

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

Model:GTM96300-3656-T3-AP

June 2, 2020

Medical POE Injector Midspan provides IEEE802.3at Poe PSE, DEO EPS Level VI and EuP compliance, and IEC60601-1 certification

Information

Model Number	GTM96300-3656-T3-AP
Description	GTM96300-3656-T3-AP, ITE / Medical Power Supply, Desktop/External, Gigabit Power over Ethernet (IEEE802.3at PoE PSE) Power Supply AC Adaptor, , Input Rating: 100-240V~, 50-60 Hz, IEC 60320/C14 AC Inlet Connector, Class I, Earth Ground, Output Rating: 36 Watts, Power rating with convection cooling (W) , 56V in 0.1V increments, Approvals: CB 60335; CB 62368; CE; China RoHS; Class I; EAC; PSE; Level VI; VCCI; Patent US9838207B2; WEEE; Ukraine; RoHS; China RoHS; CB 60601-1-11; cRUus; ETL 62368;
Model Picture	
Agency Documents	http://www.globtek.info/certs/GTM96300-POE/
CE EC-Declaration	https://www.globtek.com/pdf/ec_declaration/a000c00000QDdumEAD
RoHS/RoHS2 Declaration	https://www.globtek.com/pdf/rohs_cert/a000c00000QDdumEAD
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

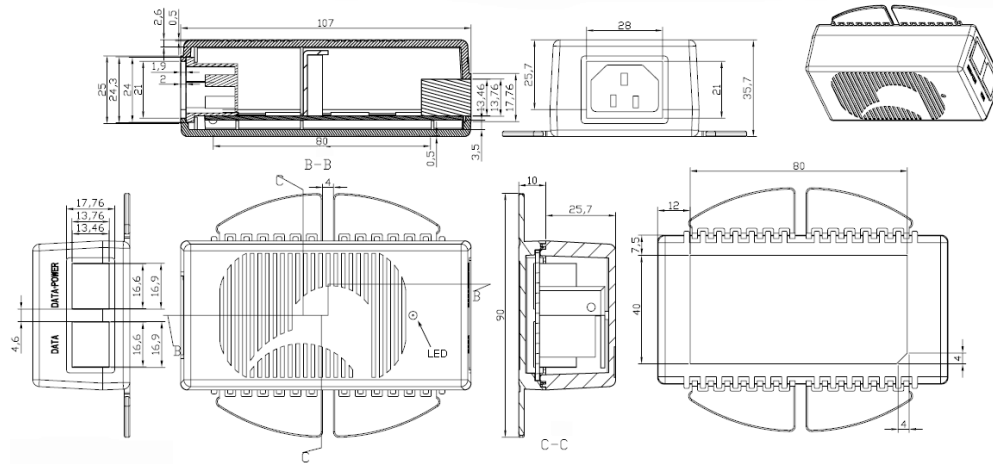
Type	Desktop/External
Technology	Gigabit Power over Ethernet (IEEE802.3at PoE PSE) Power Supply AC Adaptor
Category	ITE / Medical Power Supply
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	1.0A
Wattage (W)	36.0
Vout Range (V)	56
Efficiency Level	USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782
Ingress Protection	IP40
Size (mm)	107*55*36

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ENCLOSURE



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RATING TABLE

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GTM96300-3656-T3-AP	56 V	0.643	36.01	RFQ

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SPECIFICATIONS

GlobTek's GTM96300-3656 Active Power over Ethernet Midspan Injector offers cost effective and reliable solution for remote powering of Wireless LAN Access Points, Voice over IP phones, Security Cameras, RFID readers and other IP terminals up to 36 Watts over existing network infrastructure. This injector is configured to provide 36 watts of power per port over two pairs in compliance with IEEE 802.3at (type 2) standard.

The GTM96300-3656 Active PoE Injector is designed to function with and provide power to any IEEE 802.3at compliant PoE device.

MAIN FEATURES

- Withstands high energy EMI Immunity events without going into latched shutdown state
- Enhanced 36W output power capability
- IEEE 802.3at Detection, 2 Event classification, Disconnect and Overload Protection
- LED User Interface for Power Good and Fault Conditions
- Compliant to PoE+, 10/100/1000 BaseT Data Rates
- Universal Input Power from 100Vac to 240Vac
- Unique Patented Green Design: Compliant to DoE Efficiency level VI requirement
- Full Protection for Over Voltage and Current
- Compact 104 x 54 x 40 mm (w/o MTG Flange)

