet
Markings:	Label and/or pad printed and/or laser-etched into case

## Special Options

---

1. Reduced leakage current to meet IEC60601-1 Type-CF limits
2. Improved EN61000-4-5 line surge immunity (3KV differential, 5KV common-mode)
3. Reduced harmonic current levels for LED lighting (EN61000-3-2 Class C) for 85 - 120W load
4. Short term output surge capability for motors or other high peak current loads
5. Ruggedized construction with improved shock and vibration resistance
6. Compliance to IPC-600, IPC-610, IPC-6012 Class 2 or 3
7. Custom cordsets, special cordage and connector types
8. Custom housing markings
9. Custom housing/cordage colors
10. Tightened output voltage tolerance
11. Reduced output ripple level
12. Reduced output power rating
13. Low temperature option, down to -40°C
14. Epoxy potted version "P2" or "P3" suffix, with flying wires or custom cables
15. "Back EMF" upgrade, for motor loads and other high inductance applications with reverse energy flow requirements
16. Improved ingress protection (IP) rating

## 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.
- Please visit our real-time listing of mating connector product offering:  
<https://en.globtek.com/news/high-current-coaxial-barrel-plug-jacks-for-high-wattage-power-supplies>

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

Model:GTM961200P120VV.V-T3A

October 7, 2022

## DERATING CURVE





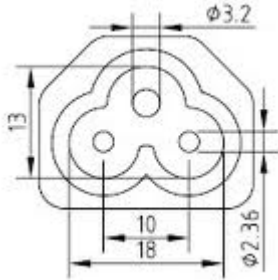
Delivering leading edge, innovative power solutions for more than 30 years....

Model:GTM961200P120VV.V-T3A

October 7, 2022

**INPUT CONFIGURATION**

Description IEC 60320/C6 AC Inlet Connector, Class I, Earth Ground ( aka "Mickey Mouse")



Mates with IEC 60320/C5 Plug

**Standard International IEC 320/C5 Cordsets**

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

Part Number / Link	Country	Plug	Connector	Length (mm)	Length (ft)
<a href="#">3021066F712(R)</a>	N. American (Type B)	NEMA 5-15P	IEC 320/C5	1880	6
<a href="#">1191068F0712(R)</a>	N. American (Type B)	NEMA 5-15P Hospital	IEC 320/C5	2459	8
<a href="#">2194262M0712(R)</a>	Argentina (Type I)	IRAM 2073	IEC320/C5	2050	6.7
<a href="#">2064262M0712(R)</a>	Australian (Type I)	AS3112 / 3 PRONG	IEC 320/C5	2000	6.6
<a href="#">204B4262M0712(R)</a>	Brazil (Type N)	BRAZIL	IEC 320/C5	2000	6.6
<a href="#">6023592M5712(R)</a>	China (Type I)	CCC GR2099	IEC 320/C5	2500	8
<a href="#">23144262M0712(R)</a>	Europe (Type E)	CEE 7/7	IEC 320/C5	2050	6.6
<a href="#">2313K3432M0712(R)</a>	Korea (Type F)	KS C 8305	IEC 320/C5	2000	6.6
<a href="#">205IN4262M0712(R)</a>	India (Type D)	India IS 1293 (also known as IA16A3 or BS546)	IEC320/C5	2000	6.6
<a href="#">377C4262M0712(R)</a>	Israel (Type H)	ISL	IEC320/C5	2050	6.7
<a href="#">23024262M0712(R)</a>	Italy (Type L)	CEI 23-16/VII	IEC 320/C5	2000	6.6
<a href="#">3003316F0712(R)</a>	Japan (Type B)	JIS 8303 / 3 PINS	IEC 320/C5	1830	6
	Japan / USA	JIS 8303 / 3 PINS +			

