



## 19.6W Single Port Power over Ethernet Midspan IEEE802.3af Compliant Power Injector



### Features

- Compliant with IEEE802.3af Standard
- Non-vented Case
- Full Protection OVP, OCP
- Limited Power Source
- Gigabit Compatible
- 1 Year Warranty

### Applications

- IP Telephones
- Wireless Access Points
- Bluetooth® Access Points
- Security Cameras
- IP Print Servers
- WiMAX® Access Points

### Safety Approvals

- cUL/UL
- CE

### Mechanical Characteristics

- Length: 140mm (5.51in.)
- Width: 65mm (2.55in.)
- Height: 36mm (1.42in.)
- Weight: 0.2Kg (7.58oz)

### Output Specifications

Model	AC Input	DC Output Voltage	Load		Regulation	
			Min.	Max.	Line	Load
POE21U-1AF-R <sup>1</sup>	Three Wire	56V	10mA	350mA	54-57V	

Notes: (1) Consult factory for availability

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**INPUT:****AC Input Voltage Rating**

100 to 240VAC

**AC Input Voltage Range**

90 to 264VAC

**AC Input Current**

0.8A (RMS) max at 120VAC

0.55A (RMS) max at 240VAC

**AC Input Frequency**

47 to 63Hz

**Leakage Current**

350uA max

**Max In-rush Current**60A max at 240VAC and max load  
(Cold Start at ambient 25°C)**OUTPUT:****Output Power**

19.6W

**Hold up Time**

10mSec min at max load at 120VAC, 60Hz

**Transient O/P Voltage Protection**

60V max at switch on/off any AC line phase

**Efficiency**

80% Typical at max load at 120VAC, 60Hz

**ENVIRONMENTAL:**

Temperature

Operating 0 to +40°C

Non-operating -20 to +65°C

Humidity 5 to 90%

**EMI**

Complies with FCC part 15 Class B

Complies with EN55032 Class B

**EMC**

ESD: IEC61000-4-2 Level 3

RS: IEC61000-4-3 Level 3

EFT/Burst: IEC61000-4-4 Level 2

Surge: IEC61000-4-5 Level 3

CS: IEC61000-4-6 Level 3

Voltage Dips: IEC61000-4-11

Harmonic: IEC61000-3-2 Class A

**Isolation (HI-POT)**Primary to secondary: 1500VAC for 1  
minute, 10mA**Insulation Resistance**

Primary to secondary: 10M Ohm 500VDC

**FEATURES:****Cisco**

No extern parts required for Legacy devices:

VoIP Phones: 7910, 7912, 7940, 7960

Access Points: 1040, 1140, 1250, 1260, 3500

**Over Voltage/Current, Short Circuit Protection**The output can be shorted permanently  
without damage.**Indicator (Status)**Solid Green: Valid IEEE802.3af load  
detected and connected "ON"Blinking Green: Power "ON" ready for  
connection

Blinking Red/Green: Invalid load connected

Blinking Red: fault

**AC Input Connector**

IEC320 inlet 3-pin C14

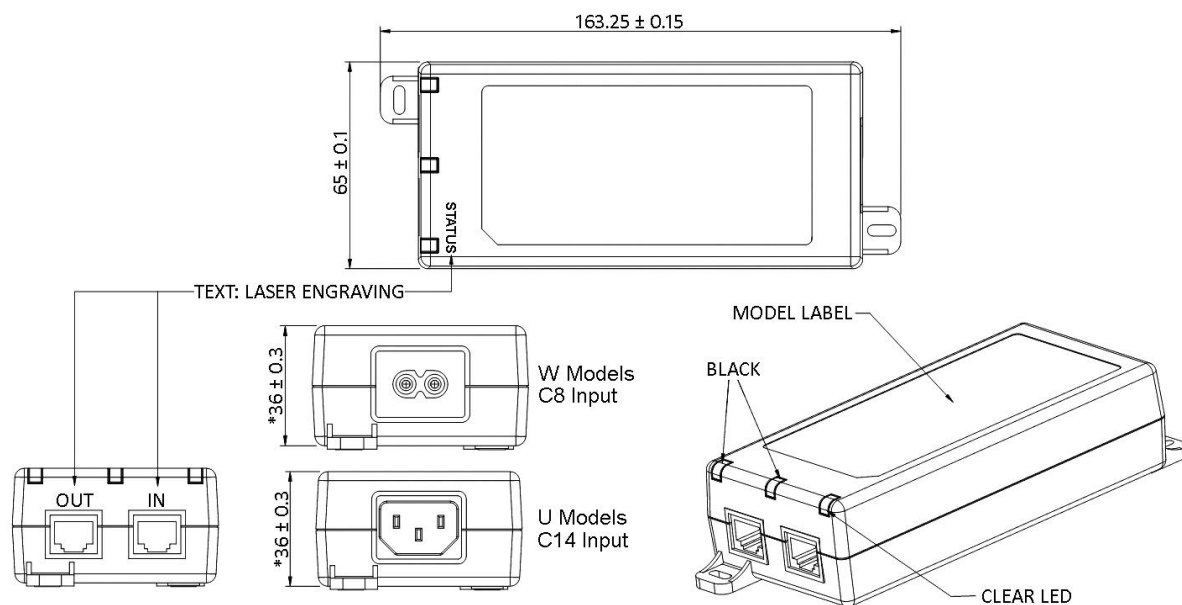
**Output Connection**

+pins 3,6 / -pins 1,2

**Data IN/POE OUT Connector**

RJ45

**Dimension Diagram Unit: mm**



**Supplier's Declaration of Conformity**  
**47 CFR § 2.1077 Compliance Information**

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NOTE: This model has/The models in this product series have been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to equipment not expressly approved by PHIHONG could void the user's authority to operate the equipment.