May 2, 2024

Model:GT-96180-18VV-R2-PP



	Way 2, 202-
Passive POE midspan/ir	njector available in 5-54vdc output.
Information	
Model Number	GT-96180-18VV-R2-PP
Description	GT-96180-18VV-R2-PP, PoE, Passive Power Injector, Wall Plug-in+Desktop Combination, Single Port Passive Power Over Ethernet Midspan (Passive/Dumb PoE PSE) Power Supply AC Adaptor, , Input Rating: 100-240V~, 50-60 Hz, IEC 60320/C8 AC Inlet connector, Output Rating: 18 Watts, Power rating with convection cooling (W) , 18-56V in 0.1V increments, Approvals: CCC; IRAM; Patent US9838207B2; EAC; UKCA; Conforms to 62368-1; Morocco; WEEE; VCCI; Ukraine; China RoHS; RoHS; Level VI; CE; Double Insulation; cETLus 60950; S-Mark 60950; ETL; CB 60335; ETL 62368;
Model Picture	
Agency Documents	http://www.globtek.info/certs/GT-96180-POE/
CE EC-Declaration	https://www.globtek.com/pdf/ec_declaration/a0Oa00000Mmd55EAB
RoHS/RoHS2 Declaration	https://www.globtek.com/pdf/rohs_cert/a0Oa00000Mmd55EAB
REACH Declaration	https://www.globtek.com/pdf/iso_certificates/REACH.pdf
Conflict Minerals Declaration	https://www.globtek.com/pdf/conflict-minerals.pdf

May 2, 2024

Model:GT-96180-18VV-R2-PP



MODEL PARAMETERS	
Туре	Wall Plug-in+Desktop Combination
Toohnology	Single Port Passive Power Over Ethernet Midspan (Passive/Dumb PoE PSE) Power
Technology	Supply AC Adaptor
Category	PoE, Passive Power Injector
Input Voltage	100-240V~, 50-60 Hz
I/P Amps (A)	2.0A
Wattage (W)	18.0
Vout Range (V)	18-56
Efficiency Level	USA DOE Level VI / Eco-design Directive 2009/125/EC, (EU) 2019/1782
Ingress Protection	
Size (mm)	

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# Model:GT-96180-18VV-R2-PP May 2, 2024 **ENCLOSURE** 104.00±1.00-

186 Veterans Dr, Northvale NJ 07647, USA 1-201-784-1000

Model:GT-96180-18VV-R2-PP	May 2, 2024
Unit shipped without an installed input	
"Desktop insert" installed	





**RATING TABLE** 

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May 2, 2024

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## Model:GT-96180-18VV-R2-PP

Model Number	Voltage	Amps(A)	Watts(W)	RFQ
GT-96180-1836-R2-PP	36 V	0.5	18.00	RFQ
GT-96180-1848-R2-PP	48 V	0.375	18.00	RFQ
GT-96180-1856-R2-PP	56 V	0.321	17.98	RFQ



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Model:GT-96180-18VV-R2-PP May 2, 2024

# **SPECIFICATIONS**

GlobTek's 18W and 36W Passive Power over Ethernet Midspan Injectors offers cost effective and reliable solution for remote powering of specialized non-standard Ethernet Powered Devices requiring up to 36 Watts over existing network infrastructure. These Passive Injectors are configured to provide 18 or 36 watts of power over two pairs (4,5 + and 7,8 -) per IEEE 802.3 defined wires. When the load device is connected, GlobTek's Passive PoE Injector will immediately source power to the Powered Device. GlobTek's 56V Passive PoE Injectors are designed to function with and provide power to any IEEE 802.3af or 802.3at PoE device. For specialized applications Globtek can also provide lower output voltage models between 18V and 54V with reduced circuit complexity, these are referred to as our Simple Power over Ethernet Injector products.

