

L1000i-at Midspan PoE Injector

Power over Ethernet (PoE) for 10/100/1000Base-Tx

User Guide

- Power-over-Ethernet Injector for 10/100/1000Base-T
- Remote Power Feeding
- Overload and short circuit protection
- Mixes Ethernet and power on the RJ-45 port
- Delivers power up to 100 meters
- Light weight and compact size
- Plug-and-play
- IEEE 802.3at and IEEE 802.3af compliant



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Product Description

Transition Networks L1000i-at is a 1-port 10/100/1000Base-T PoE+ mid-span injector which provides a simple, cost-effective, fully IEEE 802.3at compliant solution to upgrade existing infrastructure with PoE+. Powering PoE+ enabled network devices, such as PTZ dome network cameras, can be done without the need to install power outlets and electrical cabling.

PoE technology allows IP phones, wireless access points, and security network cameras to receive power, along with data, over standard Ethernet cables, leaving the network infrastructure completely unaltered. PoE technology also allows for easier installation in areas where power cabling and outlets are unavailable, thereby reducing installation costs.

Mid-span injectors offer users the ability to take advantage of PoE technology while protecting investments they’ve made in purchasing, configuring, and deploying non-PoE supported devices such as standard Ethernet switches.

Package Contents

Compare the contents in your Power over Ethernet Injector package with the standard checklist below. If any item is missing or damaged, please contact your local dealer for service.

- One Power over Ethernet Injector
- Power Cord
- Support Reference Card

Hardware Description

The PoE Injector has two RJ-45 ports and one AC input connector:

- **DATA IN** port is an RJ-45 Ethernet port that connects to a non-PoE device such as an Ethernet switch.
- **DATA OUT** port is an RJ-45 Ethernet port that provides 'power' and transmits data to PoE devices such as IP Phones, IP Cameras, Wireless Access Points, and other equipment via an RJ-45 cable.



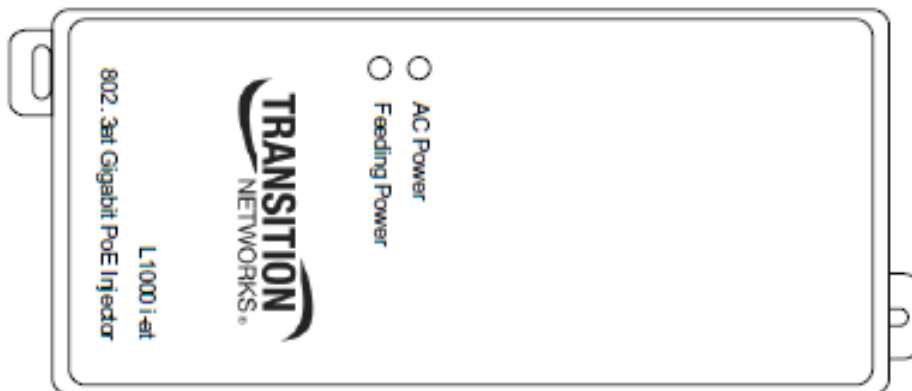
Power In Connector: The Power In connector is for supplying the power into the Injector.

Power Cord Included: To order the corresponding country specific power cord, add the extension from the list below to the end of the SKU. For example: L1000i-at-NA = North America, -LA = Latin America, -EU = Europe, -UK = United Kingdom, -SA = South Africa, -JP = Japan, -OZ = Australia, and -BR = Brazil.

LEDs

The PoE Injector has two LEDs on the top of its case:

