

**Overview**

With the high power PS-POE-AT-TC Injector (FG423-84), transmit both power and data through a single cable to a remotely located Power-over-Ethernet (PoE) touch panel. Required for use with the MVP-9000i and DXLink Twisted Pair Transmitters and Receivers, it is also compatible with the MXT-1000, MXD-1000, MXT-700, MXD-700 and MXD-430.

This self-contained single-port PoE Gigabit power supply "injects" DC power and data into the same twisted pair cable at a distance of up to 100 meters (328 feet).

**Common Application**

The PS-POE-AT-TC PoE Injector sends power and data on demand to wall or table docking stations of compatible touch panels via a single Ethernet connection.

**Features**

- 10/100/1000 (MbPS) Data Rates
- Meets IEEE802.3at requirements
- Load Diagnostic LED
- 100/240 VAC Universal Input



**FIG. 1** PS-POE-AT-TC - HIGH POWER POE INJECTOR, 802.3AT COMPLIANT

The PS-POE-AT-TC supports the IEEE standard PoE pinout: Pins 4&5 Power (+) / Pins 7&8 Power (-). See *Pin Connections* (on reverse) for details.

**Product Specifications**

PS-POE-AT-TC SPECIFICATIONS	
DIMENSIONS (HWD)	5 1/2" x 2 1/8" x 1 1/4" (14 cm x 5.3 cm x 3.25 cm)
WEIGHT	.44 lbs (200 g)
ENVIRONMENTAL	<ul style="list-style-type: none"> <li>• Temperature (Operating): -4°F to 104°F (-20°C to 40°C) @ 30W -4°F to 131°F (-20°C to 55°C) @ 22.5W</li> <li>• Temperature (Storage): -4°F to +158°F (-20°C to +70°C)</li> <li>• Relative Humidity (Operating): Maximum 90%, Non-Condensing</li> <li>• Thermal Rating: 20 BTU/hr (@240VAC)</li> <li>• Operating Altitude: -1000 to 10,000 ft. (-304.8 to 3048 m)</li> </ul>
GENERAL	<ul style="list-style-type: none"> <li>• LEDs: Yellow (On): power is on and active Green (On): A remote terminal is connected Green (Blinking): Overload state or short circuit</li> <li>• Enclosure: Molded black matte plastic</li> <li>• Cord and Connectors: Dual shielded RJ45 jacks built into the enclosure, EIA 568A and 568B</li> <li>• Approvals: IEEE 802.3at (PoE) RoHS / WEEE compliant CE FCC Part 15, Class B EN 55022 Class B (Emissions) EN 55024 (Immunity) VCCI (Japan) C-Tick UL/cUL per IEC 60950-1 GS Mark per IEC 60950-1</li> </ul>

**PS-POE-AT-TC SPECIFICATIONS (CONT.)**

INPUT SPECIFICATIONS	<ul style="list-style-type: none"> <li>• AC Input Voltage Range: 100-240 VAC</li> <li>• AC Input Current: 0.8A @ 100-240 VAC</li> <li>• AC Frequency: 50 to 60 Hz</li> <li>• AC Input Current: 0.8A MAX at 110-240 VAC</li> <li>• Protection: Internal Primary Current Fuse Inrush Limiting</li> <li>• Input Power Cord: Universal Power Cord, 3 Foot</li> </ul>
OUTPUT SPECIFICATIONS	<ul style="list-style-type: none"> <li>• Pass Through Data Rates: 10/100/1000 Mbps</li> <li>• Output Voltage: 55 VDC Nominal</li> <li>• Output Power: 30 Watts (Guaranteed)</li> <li>• Output Current: 0.6A (max)</li> <li>• Ripple and Noise: Below the IEEE802.3af requirements f&lt;500Hz: Vp-p 0.5 500Hz to 150kHz: Vp-p 0.2 150kHz to 500kHz: Vp-p 0.15 500kHz to 1MHz: Vp-p 0.1</li> <li>• Transient Response: Meets IEC61000-4-4 (1Kv)</li> <li>• DXLink Transport Layer Throughput: 10.2 Gbps pass thru (only applicable to DXLink signals)</li> </ul>

