**Parts for Arduino-Based Thermocouple Loggers**

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| Description | Part Number | Details |
| Main board: Adafruit Metro | 2488 | <https://www.adafruit.com/product/2488>  - Adafruit METRO 328 - Arduino Compatible - with Headers - ATmega328 |
| Data logging shield | 1141 | <https://www.adafruit.com/product/1141>  -The newer, R3-compatible style (RTC number label reads PCF 8523, and there is a **2x3 SPI pin area on one side**)  -Coin batteries (part no. 380) were installed prior to initializing RTC  -In setting up these devices, the RTC was initialized, and steps from the following websites were followed:  -<https://learn.adafruit.com/adafruit-data-logger-shield>  -<https://learn.adafruit.com/adafruit-data-logger-shield/using-the-real-time-clock> |
| Multiplexer | KTA-259 | <https://oceancontrols.com.au/KTA-259.html>  -Allows 8 thermocouple inputs  -Code free to download from website |
| Thermocouples | THMWK-50-01 | <https://www.automationdirect.com/adc/shopping/catalog/sensors_-z-_encoders/temperature_sensors_-a-_transmitters/thermocouple_-a-_rtd_extension_wire/thermocouple_wire_(type_k)/thmwk-50-01?utm_source=msn%20cpc&utm_medium=cpc&utm_term=&utm_campaign=Shopping%20-%20Process%20Sensors&utm_adgroup=Process%20Sensors&msclkid=9473d185b37a112e38278d439941e26d>  -K Type  -20 AWG  -PVC Insulation  -8 plug in to multiplexer |
| Battery enclosure | 248 | <https://www.adafruit.com/product/248>  - 6 x AA battery holder with 5.5mm/2.1mm plug |
| Batteries |  | -6 AAs |