

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

Model:GT-96300-36VV-R3A-PP

September 19, 2019

GT-96300-36VV-R3A-PP

Information

Model Number GT-96300-36VV-R3A-PP

Description GT-96300-36VV-R3A-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/C6 AC Inlet Connector, Class I, Earth Ground (aka "Mickey Mouse"), Output Rating: 36 Watts, Power rating with convection cooling (W) , 18-56V in 0.1V increments, Approvals: CB 62368; EAC; PSE; PSE; CE; WEEE; VCCI; Ukraine; RoHS; China RoHS; Level VI; Class I; CB 60335;

Model Picture



Agency Documents <http://www.globtek.info/certs/GT-96300-POE/>
CE https://www.globtek.com/pdf/ec_declaration/a0Oa000000MnJfHEAV
EC-Declaration
RoHS/RoHS2 https://www.globtek.com/pdf/rohs_cert/a0Oa000000MnJfHEAV
Declaration
REACH https://www.globtek.com/pdf/iso_certificates/REACH.pdf
Declaration
Conflict
Minerals <https://www.globtek.com/pdf/conflict-minerals.pdf>
Declaration

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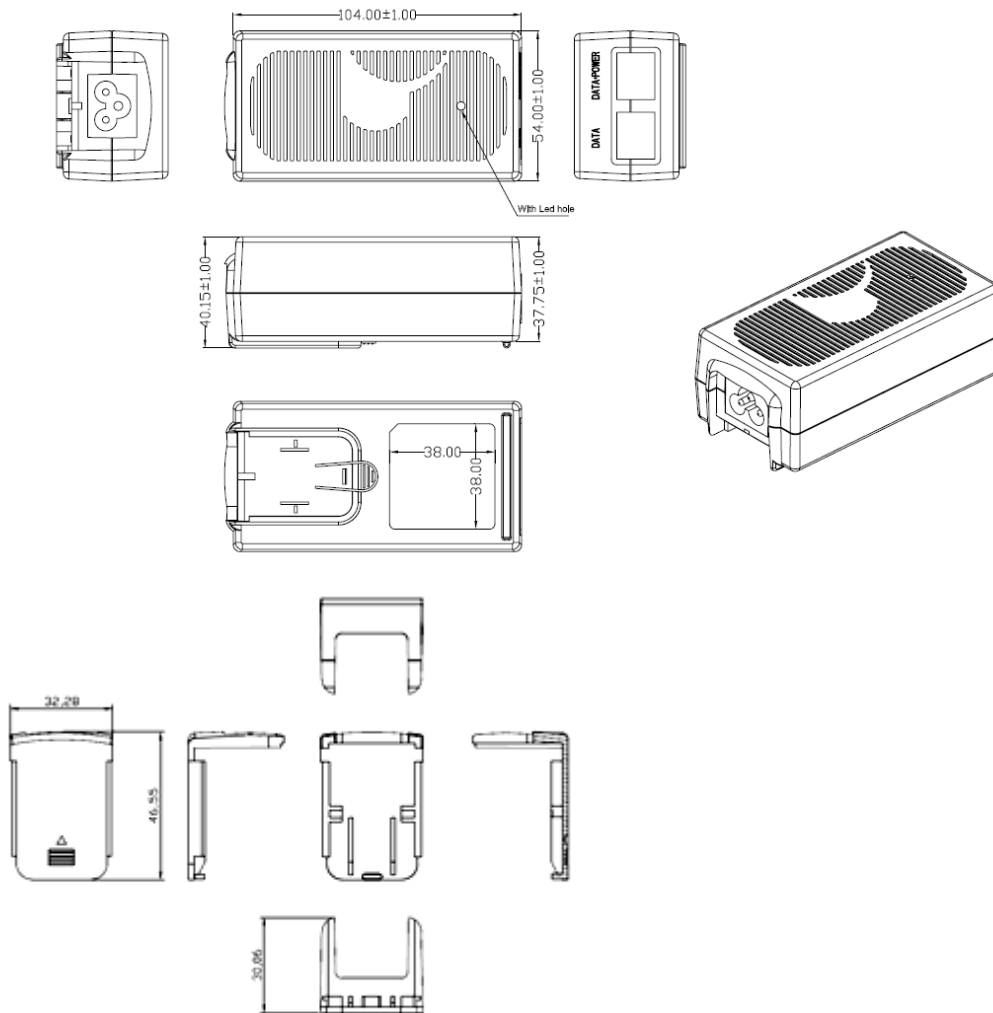
Model Parameters

| | |
|--------------------|------------------------------------------------------------------------------------------------|
| Type | Wall Plug-in+Desktop Combination |
| Technology | Single Port Passive Power Over Ethernet Midspan (Passive/Dumb PoE PSE) Power Supply AC Adaptor |
| Category | PoE, Passive Power Injector |
| Input Voltage | 100-240V~, 50-60 Hz |
| I/P Amps (A) | 1.0A |
| Wattage (W) | 36.0 |
| Vout Range (V) | 18-56 |
| Efficiency Level | VI |
| Ingress Protection | IP40 |
| Size (mm) | 107*55*36 |

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ENCLOSURE


Units shipped without an installed input plug have a "desktop insert" installed.

