PoE Regulator 802.3af

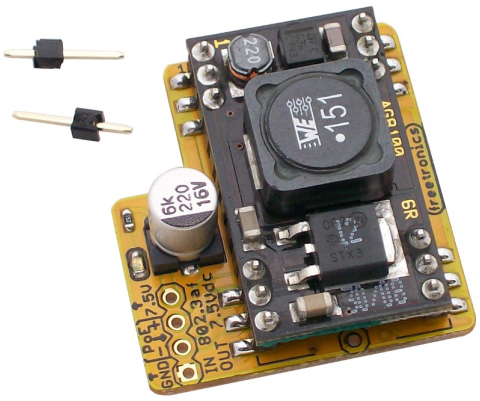
www.freetronics.com/poe-regulator-8023af

Getting Started: Power-over-Ethernet Regulator 802.3af

The **Power-over-Ethernet Regulator 802.3af** is an add-on board for the **Freetronics Ethernet Shield** (**www.freetronics.com/ethernet-shield**) that allows it to accept the 48V input supplied via the Ethernet cable as a "Powered Device" (PD) on a Power-over-Ethernet network.

The module implements the signalling protocol necessary to communicate with commercial PoE switches and injectors to tell them that there is a device on the network that is ready to accept power.

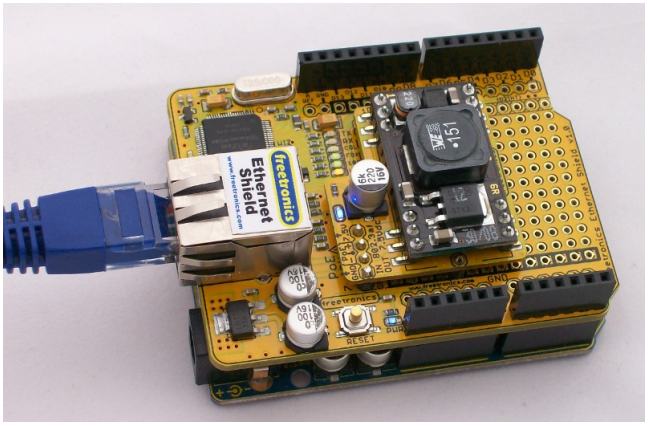
Further background information on Power-over-Ethernet schemes can be found at **www.freetronics.com/poe**.



Features

Power Rating	
Input voltage	Nominal 48Vdc
Output Voltage	7.5Vdc
Maximum Power	12W
Other Features	
Power ON Indicator	Blue LED
Decoupling Capacitor	220nF

Installation



1. Remove the jumpers from the PoE header on your Freetronics Ethernet Shield if they are fitted.

2. Place the provided single-pin headers into the GND and 5V rails adjacent to the prototyping area on the Ethernet Shield so that they align with the center holes in the **PoE Regulator 802.3af**. Orient them with the short end pointing up and the long end pointing down below the shield.

3. Place the **PoE Regulator 802.3af** onto the header pins.

4. Solder the 4 power header pins to the top of the regulator. Trim off any excess length.

5. Solder the top of the header pins that protrude through the middle of the regulator board. It's a tight angle, but there should be plenty of room to get between the headers and the regulator module.

6. Turn over the Ethernet Shield and solder the bottom of the single-pin headers in place. Trim off the excess length.

7. Fit your Ethernet Shield to your Arduino and plug it in to your Ethernet network.

8. Connect the network segment to Power Sourcing Equipment such as a PoE switch or midspan injector.

Support

For assistance see **www.freetronics.com/support** or email **support@freetronics.com**.

About Freetronics

Freetronics is an Australian company created by Jonathan Oxer and Marc Alexander to provide easy access to hardware, parts, and products related to Arduino projects and the book ***Practical Arduino***. Learn more at **www.freetronics.com**. Follow us on Twitter at **twitter.com/freetronics**.