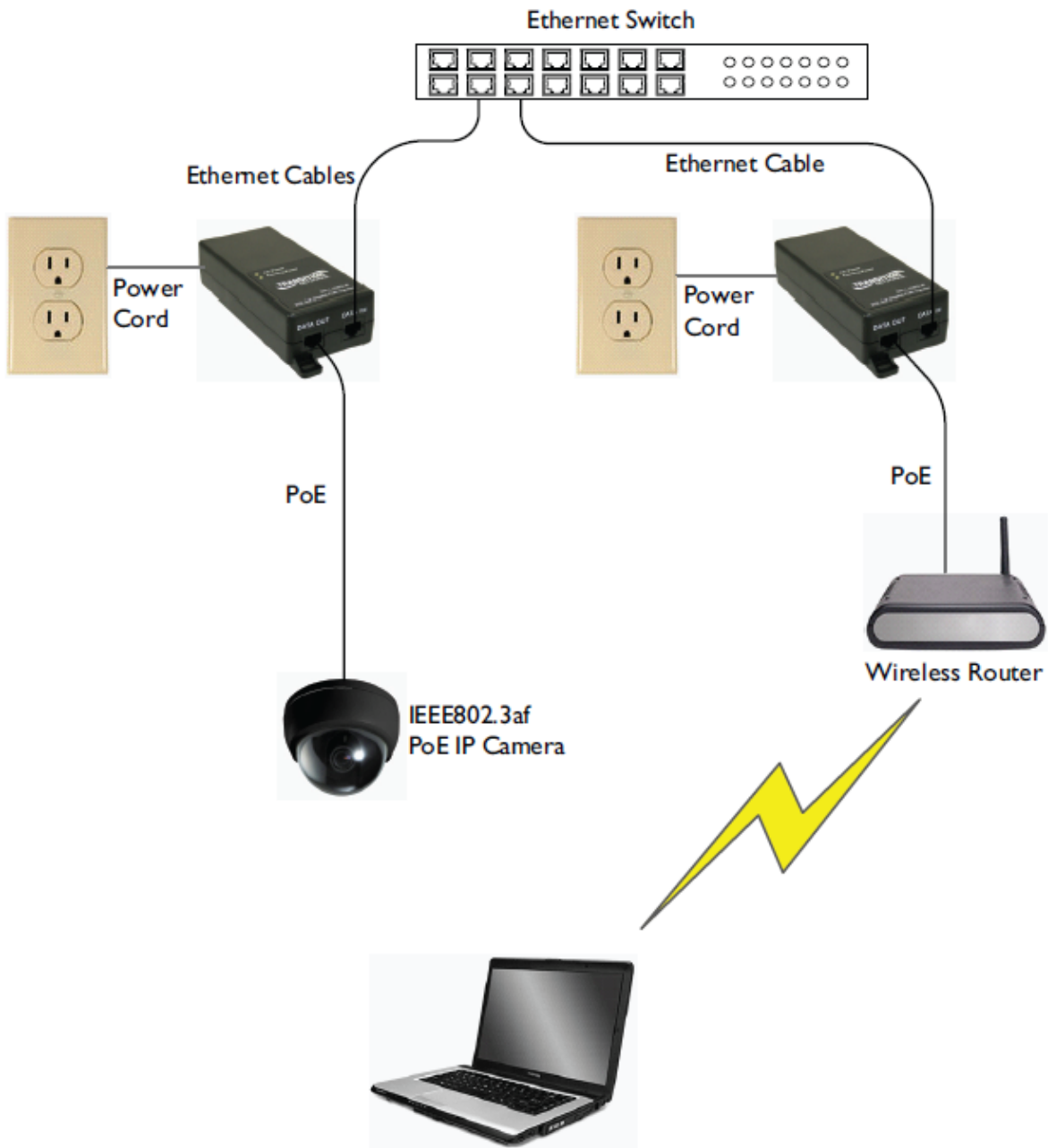
- **AC Power:** Lit when power is applied. Off when no power is applied.
- **Feeding Power:** Lit when powering a PoE device. Off when not powering a PoE device.



Application Example

The L1000i-at Midspan PoE Injector passes data and provides DC power through the Ethernet cable to PoE equipped devices, such as IP Phones, IP Cameras, WAPs, and other equipment that supports the IEEE 802.3at or IEEE 802.3af standard. Typically, the injector is installed near an Ethernet hub or switch.

The figure below shows an application where two PoE Injectors are networked via a switch.



Installation

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction. Wiring should be UL Listed and/or Recognized wire suitable for the application.

The PoE Injector is not intended to be connected to outside plant leads and should be installed indoors within the protected premises.

The PoE Injector is intended for indoor use only.

Note: When using this PoE Midspan Injector, the 100m cable distance limitation combines both ports, not each port individually. The total cable distance for both ports combined MUST NOT exceed 100m.

