

#### Overview

PWR-20001 is a small form factor PTC fused power distribution board.

#### Features

- x1 spring clamp power input
- x6 spring clamp power outputs
- Channel status indicator LEDs
- 250 mA PTC fuses
- Designed, manufactured, tested, and shipped from the USA.

#### **Kit Includes**

- PWR-20001
- Enclosure

# **Typical Applications**

- Robotic competitions (FRC, FTC, VEX, etc.)
- RC projects (cars, trucks, boats, etc.)
- Other hobby projects



Figure 1: PWR-20001

### Description

Sensors can be delicate devices. Protect your sensors from excess current with Playing With Fusion's PTC fused sensor power distribution board! PWR-20001 includes Positive Temperature Coefficient (PTC) fuses, a resettable fuse ideal for protecting against overcurrent faults. The small form factor makes it mountable virtually anywhere on your build. Wiring to robot extremities becomes simplified, reducing failure points. Clear labeling shows the polarity of the connectors, and LED indicators display the status of each channel for quick troubleshooting.

### **Electrical Information**

- Max current: 3A continuous
- PTC fuse cutoff: 250 mA

# Application & Guide

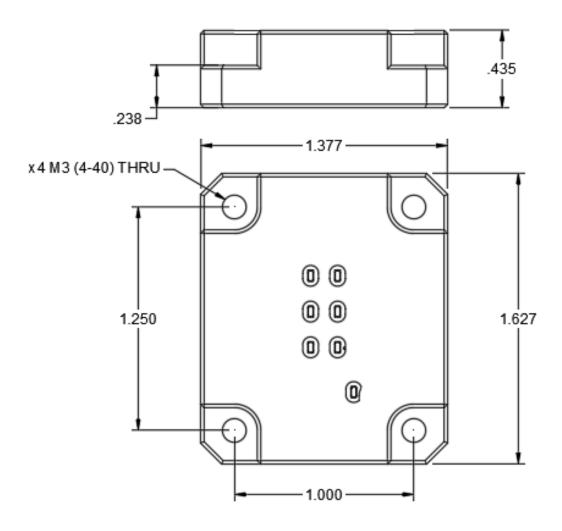
No setup is required to use PWR-20001. Just connect power. See Playing With Fusion's YouTube channel to see implementation in action.

# **Ordering Options & Related Parts**

<u>PWR-10001:</u> XT30 power distribution module <u>PWR-10002:</u> XT30 power distribution module <u>IFB-10013</u>: CAN Inline 2-way splitter <u>IFB-10014</u>: CAN Inline 3-way splitter <u>IFB-10015</u>: CAN "Y" 2-way splitter <u>IFB-10016</u>: CAN "Y" 3-way splitter

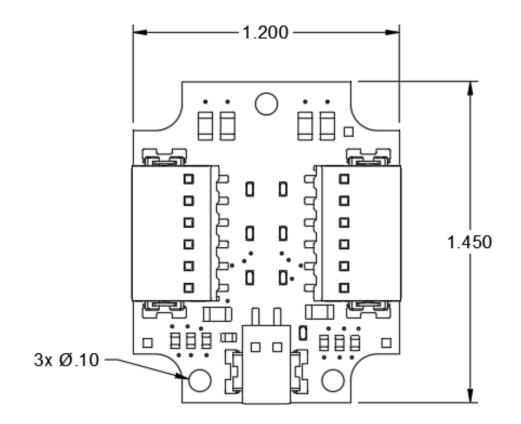


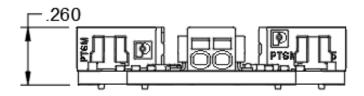
Appendix 1: Mechanical Drawing of Enclosure





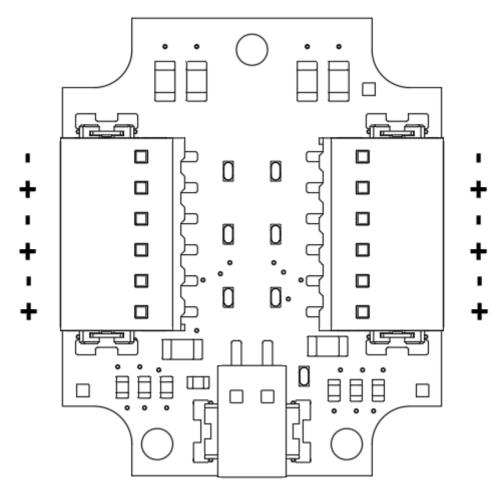
### Appendix 2: Mechanical Drawing of PCB







### Appendix 3: Connector Polarity Diagram



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# **Revision History**

Date	Author	Notes
11/2/2024	N. Johnson	Initial creation