#### MAIN FEATURES

- Cost Effective Passive PoE, supplies continuous power without requiring handshaking communications
- Output can source up to 18W or 36W at 18V, 24V, 36V, 48V, 54V or 56V
- Withstands high energy EMI Immunity events without going into latched shutdown state
- Short Circuit and Overload Protection protects Ethernet cabling if Splitter has a Short Circuit
- Green LED Indicates Output Power Availability
- Passive PoE models can transfer 10/100/1000 BaseT Data Rates (Gigabit compatible)
- Simple, Low Cost PoE models can transfer 10/100 BaseT Data Rates
- Universal Input Power from 100Vac to 240Vac
- 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**

- Custom Ethernet Power Distribution Architecture
- 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
- Digital Time clock

# A) ELECTRICAL SPECIFICATIONS:

**INPUT** 

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

Input Line Frequency: 47-63Hz

Input Current:< 1A RMS @ 90Vac Full Load for 36W

< 0.6A RMS @ 90Vac Full Load for 18W

Inrush Current: 30/60A max at 115/230Vac

#### PROPRIETARY INFORMATION



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Model:GT-96180-18VV-R2-PP May 2, 2024

No load Power: < 100mW

Efficiency: > 87.4%, 4 Point Avg efficiency. Typical at Full Load for 36W

> 85.0%, 4 Point Avg efficiency. Typical at Full Load for 18W

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

Touch current at output: <100uA Earth Leakage current at input: <100uA Isolation: Input to Output, 3000 VAC

#### **OUTPUT**

Power Injection Pins: 4&5 for V+ and 7&8 for Common Port Voltage: 56V standard, 18V to 54V optional

Port Power: 18W or 36W Max

Port Voltage Regulation: +/-3%, and less than 57Vdc

Port Voltage Ripple: 100mVpp max

#### **B) ENVIRONMENTAL**

Temperature: Operating, -10C to 40C

Storage, -30C to 80C

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

Altitude: Operating, Up to 5000M

## C) 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 I or Class II input

Data and Data+Power Connector: Fully Shielded RJ45

# D) EMISSIONS and IMMUNITY

Emission: Meets FCC Class B Part 15, EN55022 Class B

Immunity: Meets the following;

EN610000-6-2 (Industrial Level Immunity Compliance, extended levels shown in parenthesis)

EN 61000-4-2 ESD (+/-18KV Air, +/-8KV Contact, criteria A) (+/-20KV Air, +/-10KV Contact, criteria B)

EN 61000-4-3 Radiated Immunity

EN 61000-4-4 EFT (+/-2.5KV, criteria A) (+/-4KV, criteria B)

EN 61000-4-5 Surge (+/-2KV Line-Line, +/-4KV Line to Gnd, criteria A)

EN 61000-4-6 Conducted Susceptibility

EN 61000-4-11 Voltage Dips and Interrupts

EN 61000-3-2 Harmonics, Class A

#### E) SAFETY APPROVALS

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

#### PROPRIETARY INFORMATION



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#### Model:GT-96180-18VV-R2-PP

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F) INTEROPERABILITY: Passive and Simple 48V and 56V models work with all types of AF and AT Splitters and PoE appliances with appropriate input power requirements

#### G) SPECIAL OPTIONS

- 1. Custom Markings
- 2. High Rel PCB laminate with Plated through Holes for IPC610 Class 2 Compliance
- 3. Special Housing Color
- 4. Reduced Output Voltage, 18V to 54V

## 18W PoE Injector, Ethernet InterOperability and Compatibility Testing

Injector tested: *Model GT-96180-1856*, rated 18W output, 56Vdc, IEEE802.3-2003 af Compliant

Note, assuming 80% eff splitter, max Pout = 14.4W (14.4/18 = 0.8)

Splitter Model Used	Splitter Description	Splitter O/P Power Rating	Splitter Load During Testing		
GlobTek GT-91087	5V, af type	8W			
PowerDSIne PD-AS-601/5	5V, af type	10W	7.5W		
Linksys POEES5	5V, af type	10W	7.5W		
Axis 5008-001-02	5V, af type	10W			
PowerDSIne PD-AS-701/12	12V, at type	24W	14W		
Phihong POE21-120-R	12V, at type	21W	1400		
Cisco 7970 Series Phone	IP Phone, af type	Input to Phone rating 48V, 0.38A			

