

Table List of Parts Needed

| | Item | Description | Link | Price (€) | Comments |
|----|---|---------------------------------|---|-----------|--|
| 4 | Custom Carrier Board | Custom PCB for M0-based OpenCTD | https://a.co/d/hlJF9NW | 12.99 | <i>probably not the right link</i> |
| 5 | Adafruit Feather M0 Adalogger | Microcontroller | https://www.adafruit.com/product/2796 | 19.95 | Amazon.de for 28 euro |
| 7 | Adafruit DS3231 Precision RTC Breakout | Real-time clock | https://www.adafruit.com/product/3013 | 17.5 | Amazon.de for 25 euro |
| 8 | CR1220 3V Coin Cell Battery | To power RTC | https://amzn.eu/d/gCg9msD | 6.64 | link good |
| 9 | Atlas Scientific EZO Conductivity Circuit | Measures conductivity | https://www.atlas-scientific.com/productpages/circuits/ezoec.html | 64.34 | guess we need this circuit .. |
| 16 | Adafruit DS3231 Precision RTC FeatherWing | Real-time clock | https://amzn.eu/d/ilK9QE7 | 21.99 | is this the same as item 7 which is also a RTC clock |
| 17 | Adafruit Stacking Headers | For connecting RTC | https://amzn.eu/d/4mRsWOW | 2.8 | |
| 18 | Adafruit Perma-Proto Small Breadboard PCB | For protoboard version | https://www.adafruit.com/product/1214 | 7.52 | can we find it elsewhere .. is it needed? |
| | DS18B20 Temperature Sensor in | Measures | | | okay .. Martin was commenting |

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|----|--|---------------------------------------|---|--------|--|
| 21 | Stainless Steel Housing | temperature | https://a.co/d/24QHYSY | 7.99 | on this yesterday .. |
| 22 | Atlas Scientific K 1.0 Mini Conductivity Probe | Measures conductivity | https://www.atlas-scientific.com/productpages/probes/eck1-0-mini.html | 123.99 | need to check if we need both the normal <i>and</i> mini probe |
| 23 | Atlas Scientific K 1.0 Conductivity Probe | Measures conductivity | https://www.atlas-scientific.com/productpages/probes/eck1-0.html | 157.99 | probably need this .. |
| 24 | MS5803-14BA Pressure Sensor Breakout | Measures pressure | https://amzn.eu/d/5gxiEdw | 79.23 | hmm .. expensive !! |
| 25 | MS5803-14BA Pressure Sensor SMC | Pressure sensor chip | https://www.digikey.de/en/products/detail/te-connectivity-measurement-specialties/MS580314BA01-00/5277631 | 23.63 | okay .. |
| 26 | SOIC to DIP Adapter | For pressure sensor | https://amzn.eu/d/af9ZiLB | 8.9 | okay .. |
| 28 | Lithium Ion Battery Pack 3.7V 2000 mAh | Battery for OpenCTD | https://amzn.eu/d/fCoCx4s | 17.09 | okay .. |
| 29 | Board-mounted switch | Internal power switch | https://amzn.eu/d/fWvyRN0 | 1.39 | yes .. |
| 33 | Half-size breadboard | For testing circuits | https://amzn.eu/d/2MireJq | 11.99 | okay .. |
| 34 | Screw Terminal Block Extra Long Pins for Breadboarding (3) | For connecting sensors during testing | https://amzn.eu/d/iAapgTb | 8.15 | need to checkl with Martin |
| 64 | Conductivity calibration | For calibrating conductivity | https://atlas-scientific.com/calibration-solutions/conductivity-calibration-k-1-0-set/ | 15.89 | |

| | solution | probe | | | |
|----|----------------------|-------------------|---|-------|----------------------------|
| 65 | openrov 30bar IMU | Waterproof IMU | https://amzn.eu/d/fEwTTNr | 10.99 | <i>please check !!</i> |