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RATING TABLE

| Model Number | Voltage | Amps(A) | Watts(W) | RFQ |
|----------------------|---------|---------|----------|---------------------|
| GT-96300-3636-R3A-PP | 36 V | 1 | 36.00 | RFQ |
| GT-96300-3656-R3A-PP | 56 V | 0.642 | 35.95 | RFQ |

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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

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

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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;
EN61000-6-2 (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

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

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4. Reduced Output Voltage, 18V to 54V
36W PoE Injector, Ethernet InterOperability and Compatibility Testing

 Injector tested: *Model GT-96300-3656*, rated 36W output, 56Vdc, IEEE802.3-2009 at Compliant

Note, assuming 80% eff splitter, max Pout = 28.8W (28.8/36 = 0.8)

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

* For 24W-30W output power Splitters using Data Link Layer Classification, contact GlobTek for option availability.

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-96300-3656*, rated 36W output, 56Vdc, IEEE802.3-2009 at 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 | P | Limited bandwidth splitter |
| PowerDSIne PD-AS-701/12 | 1000 Base T rating | P | Full bandwidth splitter |

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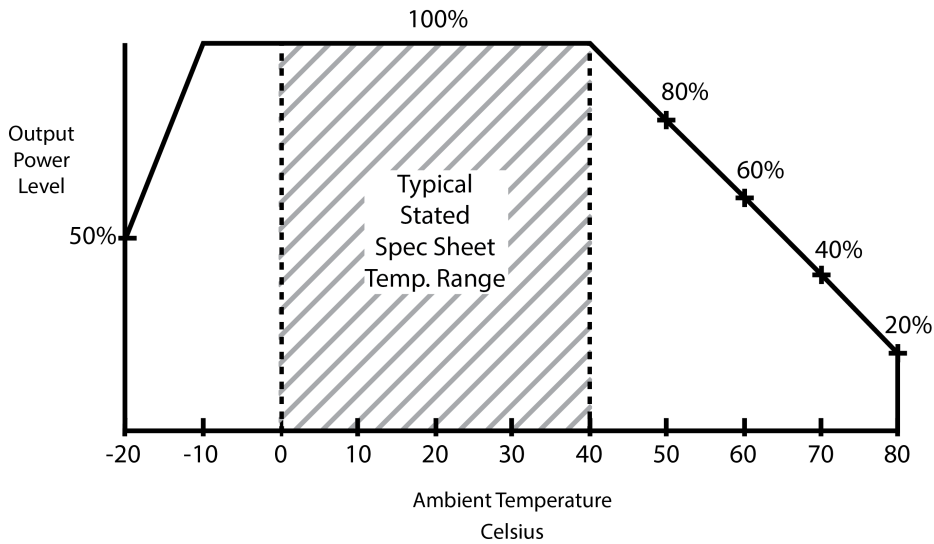
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DERATING CURVE

**Typical External
Power Supply Derating Curve**

(For Efficiency Level V and Efficiency Level VI Products)



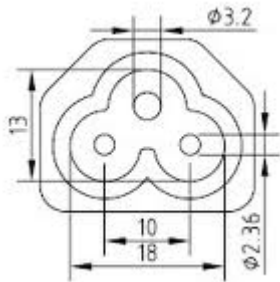
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Input Configuration

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

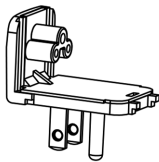
[Blade Insertion Instructions](#)
[R-Blade Style Instruction Video](#)


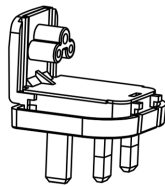
Mates with IEC 60320/C5 Plug

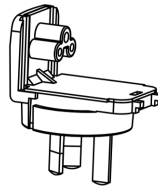
This series of Interchangeable Blade products may be used with Proprietary Interchangeable Blades as described below or with standard international power cords.