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

Model:GTM961200P120VV.V-T3A

October 7, 2022

<a href="#">3021066F0712ULPSE(R)</a> (Type B)	NEMA 5-15P	IEC 320/C5 1830	6
<a href="#">2054262M0712(R)</a>	S. Africa (Type D) South Africa SABS164-1 (6A type plug)	IEC320/C5 2050	6.7
<a href="#">2084262M0712(R)</a>	S.Africa (Type M) South Africa SABS164-1 (16A type plug)	IEC 320/C5 2000	6.6
<a href="#">23214262M0712(R)</a>	Switzerland (Type J) SEV 1011 ( EL 203)	IEC 320/C5 2000	6.6
<a href="#">3003316F0712(R)</a>	Taiwan (Type B) BSMI	IEC 320/C5 2000	6.6
<a href="#">6104262M0712(R)</a>	UK, Hong Kong, Singapore, Gulf States (Type G) BS1363	IEC 320/C5 2000	6.6

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

Model:GTM961200P120VV.V-T3A

October 7, 2022

**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.

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

Model:GTM961200P120VV.V-T3A

October 7, 2022







## Approvals

Logo	Description
	Taiwan BSMI GTM961200P-T3(A) R32282 GTM961200P-T3(A); <a href="http://www.bsmi.gov.tw/wSite/ct?xItem=4072&amp;ctNode=8167=2">http://www.bsmi.gov.tw/wSite/ct?xItem=4072&amp;ctNode=8167=2</a>
No Logo Applicable	CB for IEC 60601-1:2006/A1:2013+A12:2014 IEC 60601-1-11:2015
No Logo Applicable	IEC 60335-1.2010+A1
No Logo Applicable	IEC 60335-1.2010+A1
No Logo Applicable	CB for IEC61347-1:2015 + A1:2017 IEC61347-2-13:2014, A1:2016
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)
	CCC Altitude up to 5000 m GB17625.1-2012, GB4943.1-2011, GB/T9254-2008
	Test standard: EN 55032: 2012+AC: 2013 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 55024:2010 EN 60601-1-2:2015
	Audio/Video, Information And Communication Technology Equipment - Part 1: Safety Requirements [UL]

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

Model:GTM961200P120VV.V-T3A






October 7, 2022

	62368-1:2014 Ed.2] Audio/Video, Information And Communication Technology Equipment - Part 1: Safety Requirements [CSA C22.2#62368-1:2014 Ed.2]
	CHINA SJ/T 11364-2014, China RoHS Chart: <a href="http://en.globtek.com/globtek-rohs.php">http://en.globtek.com/globtek-rohs.php</a>
Conforms to AAMI STD.ES60601-1,IEC 60601-1-11 Certified to CAN/CSA STD.C22.2 NO.60601-1	Conforms to AAMI STD.ES60601-1,IEC 60601-1-11 Certified to CAN/CSA STD.C22.2 NO.60601-1
Conforms to UL STD. 60950-1 Certified to CSA STD C22.2 NO.60950-1	Conforms to UL STD. 60950-1 Certified to CSA STD C22.2 NO.60950-1
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 <a href="http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration">http://www.globtek.com/redirect/?loc=gost-certificate-eac-declaration</a>
	Medical Electrical Equipment - Part 1: General Requirements For Basic Safety And Essential Performance (R2012) [AAMI ES60601-1:2005 +C1;A2] [CSA C22.2#60601-1:2014 Ed.3] [AAMI HA60601-1-11:2015 Ed.2]
	Information Technology Equipment Safety Part 1: General Requirements >Valid without technical revision: 01Jan2022< [UL 60950-1:2007 Ed.2 +R:14Oct2014]
	ETL (Brazil) to IEC 62368-1;2014 DOC cert
	Indoor Use Only - Mark is on the label or Molded in the case