APPLICATIONS

- Medical Apparatus
- VoIP Phones
- VoIP Phone with Video
- Wireless Access Points
- Bluetooth Access Points
- Multi-Band Wireless Access Points
- Network Security Cameras
- Point of Sales
- Industrial Controllers
- Electronic Time Card Readers
- Building Security Systems
- Network Camera with Pan, Tilt and Zoom Features
- Electronic Signs
- RFID Readers
- Motion Sensors
- HVAC Controllers
- Magnetic Card Readers
- PDAs
- Digital Time clock

A) ELECTRICAL SPECIFICATIONS:

INPUT

Input Range: 90-264 Vac (85-264Vac @ 85% of rated output power)

Input Line Frequency: 47-63Hz

PROPRIETARY INFORMATION

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Input Current:< 1A RMS @ 90Vac Full Load
Inrush Current: 60A Typical, Cold Start @ 25°C at 230Vac
No load Power: < 100mW
Efficiency: >87.4%, 4 Point Avg efficiency. Typical at Full Load , 230 Vac
Turn on-delay: 1 Second Typical @ 115Vac
Input Line Protection: MOV Transient protected.
Hold-up time: 8ms typical at nominal input voltage and full load
Leakage current: <100uA
Isolation: 3000 VAC

OUTPUT

Number of Ports: One

Data Rates: Compliant to PoE+, 10/100/1000 Mbits/second Ethernet Speed

Power Injection Method: For IEEE 802.3at Midspan, 4&5 for V+ and 7&8 for Common

Port Voltage: 56Vdc nom at pins 4&5 to 7&8

Port Current: 0 to 640mA max for pins 4&5 to 7&8

Port Power: 36W max from pins 4&5 to 7&8

Port Voltage Regulation: Complies with IEEE 802.3at requirements

Port Voltage Ripple: Complies with IEEE 802.3at requirements

Port Voltage Transient Performance: Complies with IEEE 802.3at requirements

Port Overload Protection: Complies with IEEE 802.3at Requirements. Port will shutdown during overload and auto recover when overload is removed.

Port Short Circuit Protection: Complies with IEEE 802.3at Requirements. Port will shutdown during short circuit and auto recover when short is removed.

Port Power Disconnection Method: Automatic Disconnect if < 10mA minimum load detected per IEEE 802.3at standard.

User Interface: Green LED Status Indicator, States as Follows:

No Light: No Powered Device detected at end of ethernet cable

Flashing at 1.5Hz: Detection (hand-shaking) in-Process, with Powered Device

Continuous Light: Good Connection with Powered Device

Flashing at 10Hz: Over Current Condition

ENVIRONMENTAL

Temperature: Operating, -10C to 40C

Storage, -30C to 80C

Humidity: 0% to 95% Relative Humidity, Non-Condensing

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Altitude: Operating, Up to 5000M

MECHANICALS / ENCLOSURE

Housing: High impact plastic, 94V0 polycarbonate, non-vented

Markings: Label and/or Pad Printed and/or Molded in the case Dimensions: 104*54*40 mm (w/o MTG Flange)

Weight: 0.35 Lb, 155 gr.

AC Input mechanical options: Desktop C6, C8, C14 or C18 IEC Inlet.

Hybrid option (Desktop or Changeable Blade Wall Plug-in) Class II with FE or Class II input

Data and Data+Power Connector: Fully Shielded RJ45

SAFETY

Dielectric Withstand Voltage: 4000Vac or 5656Vdc from input to output,

Earth Leakage Current: Class II FE models < 300uA, N/A for Class II models

Touch Current: Class II FE models < 20uA, Class II models < 75uA

Output Isolation Options:

a) C8 or C18 Inlet, Class II

b) C6 or C14 Inlet, Class II FE, Output Isolated from Earth contact, by F3 config

Means of Protection: 2 x MOPP

Primary to Secondary Bridging Capacitance: Two IEC60384-14 certified Y1 type capacitors in series

Compliant Standards: See listings at end of this drawing for specifics

EMISSIONS and IMMUNITYEN 60601-1-2, 4th edition

Emissions, per EN 55032, EN 55011, EN 61000-6-3, EN 61000-6-4

Conducted Emissions: Class B, FCC Part 15, Class B

Radiated Emissions: Class B, FCC Part 15, Class B

Line Frequency Harmonics EN61000-3-2, Class A

Voltage Fluctuations/Flicker EN61000-3-3

Immunity, per EN 55024, EN 61000-6-1, EN 61000-6-2

Static Discharge Immunity EN61000-4-2, 10kV Contact Discharge, 18kV air discharge

Radiated RF Immunity EN61000-4-3, 10V/m 80MHz - 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, 30A/m

Voltage Dip Immunity EN61000-4-11, Criteria

REGULATORY COMPLIANCE

Compliant Safety Standards: See listings at end of this drawing for specifics

IEEE 802.3at: Product tested per the requirements of IEEE 802.3at

INTEROPERABILITY: Product's interoperability performance verified with various third party PoE enabled systems. See table below.

