

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

Model:GTD221109

May 10, 2025

GTD221109

Information

Model Number	GTD221109
Description	GTD221109, ICT/ITE Power Supply, Vehicle/Car DC/DC Converter, DC-DC, , Input Rating: 12-24 Vdc, Male Cigarette Lighter Plug,UL2468, 16AWG, 1800mm, Output Rating: 60 Watts, Power rating with convection cooling (W) , 12-24V in 0.1V increments, Approvals: CE; China RoHS; RoHS; Double Insulation; Ukraine; VCCI;
Model Picture	
Agency Documents	
CE EC-Declaration	https://www.globtek.com/pdf/ec_declaration/a0O30000007P7ZjEAK
RoHS/RoHS2 Declaration	https://www.globtek.com/pdf/rohs_cert/a0O30000007P7ZjEAK
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	Vehicle/Car DC/DC Converter
Technology	DC-DC
Category	ICT/ITE Power Supply
Input Voltage	12-24 Vdc
I/P Amps (A)	
Wattage (W)	60.0
Vout Range (V)	12-24
Efficiency Level	
Ingress Protection	
Size (mm)	103*50*32.5

PROPRIETARY INFORMATION

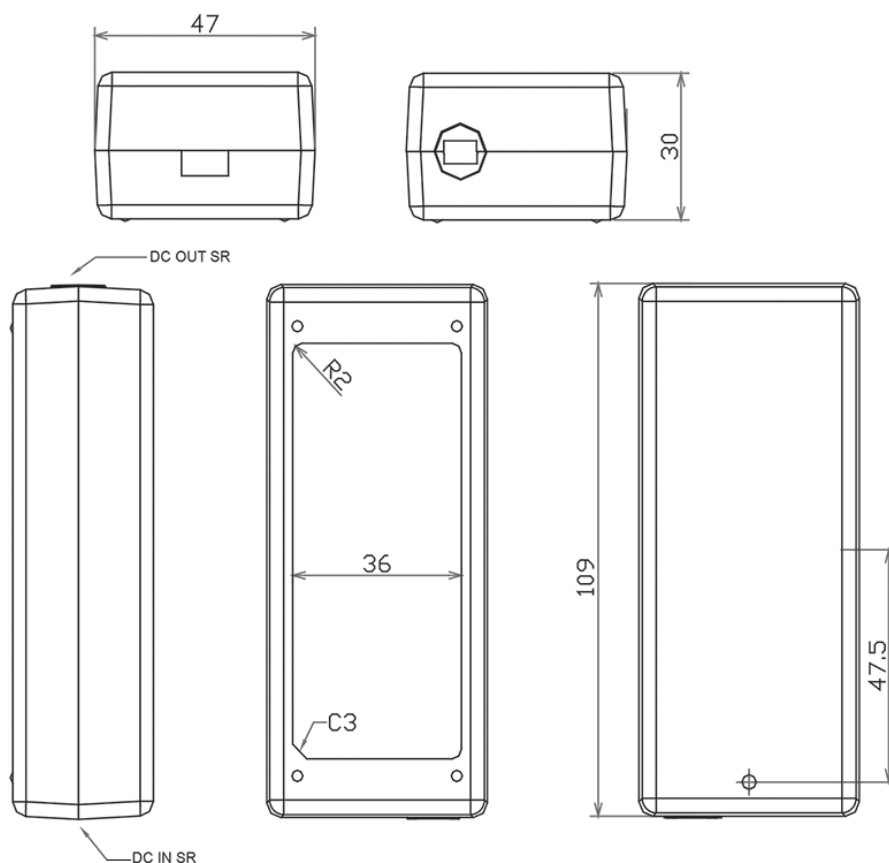
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<https://www.globtek.com/ds/8iMPTjun2bg/hcCELZBJ5SY.html#datasheet>

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ENCLOSURE

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RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
a17a000000LICrP	V			RFQ
GTD221109-6012	12 V	5	60.00	RFQ
GTD221109-6015	15 V	4	60.00	RFQ
GTD221109-6016	16 V	3.75	60.00	RFQ
GTD221109-6018	18 V	3.33	59.94	RFQ
GTD221109-6019	19 V	3.15	59.85	RFQ
GTD221109-6020	20 V	3	60.00	RFQ
GTD221109-6024	24 V	2.5	60.00	RFQ

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SPECIFICATIONS

1. ELECTRICAL CHARACTERISTICS

1.1 Input Characteristics

1.1.1 DC input voltage

Rated input voltage: 12 ~ 24Vdc

1.1.2 DC input current

Maximum: 10A

1.2 Efficiency

1.2.1 The efficiency of power supply will be higher than 85% at input voltage range with average value.

1.3 Ripple & Noise

Ripple limit: Output voltage 1% max.

