

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

Model:GT-A620-D5801

May 11, 2025

GT-A620-D5801

Information

Model Number	GT-A620-D5801
Description	GT-A620-D5801, ICT/ITE Power Supply, Enclosed-Metal, Li-Ion Battery Charger, , Input Rating: 100-240V~, 50-60 Hz, IEC 60320/C14 AC Inlet Connector, Class I, Earth Ground, Output Rating: 620 Watts, Power rating with convection cooling (W) , V in 0.1V increments, Approvals: WEEE; CE;
Model Picture	
Agency Documents	
CE EC-Declaration	https://www.globtek.com/pdf/ec_declaration/a0Oa000000MguLuEAJ
RoHS/RoHS2 Declaration	https://www.globtek.com/pdf/rohs_cert/a0Oa000000MguLuEAJ
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 PARAMETERS

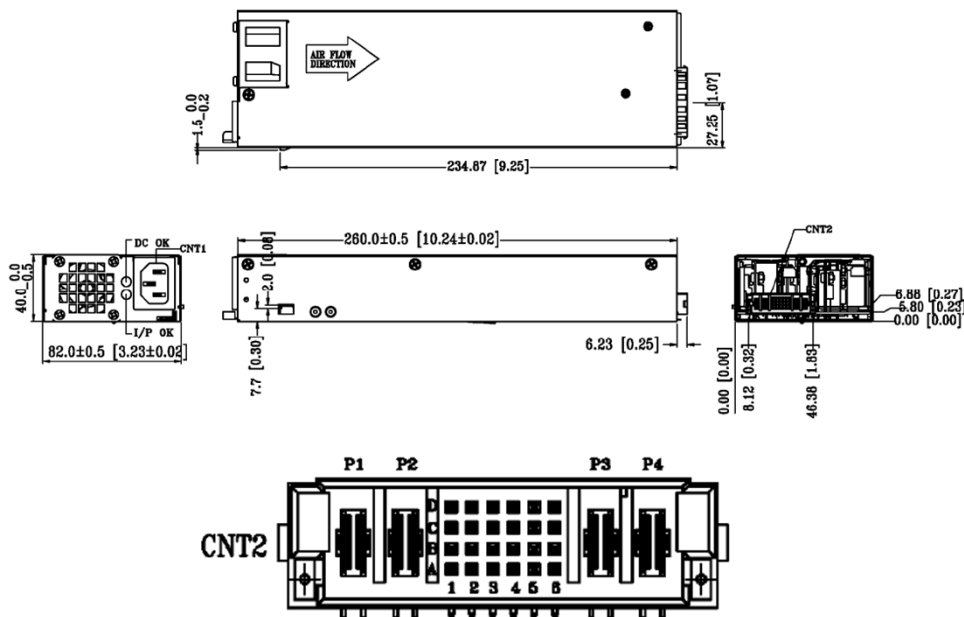
Type	Enclosed-Metal
Technology	Li-Ion Battery Charger
Category	ICT/ITE Power Supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	5.9A at 115Vac
Wattage (W)	620.0
Vout Range (V)	
Efficiency Level	V
Ingress Protection	
Size (mm)	

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ENCLOSURE



DC Output Connectors (P1-P2) & (P3-P4) Pin Assignment

Main Output (ALLTOP C24501-128H1-Y)

VO1	P4
VO1 RTN	P3

Auxiliary Output (ALLTOP C24501-128H1-Y)

VO2	P1
VO2 COM	P2

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CNT2 PMBus Interface connector

D1	D2	D3	D4	D5	D6
ALERT	A2	DGND	INH	N/A	N/A
C1	C2	C3	C4	C5	C6
MCU_OK	A1	PS_EN_IN	PWM-V	N/A	N/A
B1	B2	B3	B4	B5	B6
SDA	A0	PS_EN_OUT	PWM-C	N/A	N/A
A1	A2	A3	A4	A5	A6
SCL	PS_PRNT	AC_FAIL	FAN_FAL	N/A	N/A

Suitable Battery TypesLead-acid

Li-ion

LiFePO4

Ultra-capacitors

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RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GT-A620-D5801	58/12 V	9.6/5		RFQ