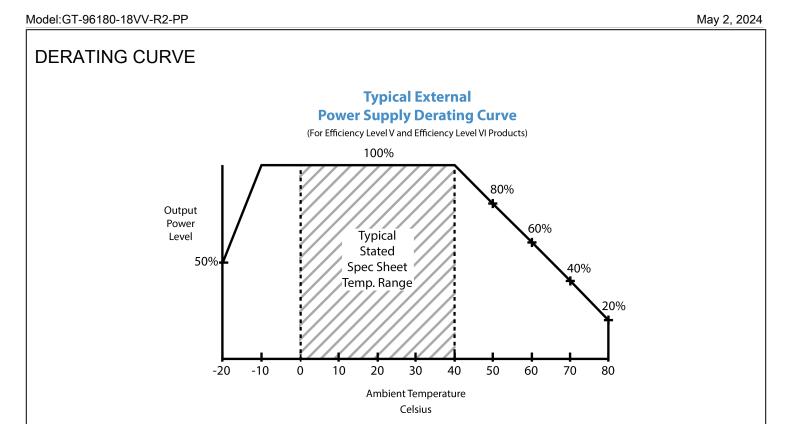
# 100BaseT/1000 Base T network digital transmission testing

(During testing ethernet communications is passed thru Injector and then Splitter and then to a computer) Injector tested: *Model GT-96180-1856*, rated 18W output, 56Vdc, IEEE802.3-2003 af Compliant

Injector is Gigabit designed and tested, to 100 Base T and 1000 Base T

Splitter Model Used	Splitter Description	P/F	Notes:
Axis 5008-001-02	100 Base T rating	Р	Limited bandwidth splitter
PowerDSIne PD-AS-701/12	1000 Base Trating	Р	Full bandwidth splitter





May 2, 2024



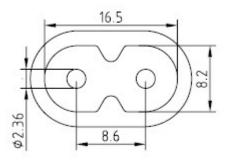
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# INPUT CONFIGURATION

Model:GT-96180-18VV-R2-PP

IEC 60320/C8 AC Inlet connector Description

**Blade Insertion Instructions** R-Blade Style Instruction Video



## Mates with IEC 60320/C8 Plug

This series of Interchangeable Blade products may be used with Proprietary Interchangeable Blades as described below or with standard international power cords.

Optional INPUT BLADES: R-Socket: below are available blades configurations which are "not included" (unless stated above); may be purchased separately, packaged with power supply, or as a separate "R-KIT" if specified

# Part Number	Main Country/Region	Plug	IECEE Type
1 <u>R-NA-2(R)</u>	North America, Japan	Nema 1-15P	Type A
2 <u>R-SAA-2(R)</u>	Australia/New Zealand	AS/NZ 3112	Type I
3 <u>R-UK-2(R)</u>	United Kingdom/Irelan	dUK, Hong Kong, Singapore, Gulf States	Type G
4 <u>R-EU-2(R)</u>	Europe	CEE 7/16	Type C
5 <u>R-CN-2(R)</u>	China	GB 2099	Type A
6 <u>461-03030003(R</u>	<u>R)</u> N/A	R-DI(R) Desktop Insert for use with a core	d N/A
7 <u>R-KIT-2(R)</u>	prepackaged kit	1,2,3,4 above	N/A
8R-KIT-2-INTL(R)	prepackaged kit	2,3,4 above	N/A



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## Model:GT-96180-18VV-R2-PP





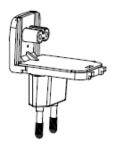




P/N: R-NA-2(R) NORTH AMERICA JAPAN

AUS 2P P/N: R-SAA-2(R) AUSTRALIA

P/N: R-UK-2(R) UNITED KINGDOM HONG KONG SINGAPORE







P/N: R-EU-2(R) EUROPE SOUTH AMERICA

CN 2P P/N: R-CN-2(R) CHINA

P/N; R-DI DESKTOP INSERT

#### Standard Cordsets

Below are standard cordsets which are "not included" (unless stated above); these may 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.