Noise limit: Output voltage 1% max.

1.4 Protection

1.4.1 Short circuit protection

When output short circuited, output voltage peak value will be less rating output voltage

1.4.2 Over current protection

Over current protection point will be less than output current 200%

1.4.3 Over voltage protection

Over voltage protection point will be less than output voltage 130%

2. Reliability

2.1 MTBF

40,000 hour Power on at 25 °C

2.2 Temperature Rise (Delta-T).

Temperature rise will be less than 85°C and case temperature rise will be less than 35 °C at normal DC input / DC output full loading

Environment temperature 25 ± 1°C

2.3 Burn-in

100% Burn - in at full loading and 4 hours at 40 +/- 5°C Environment temperature

2.4 Drop Test

The adapter will be subjected to 3 drops from 1 M height on a hard wooden surface.

2.5 DC input ON/OFF test

The adapter must meet all specifications after test.

DC input voltage: 12~24Vdc

DC input ON/OFF cycle: min 5 sec/ 5 sec

DC input voltage drop: 30%/500msec

DC input ON/OFF times: 10,000

3. ENVIRONMENTAL CHARACTERISTICS.

3.1 Temperature

The adapter must meet all specifications after test.

Unit operating temperature range: 0 to 40°C

Storage temperature range: -20 to 85°C

3.2 Max Temperature

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The adaptor must meet all specifications after test.

Condition:

Measure the temperature continuously for more than 3 hours with max load.

3.3 Humidity

The adapter must meet all specifications after test.

Operating humidity: Max 90%RH

Storage humidity: Max 90% RH

3.4 Altitude

Installation : Sea level up to +10,000 feet

Storage : Sea level -100 to +10,000 feet

4 Mechanical

4.1 Plastic Case material: "PC"

4.2 Physical Size: 109mm(L) X47mm(W) X 30 mm(H)

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DERATING CURVE

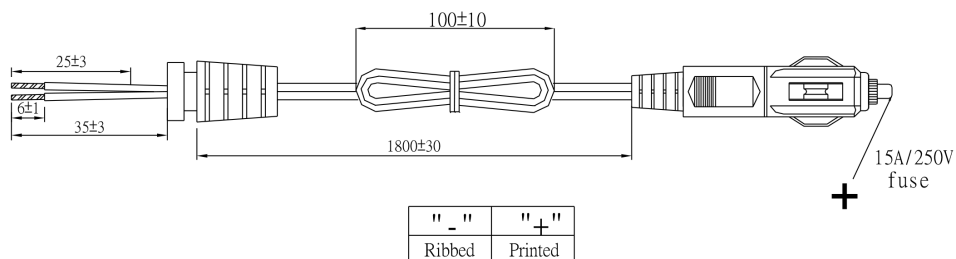
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INPUT CONFIGURATION

Description Male Cigarette Lighter Plug,UL2468, 16AWG, 1800mm



1.INPUT CABLE:UL2468 16AWG L=1800mm

2.DC PLUG:Car male cigarette lighter
(15A/250V Sloblo fuse)

Center is positive.

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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)



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design

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Approvals

Logo	Description
	Attention Mark / Refer to operating manual for operating and service instructions
	CE Certification
	CHINA SJ/T 11364-2014, China RoHS Chart: http://www.globtek.com/pdf/F-GT-DJD-8.4.1-006%20China%20RoHS%20Declaration%205-20-22.pdf
	
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
 10276	Ukraine UKRSepr (Document: www.globtek.com/html/iso_certificates/GT_Ukraine.pdf)
	Japan: Voluntary Control Council for Interference (VCCI)