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SPECIFICATIONS

Input Specifications

Input Voltage: 90-264Vac (See de-rating chart)
Frequency: 47-63Hz
Inrush current: 21A (peak @ 230Vac)
Input current: 5.9A typ. @ 115Vac / 3A typ. @ 230Vac
No-Load Power: 12.7 Watt @ 115Vac / 230Vac
Efficiency: 92% typ. @ full load @ 230Vac
Power Factor: 0.98 typ. (meets EN61000-3-2)
Conducted EMI: CISPR EN55022B
Harmonic distortion: Meets IEC 61000-3-2
Isolation: Meets IEC 60950-1
Leakage current 0.93mA typ. @ 230Vac
Hold-up Time: typ. 8.4mS @ 115Vac / 9.2mS @ 230Vac
Remote ON/OFF: Available (Contact Globtek)
Power fail Signal: Available (Contact Globtek)
Thermal Protection: NTC/thermostat and Temperature sensor

Output Specifications

Number of Outputs: Two (VO1) & (VO2)
Normal Output Voltage: VO1 – +58V (VO2 – +12V) VO1 is adjustable (Contact Globtek)
Normal Output Current: VO1 – 9.6A (VO2 – 5.0A)
Total Output Power: 620 Watts
Line Regulation: typ. $\pm 1\%$
Load Regulation: typ. VO1 & VO2 $\pm 2\%$
Transient Response: Peak > 2500mV and recovers within 3mS after 25% load step
Noise & Ripple: typ. 1% pk-pk – bandwidth limited to 20MHz
Over Voltage Protection: (OVP) Built In
Over Current Protection: (OCP) Programmable constant current (Contact Globtek)
Over Load Protection: (OLP) fully protected
Switching Frequency: 120KHz
DC-OK Signal: Available (Contact Globtek)
Environmental Specification

Storage Temperature: -40°C to +85°C
Operating Temperature: -20°C to +70°C (See de-rating chart)
Cooling: Internal fan with intelligent speed control

Safety @ Regulatory

IEC: 60950-1 / EN 60335-1 / EN60335-2-29 Class 1
Conducted EMI: CISPR EN55022B
Harmonic distortion: Meets IEC 61000-3-2

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Mechanical Specifications

Type: Enclosed Metal

Weight: 2.74lb (1.24kgs)

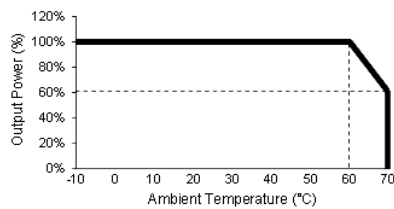
Dimensions: Length; 260± 0.5mm [10.24 ±0.02"] Width; 82 ±0.5mm [3.23±0.02"] Height; 40.0mm [1.574"]

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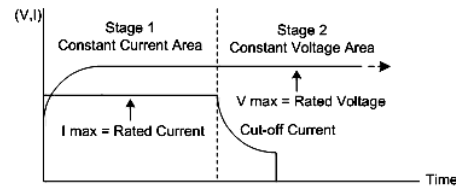
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DERATING CURVE

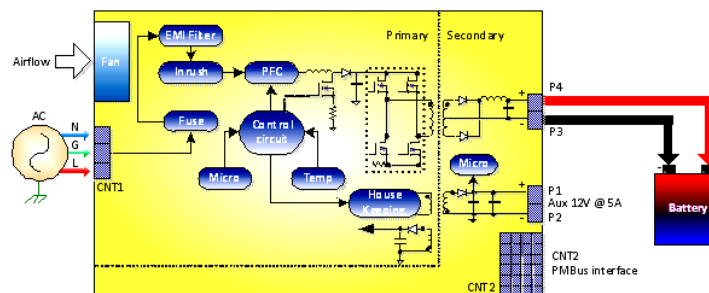


OutputPower Versus Ambient Temperature de-rating chart



Battery Charging Curve

Block Diagram



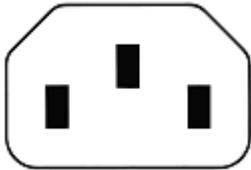
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INPUT CONFIGURATION

Description IEC 60320/C14 AC Inlet Connector, Class I, Earth Ground



Mates with IEC 60320/C13 Plug

Optional Locking IEC60320 Receptacle and cord option available on some models by request.:



[Standard International IEC 320/C13 Cordsets](#)

Below are standard cordsets which are "not included" (unless stated above); these can be purchased separately or packaged 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.