**Safety Information**

**Important Safety Information**

- The PS-POE-AT-TC should be connected to PoE networks only, without routing to an outside network.
- Only qualified personnel can install or remove the PS-POE-AT-TC.
- AC Power Cord Set:
  - \* The power cord must have regulatory agency approval for the specific country in which it is used (for example, UL, CSA, VDE, etc.)
  - \* The power cord must be a three-conductor type (two current-carrying conductors and one ground conductor) terminated on one end by an IEC 60320 appliance coupler (for connection to the PS-POE-AT-TC), and on the other end by a plug containing a ground (earthing) contact.
  - \* The power cord must be rated for a minimum of 250 VAC RMS operation, with a minimum rated current capacity of 5 amps or a minimum wire gauge of 18 AWG (0.75 mm<sup>2</sup>).
- A PS-POE-AT-TC installed in Australia requires power cords with a minimum wire gauge of 16 WWG (1.0 mm<sup>2</sup>).
- The PS-POE-AT-TC DATA IN and DATA & POWER OUT ports are shielded RJ45 data sockets. They CANNOT be used as Plain Old Telephone Service (POTS) telephone sockets. Only RJ45 data connectors may be connected to these sockets.
- The AC wall socket-outlet must be near the PS-POE-AT-TC and easily accessible. You can remove AC power from the PS-POE-AT-TC by disconnecting the AC power cord from either the wall socket-outlet or the PS-POE-AT-TC appliance coupler.
- The PS-POE-AT-TC "Data In" and "Data & Power Out" interfaces are qualified as Safety Extra-Low Voltage (SELV) circuits according to IEC 60950-1. These interfaces may only be connected to SELV interfaces on other equipment.

**WARNINGS!**

- The PS-POE-AT-TC should only be connected to devices compatible with this product. Using the PS-POE-AT-TC with incompatible devices may cause damage to the device.
- Read the installation instructions before connecting the PS-POE-AT-TC to its power source.
- Follow basic electricity safety measures before connecting the PS-POE-AT-TC to its power source.
- A voltage mismatch can cause equipment damage and may pose a fire hazard. If the voltage indicated on the label is different from the power outlet voltage, do not connect the PS-POE-AT-TC to this power outlet.

**Recycling and Disposal**

Disposal instructions for old products. The WEEE (Waste Electrical and Electronic Equipment) national environmental initiatives have been put in place to ensure that products are recycled using best available treatment, and recovery and recycling techniques, to ensure human health and high environmental protection. Your product is designed and manufactured with high-quality materials and components which can be recycled and reused.

Do not dispose of your old product in your general household waste bin. Inform yourself about the local separate collection system for electrical and electronic products marked by this symbol:



Use one of the following disposal options:

1. Dispose of the complete product (including its cables, plugs, and accessories) in the designated WEEE collection facilities.
2. If you purchase a replacement product, return your older product (including all components) back to the retailer. The retailer should accept it as required by the national WEEE legislation.

## Installing the PS-POE-AT-TC

The PS-POE-AT-TC may be placed on a desktop.

### Preliminary Steps

- Ensure that AC power is applied to the PS-POE-AT-TC, using an operational ground connection.
- Ensure that output Ethernet cable is connected to the DATA & POWER OUT port.
- Verify that a power-ready Ethernet-compatible device is connected.

Before placing the PS-POE-AT-TC:

- Do not cover the device or block the airflow to the device with any foreign objects. Keep the PS-POE-AT-TC away from excessive heat and humidity and free from vibration and dust.
- Ensure that the cable length from the Ethernet network source to the terminal does not exceed 328 feet (100 meters). The device is not a repeater and does not amplify the Ethernet data signal.
- The PS-POE-AT-TC does not have a power switch. Simply plug the device into an AC power source.

## Installing the PS-POE-AT-TC

1. Connect the PS-POE-AT-TC to an AC outlet (100-240VAC), using an appropriate power cord.
2. Connect the *DATA IN* jack (input) to the remote Ethernet network switch's Patch panel and the *DATA & POWER OUT* jack (output) to the terminal.

## Pin Connections

FIG. 2 describes the PoE Gigabit pin-out connections for the IN and OUT Ports on the rear panel of the PS-POE-AT-TC:

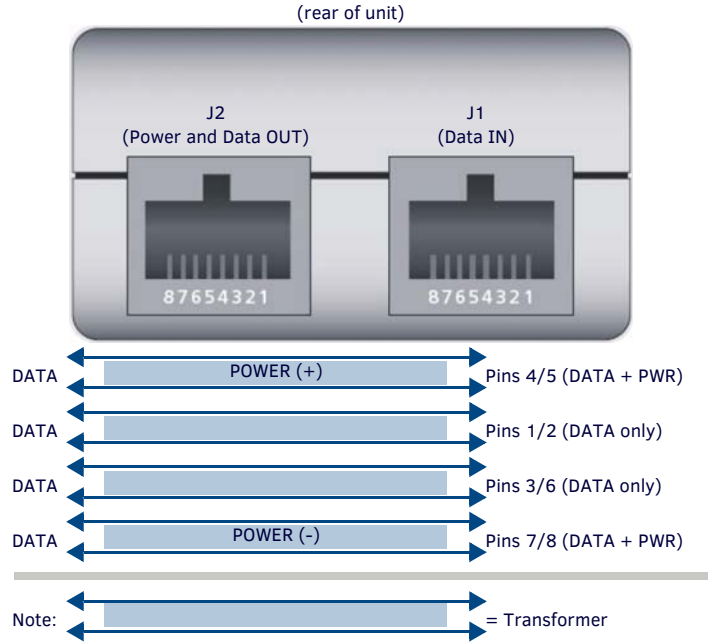


FIG. 2 POE GIGABIT PIN-OUT CONNECTIONS