

Technical Advisory TAB-10-0002 (this TAB supercedes TAB-10-0001) **Bulletin:**

- Equipment: TrangoLINK® Apex (all models) and PoE Injector Box
- **Condition:** PoE Injector blinking and Apex unit non-responsive or shuts down
- **Description:** If the PoE Injector and Power Adapter are housed in a non-environmentally controlled enclosure, the units may overheat, causing the Apex unit to power down. The symptom may also include a blinking ODU power light on the PoE injector. If the PoE injector is cooled down the Apex unit will operate normally again until it heats up beyond the rated temperature. The Apex PoE Injector is rated for **0 to +55 degree C** operation. If it is used outside this temperature range the resettable fuse inside the PoE may open and the Apex will no longer have power applied.

Apex 11 and Apex 11E models are especially susceptible to this problem and in some cases long cables (especially unshielded) used with power supplies that are lower than -46 Volts DC output the condition may exist within the temperature specification. The PoE injector and power supply are shown below



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Solution: Trango has improved the current capacity of the PoE injector with the release of the the Revision "D" PoE Injector which began shipping on July 18, 2010. To request a replacement PoE injector at no charge, please contact Customer Service and have the serial numbers of your Apex units available. For immediate remedy of the problem, please follow the following instructions:

- The PoE injector MUST be moved to an environmentally controlled area where the temperature does not exceed +55 deg C (recommended) AND the Ethernet cabling MUST be 24 AWG Shielded Twisted Pair (STP) with shielded RJ45 plugs at both ends to reduce cable resistance. See TAB 09-0002 for more information.
- 2) The PoE injector resettable fuse may be short-circuited to remove the current limitation.
 - a. Removing the PoE injector cover with the 4 philips head screws.
 - b. Remove the grounding screw and cover
 - c. The back of the PoE injector pcb assembly will look as shown below. To bypass the resettable fuse, short the two points shown below by soldering AWG 18 jumper wire across the two points shown. THE WIRE SHOULD HAVE AN INSULATING COATING (NOT BARE) to avoid shorting this wire to the PoE enclosure.
 - d. Re-attach the cover and grounding screw.
 - e. Attach the Ethernet cables, then the -48 Volt power via the terminal block. Please note that the ODU light may not illuminate, but the Apex will power up normally and will not shut down due to high current.



Short these two pins together by soldering a short section of 18 AWG solid wire to each point

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As an alternative to the above procedure, The Apex may be powered directly using the terminal block connected directly to the Apex unit via the Conduit port (Fiber Port) interface. In this case no PoE is used. See the user manual for more information on this method of powering the unit.

It should also be noted that the PSUPPLY-DT-48 is operationally rated from **0 to +40 deg C** and should be housed in an environmentally controlled location.

Failure to follow these requirements may result in intermittent connections and loss of connectivity.

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