Stock Power Supply Cords

Part Number/ Link	Country	Plug	Termination	Length (mm)	(Ft)
3021457F701(R)	N. American (Type B)	NEMA 5-15P	IEC 320/C13	2150	7
1191068F0701(R)	N. American (Type B)	NEMA 5-15P Hospital	IEC 320/C13	2459	8
2194272M5701-T(R)	Argentina (Type I)	IRAM 2073	IEC 320/C13	2500	8
5502022M5701A(R)	Australian (Type I)	AS3112 / 3 PRONG	IEC 320/C13	2500	8
204B4272M5701(R)	Brazil (Type N)	BRAZIL	IEC 320/C13	2500	8
6023602M5701(R)	China (Type I)	CCC GR2099	IEC 320/C13	2500	8
G8014272M5701(R)	Danish (Type K)	AFSNIT SECTION 107-2-D1	IEC 320/C13	2500	8
23144272M5701-T(R)	Europe (Type E)	CEE 7/7	IEC 320/C13	2500	8
23134272M5701EUKR(R)	Europe/Korea Combo (Type E)	CEE 7/7 / KSC8305	IEC 320/C13	2500	8
205IN4272M5701(R)	India (Type D)	India IS 1293 (also known as IA16A3 or BS546)	IEC 320/C13	2500	8

PROPRIETARY INFORMATION

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<https://www.globtek.com/ds/dMRJq4axF5R/3LpHnk76Uvp.html#datasheet>

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208IN4272M5701(R)	India (Type M)	India IS 1293 (also known as IA16A3 or BS546)	IEC320/C13	2500	8
377C4272M5701(R)	Israel (Type H)	ISL 377C	IEC 320/C13	2500	8
23024272M5701(R)	Italy (Type L)	CEI 23-16/VII	IEC 320/C13	2500	8
3003339F701(R) [3x1.25mm2]	Japan (Type B)	JIS 8303 / 3 PINS	IEC 320/C13	2500	8
3003068F2701-HK(R) [3 x 2.0mm2]					
302J115J6F0701J(R)	North America / Japan (Type B – 12A)	NEMA 5-15P (cULus approved), Japan JIS C 8303 (PSE Approved)	IEC 320/C13	1830	6
302J104J6F0701J(R)	North America / Japan (Type B – 15A)	NEMA 5-15P (cULus approved), Japan JIS C 8303 (PSE Approved)	IEC 320/C13	1830	6
302JT104J9F0701JT(R)	North America / Japan / Taiwan (Type B – 15A)	NEMA 5-15P (cULus approved), Japan JIS C 8303 (PSE Approved), Taiwan CNS 6797 (BSMI Approved)	IEC 320/C13	2800	9
2313K3432M5701(R)	Korea (Type F)	KS C 8305	IEC 320/C13	2500	8
5804272M5701(R)	Russia (Type F)	GOST 7396	IEC 320/C13	2500	8
2084272M5701(R)	South Africa (Type M)	South Africa SABS164-1 (16A type)	IEC 320/C13	2500	8
23214272M5701(R)	Switzerland (Type J)	SEV 1011	IEC 320/C13	2500	8
3003322M5701(R)	Taiwan (Type B)	BSMI	IEC 320/C13	2500	8
6363762M5701(R)	Thailand (Type O)	TIS 166-2549	IEC 320/C13	2500	8
PZ0800100-2M5BK13H(R)	UK, Hong Kong, Singapore, Gulf States (Type G)	BS 1363A	IEC 320/C13	2500	8
7055002M5701A(R)	International	IEC 320 C14-C13	IEC 320/C13	2500	8

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Approvals

Logo	Description
	CE Mark: tested to comply with EN55022:2006/A1:2007 Class B, EN610003-2, EN610003-3 including EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6N EN61000-4-11; EMI: Complies with EN55011 CLASS B and FCC Part 15B - On label or Molded in case
	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