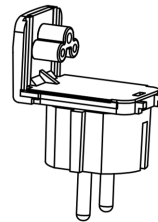
Optional INPUT BLADES: R-Socket: below are available blades configurations which are "not included" (unless stated above); may be purchased separately, packaged with power supply, or as a separate "R-KIT" if specified

1. Class I model NEMA 5-15P, Class I AC power plug with 2 blades & ground pin, R-NA-3(R)
2. Australian AS 3112 configuration: SAA 3 pins Class I, R-SAA-3(R)
3. UK BS 1363 configuration: UK 3 pins (Ground) Class I, R-UK-3(R)
4. European CEE 7/7 configuration: European plug 2 PINS + ground, Class I, R-EU-3(R)
5. Desktop Insert
- Kits
05. R-3-KIT: 1,2,3,4 above
06. R-3-KIT-INTL: 2,3,4 above


UL 3P

 P/N: R-NA-3(R)
 NORTH AMERICA
 JAPAN

UK 3P

 P/N: R-UK-3(R)
 UNITED KINGDOM
 HONG KONG
 SINGAPORE

AUS 3P

 P/N: R-SAA-3(R)
 AUSTRALIA

EU 3P

 P/N: R-EU-3(R)
 EUROPE
 SOUTH AMERICA

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.

[Standard International IEC 320/C5 Cordsets](#)

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| Part Number / Link | Country | Plug | Connector | Length (mm) | Length (ft) |
|--------------------------------------|----------------------|-----------------------------------------------|------------|-------------|-------------|
| 3021066F712(R) | N. American (Type B) | NEMA 5-15P | IEC 320/C5 | 1880 | 6 |
| 1191068F0712(R) | N. American (Type B) | NEMA 5-15P Hospital | IEC 320/C5 | 2459 | 8 |
| 2194262M0712(R) | Argentina (Type I) | IRAM 2073 | IEC320/C5 | 2050 | 6.7 |
| 2064262M0712(R) | Australian (Type I) | AS3112 / 3 PRONG | IEC 320/C5 | 2000 | 6.6 |
| 204B4262M0712(R) | Brazil (Type N) | BRAZIL | IEC 320/C5 | 2000 | 6.6 |
| 6023592M5712(R) | China (Type I) | CCC GR2099 | IEC 320/C5 | 2500 | 8 |
| 23144262M0712(R) | Europe (Type E) | CEE 7/7 | IEC 320/C5 | 2050 | 6.6 |
| 2313K3432M0712(R) | Korea (Type F) | KS C 8305 | IEC 320/C5 | 2000 | 6.6 |
| 205IN4262M0712(R) | India (Type D) | India IS 1293 (also known as IA16A3 or BS546) | IEC320/C5 | 2000 | 6.6 |
| 377C4262M0712(R) | Israel (Type H) | ISL | IEC320/C5 | 2050 | 6.7 |
| 23024262M0712(R) | Italy (Type L) | CEI 23-16/VII | IEC 320/C5 | 2000 | 6.6 |
| 3003316F0712(R) | Japan (Type B) | JIS 8303 / 3 PINS | IEC 320/C5 | 1830 | 6 |
| 3021066F0712ULPSE(R) | Japan / USA (Type B) | JIS 8303 / 3 PINS + NEMA 5-15P | IEC 320/C5 | 1830 | 6 |
| 2054262M0712(R) | S. Africa (Type D) | South Africa SABS164-1 (6A type plug) | IEC320/C5 | 2050 | 6.7 |
| 2084262M0712(R) | S.Africa (Type M) | South Africa SABS164-1 (16A type plug) | IEC 320/C5 | 2000 | 6.6 |
| 23214262M0712(R) | Switzerland (Type J) | SEV 1011 (EL 203) | IEC 320/C5 | 2000 | 6.6 |
| 3003316F0712(R) | Taiwan (Type B) | BSMI | IEC 320/C5 | 2000 | 6.6 |

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[6104262M0712\(R\)](#)UK, Hong
Kong,
Singapore,
Gulf States
(Type G)

BS1363









IEC 320/C5 2000 6.6

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Approvals

| Logo | Description |
|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No Logo Applicable | IEC 60335-1:2010 (Fifth Edition) incl. Corr. 1:2010 and Corr. 2:2011 + A1:2013 |
| No Logo Applicable | CB for IEC 62368-1:2014 (Second Edition) |
|  | CE Certification |
|  | CHINA SJ/T 11364-2014, China RoHS Chart: http://en.globtek.com/globtek-rohs.php |
|  | 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 |
|  GlobTek, Inc. | JAPAN TUV R-PSE, Cert. No. JD 50313285, to J60950-1(H26) , J55022(H22),J3000(H25)[DC15? 30V]. Please reference the following website for guidelines on PSE regulations: http://en.globtek.com/importing-ite-and-medical-power-supplies-ac-adaptors-to-japan/ |
|  GlobTek, Inc. | 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/ |
| 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) |
| 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) |
|  | 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 |