# Standard International IEC 320/C7 Cordsets

Part Number	Country	Plug	Connector	Length (mm)	Length (feet)	
2094112M703(R)	Argentina (Type I)	IRAM 2063	IEC 320/C7	200	0	7
5014112M703A(R)	Australian (Type I)	AS 3112	IEC 320/C7	200	0	7

### PROPRIETARY INFORMATION

IEC 320/C7

IEC 320/C7

IEC 320/C7

IEC 320/C7

2000

1830

1830

2000

7

6

6

7



Model:GT-96180-18VV-R2-PP

2044112M703A(R)

4511116F703A(R)

4033401M8703A(R)

6104112M703A(R)

186 Veterans Dr, Northvale NJ 07647, USA 1-201-784-1000

GlobTek Inc.®

Korea (Type C)

Taiwan (Type A)

UK, Hong Kong,

(Type G)

N. American (Type A)

Singapore, Gulf States

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207B4111M8703(R)	Brazil (Type N)	NBR14136	IEC 320/C7	1800	6
4533501M8703(R)	China (Type A)	GB 2099.1	IEC 320/C7	1830	6
2074112M703A(R)	European (Type C)	CEE 7/16	IEC 320/C7	2000	7
2084111M8703(R)	South Africa (Type M)	BS 546	IEC 320/C7	1800	6
2084111M8703B(R)	India (Type D)	ISI:1293	IEC 320/C7	1800	6
2714111M8703A(R)	India (Type C)	ISI:1293	IEC 320/C7	1800	6
451J3401M8703(R)	Japan (Type A)	JIS 8303	IEC 320/C7	1830	6

KS C8305

CNS690

BS1363

**NEMA 1-15P** 





del:GT-96180-18VV-R2-PI Approvals	May 2, 20
Logo	Description
<b>(W)</b>	CCC to GB4943. 1-2022; GB9254-2021; GB17625. 1-2022 with Tropical and Altitude up to 5000 m approval.
C€	CE Certification
No Logo Applicable	IEC 60335-1:2010 (Fifth Edition) incl. Corr. 1:2010 and Corr. 2:2011 + A1:2013
Intertek 4007497	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]
Intertek	Information Technology Equipment Safety Part 1: General Requirements (UL 60950-1 Issued: 2007/03/27, Ed: 2 Rev: 2014/10/14) Information Technology Equipment Safety Part 1: General Requirements (CSA C22.2 No. 60950-1 Issued: 2007/03/27 Ed: 2 (R2012) Amd.
intertek 4007467	Information Technology Equipment Safety Part 1: General Requirements (UL 60950-1 Issued: 2007/03/27 Ed: 2 Rev: 2014/10/14) Information Technology Equipment Safety Part 1: General Requirements (CSA C22.2 No. 60950-1 Issued:2007/03/27 Ed: 2 (R2012) Amd. 1
<b>3</b>	CHINA SJ/T 11364-2014, China RoHS Chart: <a href="http://www.globtek.com/pdf/F-GT-DJD-8.4.1-006%20China%20RoHS%20Declaration%205-20-22.p">http://www.globtek.com/pdf/F-GT-DJD-8.4.1-006%20China%20RoHS%20Declaration%205-20-22.p</a>
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



Model:GT-96180-18VV-R2-PP	May 2, 2024
EHE	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>
DC-E-G71-009.2  PRECAUCION: PARA USO EN EQUIPOS ELECTRONICOS SOLAMENTE	IRAM certificate to IEC 62368-1:2014
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)
6	Morocco SDoC declaration <a href="http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/">http://www.globtek.info/certs/Morocco%20SDoC%20Declaration/</a>
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) <a href="http://www.ce-mark.com/Rohs%20final.pdf">http://www.ce-mark.com/Rohs%20final.pdf</a>
Intertek	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> )
UK	UKCA Certification
10276	Ukraine UKRSepro (Document: <a href="www.globtek.com/html/iso_certificates/GT_Ukraine.pdf">www.globtek.com/html/iso_certificates/GT_Ukraine.pdf</a> )





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May 2, 2
Japan: Voluntary Control Council for Interference (VCCI)
WEEE: Complies with EU 2012/19/EU ( <a href="http://ec.europa.eu/environment/waste/weee/index_en.htm">http://ec.europa.eu/environment/waste/weee/index_en.htm</a> )  Mark is on the label or Molded in the case