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PWRINJ01 Datasheet

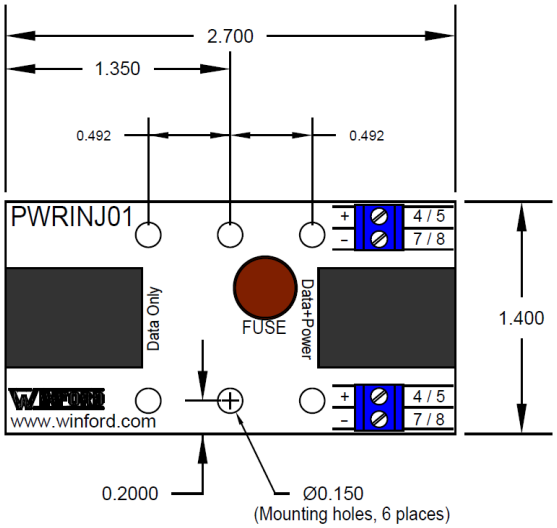
Product Revision: Rev A

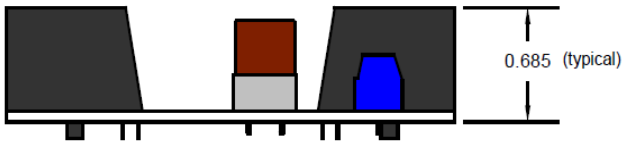
Overview

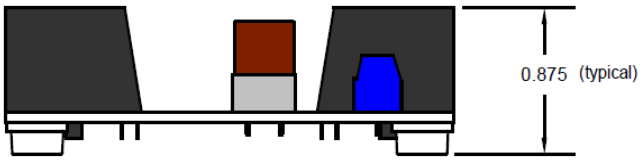
The PWRINJ01 provides a means of using a power supply to power a PoE Device on a non-PoE network. It includes a fuse holder with a fuse installed.

Drawing

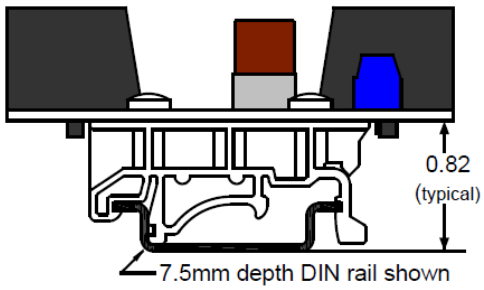
Dimensions in inches





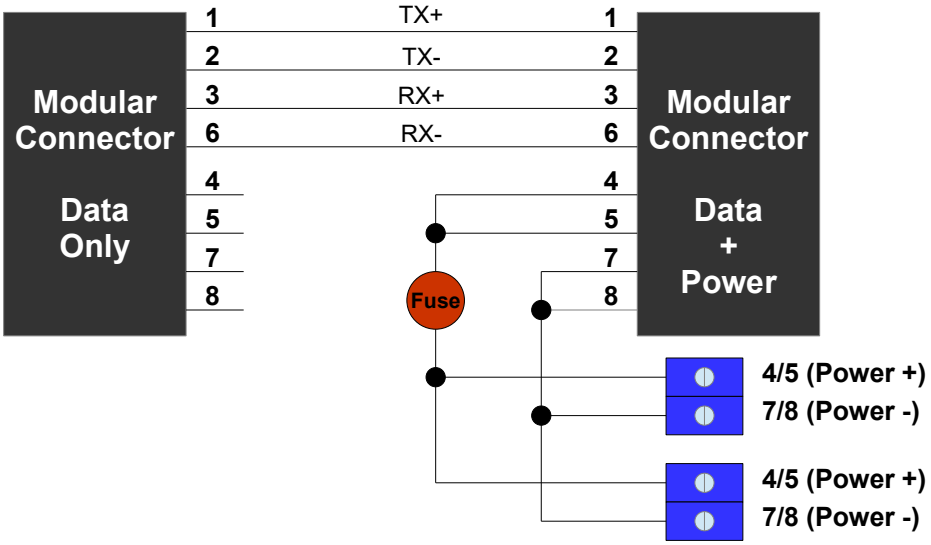


Rubber Feet



DIN Clips

Simplified Schematic Drawing



Operating Conditions

Ambient Temperature Range	–30°C to 85°C
Relative Humidity Range - not icing or condensing	5% to 85% RH

Absolute Maximum Ratings

Specification	Symbol	Min	Typ	Max	Unit
Supply voltage	V_{supply}		48	60	V
Total supply current (PCB continuous current rating)*	I_{supply}			2	A
Current drawn by PoE Device (PoE standard) (see section "Component Details" for fuse current rating)	I_{device}			0.35	A

*See Applications section for additional details.