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

Model:GTM961200P120VV.V-T3A






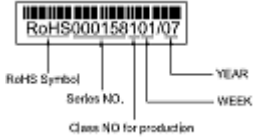



October 7, 2022

 <p><b>DC-E-G71-005.1</b></p> <p>PRECAUCION: PARA USO EN EQUIPOS ELECTRONICOS SOLAMENTE</p>	IRAM certificate DC-E-G71-005.1 to IEC 62368-1:2014
 <p>GlobTek, Inc.</p>	JAPAN TUV R-PSE, Cert. No. JD 50469658, to J62368-1(H30) , J55032(H29),J3000(H25)[15V or less]. Please reference the following website for guidelines on PSE regulations: <a href="http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/">http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/</a>
 <p>GlobTek, Inc.</p>	JAPAN TUV R-PSE, Cert. No. JD 50469658, to J62368-1(H30) , J55032(H29),J3000(H25)[DC15?30V]. Please reference the following website for guidelines on PSE regulations: <a href="http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/">http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/</a>
 <p>GlobTek, Inc.</p>	JAPAN TUV R-PSE, Cert. No. JD 50469658, to J62368-1(H30) , J55032(H29),J3000(H25)[DC30?60V]. Please reference the following website for guidelines on PSE regulations: <a href="http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/">http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/</a>
 <p>직류전원장치 AC/DC ADAPTER KTC HU10499-21046A R-R-GSZ-0006 전기용품안전관리법에 의한 표시 최저소비효율기준 만족 제품 모델명:GTM961200P10812-T3 Mfr. Name: GLOBTEK (SUZHOU) CO.,LTD A/S Center:10-6221-6100</p>	Korea KET KC Mark GTM961200P11012-T3(A) HU10499-21046A (12V & 13V Only)
<p>EFFICIENCY LEVEL </p>	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)
<p>No Logo</p>	Malaysia ST Release Letter GTM961200P T2 T3(A) IEC62368-1(Ed.2): No logo
	Morocco SDoC declaration <a href="http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/">http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/</a>

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

Model:GTM961200P120VV.V-T3A

October 7, 2022

 Energy Verified Rendement Énergétique Vérifié	Natural Resources Canada (NRCAN): CSA Standard C381.1-08, QSP NRCAN EEV1191; for model: GTM961200P10812-T3, -T3A, -T3TAB, -T2, -T2A, <a href="http://shop.csa.ca/en/canada/energy-efficiency/canicsa-c381-1-08/invt/27024802008">http://shop.csa.ca/en/canada/energy-efficiency/canicsa-c381-1-08/invt/27024802008</a>
	RCM certificate SAA-170646-EA; Australia and New Zealand Regulatory Compliance, Mark ( <a href="http://rcm.standards.org.au/rcmfaq/rcmfaq.htm">http://rcm.standards.org.au/rcmfaq/rcmfaq.htm</a> )
RoHS	Specifications of directive 2011/65/EU Annex VI (ROHS-2) with amendment 2015/863-EU (ROHS-3) <a href="http://www.ce-mark.com/Rohs%20final.pdf">http://www.ce-mark.com/Rohs%20final.pdf</a>
	S-Mark Certificate EN 60601-1:2006 + A1:2013 + A12:2014 EN 60601-1-11:2015 ( <a href="http://www.intertek.com/marks/s/">http://www.intertek.com/marks/s/</a> )
	S-Mark Certificate EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011+A2:2013 ( <a href="http://www.intertek.com/marks/s/">http://www.intertek.com/marks/s/</a> )
	S-Mark Certificate EN 62368-1:2014 + A11 ( <a href="http://www.intertek.com/marks/s/">http://www.intertek.com/marks/s/</a> )
	Serial Number Information
No Logo	SOUTH AFRICAN EMI/EMC SABS
	UKCA Certification
 10276	Ukraine UKRSePro (Document: <a href="http://www.globtek.com/html/iso_certificates/GT_Ukraine.pdf">www.globtek.com/html/iso_certificates/GT_Ukraine.pdf</a> )
	Japan: Voluntary Control Council for Interference (VCCI)

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

Model:GTM961200P120VV.V-T3A

October 7, 2022



WEEE: Complies with EU 2012/19/EU (  
[http://ec.europa.eu/environment/waste/wEEE/index\\_en.htm](http://ec.europa.eu/environment/waste/wEEE/index_en.htm))  
Mark is on the label or Molded in the case