To install the PoE Injector, do the following:

1. Mount the PoE Injector in the desired location using the mounting holes.
2. Use a proper fastener and/or wall anchor when securing the PoE Injector with a screw (not provided) through its mounting hole to the wall.
3. Connect one end of the RJ-45 cable to the Switch/HUB and connect the other end to the DATA IN port on the PoE Injector.
4. Connect the RJ-45 cable from the DATA OUT port of the injector to the PD, such as IP Phones, IP Cameras, Wireless Access Points, and other PoE equipment.
5. Plug in the power cord of the PoE Injector into the AC powered wall outlet.
6. Before starting, make sure all connections are correct:
 - The PoE Injector connects to the PD via its DATA OUT port.
 - The PoE Injector connects to the switch via the DATA IN port.
 - The AC “In” connector powers the PoE Injector from the wall AC power plug.

Note: Links will not come up until both devices are connected to the PoE Injector. The injector itself cannot link with network devices; network devices that connect to the injector must link to each other (not to the PoE Injector).

Technical Specifications

For Transition L1000i-at PoE Midspan Injectors.

Shipping Weight:	1 lb. (454 g) approximately
Standards:	IEEE802.3 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3ab, 1000Base-T, IEEE802.3at, IEEE802.3af Power over Ethernet
Speed:	10/100/1000 Mbps: DATA IN: One RJ-45 Data pin 1, 2, 3, 6, 4, 5, 7, 8 DATA OUT: One RJ-45 Data pin 1, 2, 3, 6, 4, 5, 7, 8 Power out: Power pin 1, 2, 3, 6
Network cables:	10BASE-T: 2-pair UTP/STP Cat.3, 4, 5 cable; EIA/TIA-568 100-ohm (100m); 100BASE-TX: 2-pair UTP/STP Cat.5 cable (<i>Cat. 5e recommended</i>); EIA/TIA-568 100-ohm (100m) 1000Base-T: 4-pair UTP/STP Cat 5e or above cable, EIA/TIA-568 100-ohm (100m)
LEDs:	One AC power LED One Feeding power LED
Power input:	AC input voltage range: 100 - 240VAC; 50 - 60Hz 0.72A
Power output:	55V@ 0.6A
MTBF:	116,685 MIL-HDBK-217F hrs.
Dimensions:	2.65" x 5.51" x 1.42"; (65mm x 140mm x 36mm)
Operating Temp:	0°C to 40°C (32° to 104°F)
Storage Temp:	40°C – 70°C (-40° to 158°F)
Compliance	Safety: UL, cUL, CE/EN60950-1 Emissions: FCC Class B, CE Mark
Warranty:	Lifetime

Compliance Information

FCC Regulations

This equipment has 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.



In accordance with European Union Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003, Transition Networks will accept post usage returns of this product for proper disposal. The contact information for this activity can be found in the 'Contact Us' portion of this document.



CAUTION: RJ connectors are NOT INTENDED FOR CONNECTION TO THE PUBLIC TELEPHONE NETWORK. Failure to observe this caution could result in damage to the public telephone network.

Der Anschluss dieses Gerätes an ein öffentliches Telekommunikationsnetz in den EGMitgliedstaaten verstösst gegen die jeweiligen einzelstaatlichen Gesetze zur Anwendung der Richtlinie 91/263/EWG zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über Telekommunikationsendeinrichtungen einschliesslich der gegenseitigen Anerkennung ihrer Konformität.

Declaration of Conformity

Declaration of Conformity

Transition Networks, Inc.
Manufacturer's Name

10900 Red Circle Drive, Minnetonka, Minnesota 55343 U.S.A.
Manufacturer's Address

Declares that the products:
L1000i-AT

Conforms to the following Product Regulations:

FCC Part 15 Class A, EN 55032:2012, EN 55024:2010
Directive 2014/30/EU, Directive 2015/863/EU
Low-Voltage Directive 2014/35/EU
IEC /EN 60950-1:2006+A2:2013
2011/65/EU EN 50581:2012

With the technical construction on file at the above address, this product carries the

CE Mark

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standards(s).

Minnetonka, Minnesota
Place
Apr 24, 2020
Date
Stephen Anderson
Signature

Stephen Anderson
Full Name
Vice President of Engineering
Position

201410

For More Information

For Transition Networks Drivers, Firmware, etc. go to the [Product Support](#) webpage (logon required).

For Transition Networks Manuals, Brochures, Data Sheets, etc. go to the [Support Library](#) (no logon required).

Contact Us

Technical Support: Technical support is available 24-hours a day

US and Canada: 1-800-260-1312

International: 00-1-952-941-7600

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Record of Revisions

Rev	Date	Description
A	9/28/11	Initial release.
B	4/17/19	Update power cord and contact information and change format.
C	4/27/20	Update DoC.

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