Electrical Performance and Recommended Operating Conditions (at 25 degC)

Specification / Conditions	Min	Typ	Max	Unit
Network Speed*		10 or 100		Mbps

*Although not officially certified, this product has been tested on networks at 10 Mbps and 100 Mbps.
Since network data signal connections on pins 4 / 5 / 7 / 8 are not present, it will not support 1000 Mbps.

Screw Terminal Wire Sizes

- All screw terminals: 16-26 AWG*
  *Ensure wire size is chosen appropriately for the given current that will be present in the application.

Part Number Ordering Information

PWRINJ01	-	100S	-	
		1		2

1. Installed Fuse

- **100S** 1.0A Slow Response Fuse

2. Mounting Option

- **FT** Rubber Feet on bottom side of PCB
- **DIN** DIN Rail Mounting Clips

PWRINJ01 Stocked Part Numbers

The following part numbers represent standard options that are normally stocked:

- PWRINJ01-100S-FT
- PWRINJ01-100S-DIN

Component Details

Component	Manufacturer	Manuf. Part Number
Fuse Holder, 560 series for TE5/TR5 type fuses	Littelfuse	56000001009
Fuse, 1.0A Slow Response (TR5, Series 382)	Littelfuse	38211000410

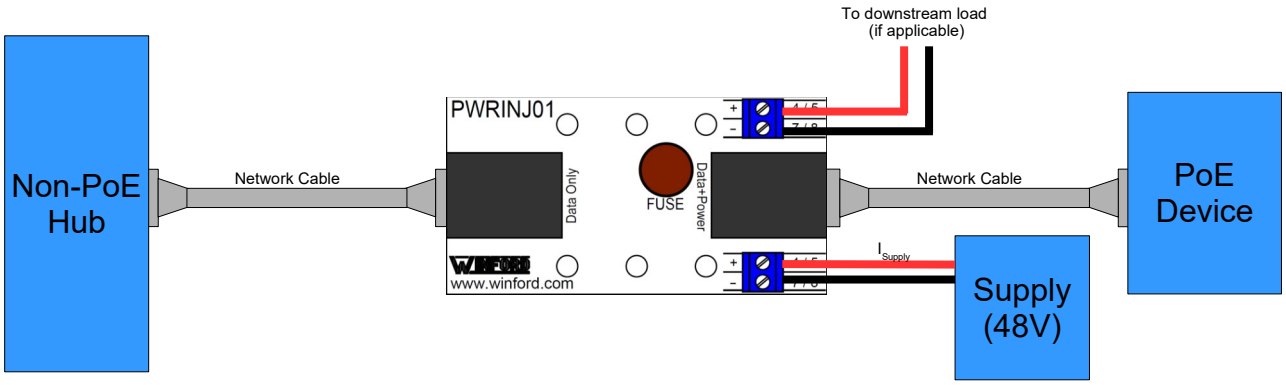
Fuse Electrical Characteristics*

Current	Opening Time
1.5A	1 Hour, Minimum
2.1A	2 Minutes, Maximum
2.75A	400ms, Minimum 10 seconds, Maximum
4.0A	150ms, Minimum 3 seconds, Maximum
10A	20ms, Minimum 150ms, Maximum

*Characteristics are given for the factory-installed fuse. Winford Engineering does not guarantee that the fuse is suitable for a particular application. The user must evaluate the fuse characteristics (shown above) for their particular application to determine suitability. If a different fuse is needed for an application, see the Applications section of this document for additional considerations.

Applications

A typical application for this product is a situation in which a PoE Device needs to be used on a non-POE network, as illustrated in the diagram below.



The extra terminal block is included to easily make the supply voltage available to another circuit if needed in the application. As shown in the schematic diagram, there are direct connections (unfused) between the two terminal blocks, so they may be used interchangeably.

Fuse / Fuse Holder

The user may choose to install their own fuse in place of the factory-installed fuse. In that event, in addition to ensuring that the fuse is suitable for the application (e.g., load and wiring), the user must ensure that the fuse is sized appropriately relative to the total supply current allowed, I_{supply} (PCB continuous current rating), as defined in the Absolute Maximum Ratings section.

If there are additional questions about using this product in a particular application, please contact Winford Engineering for more information.

Notices

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