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SPECIAL OPTIONS

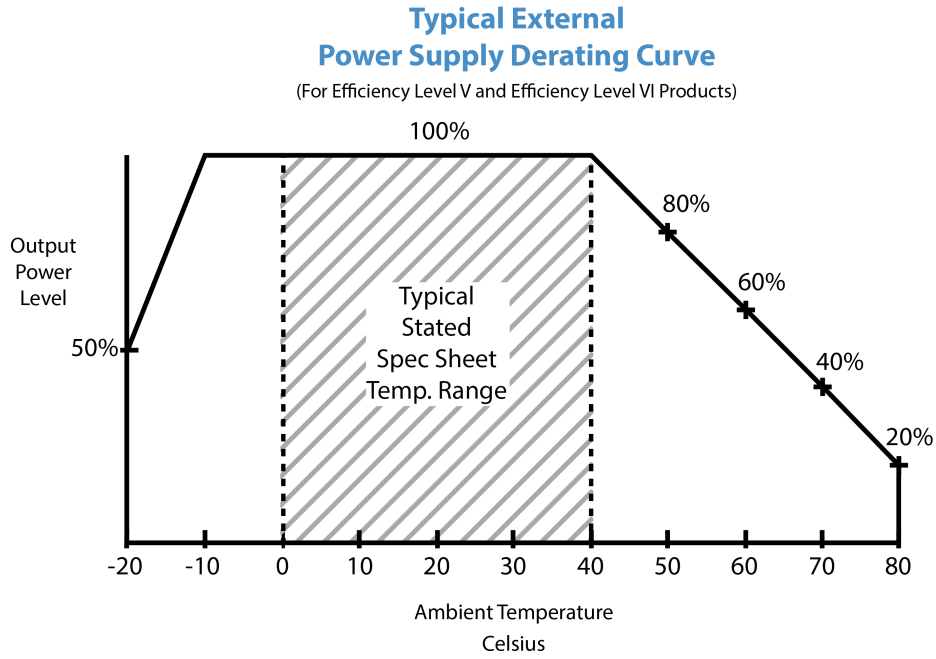
1. Custom Markings
 2. Reduced output power rating
 3. Compatibility to 24W-30W output power Splitters using Data Link Layer Classification
 4. High Rel PCB laminate with Plated through Holes for IPC610 Class 2 Compliance
 5. Special Housing Colors
 6. 48V or 54V Output Voltage, contact factory for availability
-

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DERATING CURVE



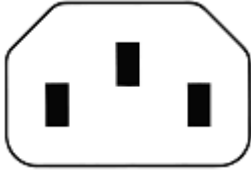
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INPUT CONFIGURATION

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
205IN4272M5701(R)	India (Type D)	India IS 1293 (also known as IA16A3 or BS546)	IEC 320/C13	2500	8
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

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3003068F2701-HK(R) [3 x 2.0mm2]					
302J115J6F0701J(R)	Japan / North America (Type B – 12A)	JIS 8303 / 3 PINS and NEMA 5-15P (PSE and UL/CUL appr)	IEC 320/C13	1830	6
302J104J6F0701J(R)	Japan / North America (Type B – 15A)	JIS 8303 / 3 PINS and NEMA 5-15P (PSE and UL/CUL appr)	IEC 320/C13	1830	6
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
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
No Logo Applicable	IEC 60601-1
No Logo Applicable	CB for IEC 62368-1:2014 (Second Edition)
	CE Certification
No Logo Applicable	IEC 60335-1:2010 (Fifth Edition) incl. Corr. 1:2010 and Corr. 2:2011 + A1:2013
	Audio/Video, Information And Communication Technology Equipment - Part 1: Safety Requirements [UL 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: http://en.globtek.com/globtek-rohs.php
	CHINA SJ/T 11364-2014, China RoHS Chart: http://en.globtek.com/globtek-rohs.php
	cRUus UL Recognized Component E341350 3rd Edition w-RM ANSI-AAMI ES60601-1 (2005 + C1:09 + A2:10) and CAN-CSA-C22.2 No. 60601-1:14 (2008)
	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
	JAPAN TUV R-PSE, Cert. No. JD 50313285, to J60950-1(H26) , J55022(H22),J3000(H25)[DC30? 60V]. Please reference the following website for guidelines on PSE regulations: http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/

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EFFICIENCY LEVEL VI	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)
	Morocco SDoC declaration http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/
Patent US9838207B2	Protected by US and international patents, US patent number US9838207B2
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 UKRSepra (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