

## Passive DIN 3 Rail Mount Power-Over-Ethernet (PoE) Midspan/Injector with Integral High Power Surge Protection - Model: BTD-CAT6-P1-HP

### Applications

- Wireless LAN Access Points and Bridges
- WAN millimeter radios
- High definition IP Surveillance Cameras
- Wired gigabit PoE switches

### Features

- DIN 3 rail mountable
- IEEE 802.3af and 802.3at compatibility
- Surge Protection on all lines
- User configurable power feed
- GR-1089 Intra-Building rated



### Description

The BTD-CAT6-P1-HP Single-Port Gigabit CAT6 Midspan/Injector is a commercial grade Power-over-Ethernet device that provides DC or AC power for one 10/100/1000 Base-T Power-over-Ethernet, PoE equipped Network Appliance device. The unit uses Gigabit transformers on all four data pairs in contrast to cheaper designs that only use transformers for two pairs. It is compatible with devices that support the IEEE 802.3af and 802.3at standard PoE power feed using Mode B (Pins 4/5 and 7/8). The unit can also be user configured using internal jumpers to supply power up all four data pairs simultaneously (Pins 1/2, 3/6, 4/5 and 7/8). The majority of IEEE 802.3af and 802.3at Network Appliances can pull power off all four data pairs simultaneously. This allows higher power to be fed up the cable and cuts resistive power losses in the cable by half. The unit supports both positive and negative DC as well as AC power up to 60 volts. Power-over-Ethernet eliminates the need for an AC outlet at each Network Appliance location. An integral PTC fuse cuts power in case of a short. The PTC fuse auto resets after the short is removed.



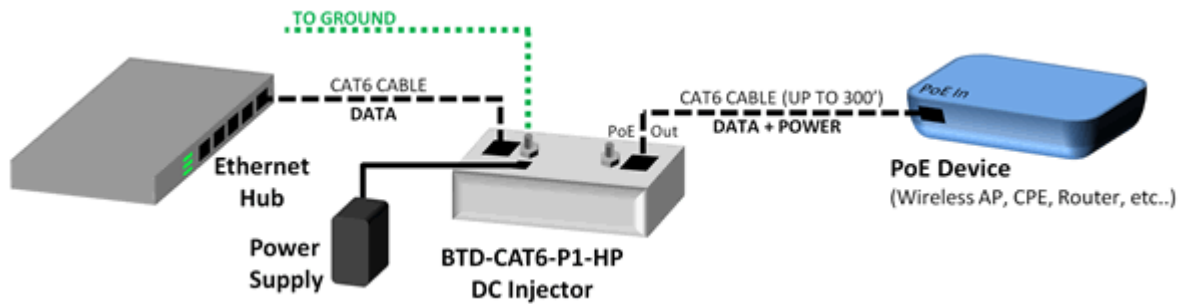
### Integral High Power Surge Protection

The BTD-CAT6-P1-HP features integral surge protection for the data and power feeds for networks. The BTD-CAT6-P1-HP has been designed to meet the GR-1089 Intra-Building surge protection requirements for Ethernet lines. The design provides protection for both common and differential mode surges. The design utilizes three-pole differential Gas Tubes. The tubes feature ultra-low Line to Line and Line to Ground capacitance to minimize distortion of high-speed signals.



The BTD-CAT6-P1-HP features shielded RJ45 jacks. This along with the BTD-CAT6-P1-HP's metal housing helps reduce the effects of EMI interference. A ground lug and terminal is provided directly on the injector's cast aluminum housing providing superior grounding.

This unit can be mounted to a DIN 3 rail using the DIN mounting clip located on the rear of the unit.



## Specifications

### Electrical Specifications

|  |  |
|--|--|
| <b>Max Voltage</b>                     | 60 Volts AC/DC   |
| <b>Max Current</b>                     | 1.5 A  |
| <b>Power Connector</b>                 | Standard 2.5mm Coaxial DC Power Jack (2.5mm x 5.5mm x 10mm)                                  |
| <b>Ethernet Connectors</b>             | (2) Shielded RJ45 Jacks  |
| <b>Data Lines</b>                      | Pair 1: Pins 1 and 2<br>Pair 2: Pins 3 and 6<br>Pair 3: Pins 4 and 5<br>Pair 4: Pins 7 and 8 |
| <b>Power Lines (Default)</b>           | +/- VDC: Pins 4 & 5<br>+/- VDC: Pins 7 & 8   |
| <b>Power Lines (Jumper Configured)</b> | +/- VDC: Pins 1 & 2<br>+/- VDC: Pins 3 & 6   |
| <b>Gas Tube Voltage</b>                | +/- 90 Volts   |

### Mechanical Specifications

|                                  |   |
|----------------------------------|---|
| <b>Enclosure Material</b>        | Cast Aluminum                                     |
| <b>Ground Lug</b>                | 12 AWG Max.                                       |
| <b>DIN Mounting Clip</b>         | DIN 3 Rail Mount                                  |
| <b>Operating Temp - Injector</b> | -40° C to +70° C                                  |
| <b>Weight</b>                    | .28 lbs. (.13 kg)                                 |
| <b>Dimensions</b>                | 4.5 x 2.5 x 1.5 (inches) 114.3 x 63.5 x 38.1 (mm) |
| <b>RoHS Compliant</b>            | Yes   |

**BTD-CAT6-P1-HP**

