



# Equipment/supply list for maintenance, quality control, and troubleshoooting of standard Stroud Center EnviroDIY Monitoring Station (pricing and availability subject to change)

#### SD cards and adaptors:

- Single micro SD card and SDHC adaptor, \$6.00: <a href="https://www.amazon.com/SanDisk-Mobile-MicroSDHC-SDSDQM-B35A-Adapter/dp/B004ZIEMWU;">https://www.amazon.com/SanDisk-Mobile-MicroSDHC-SDSDQM-B35A-Adapter/dp/B004ZIEMWU;</a> value pack (5 count), \$19.65: <a href="https://www.amazon.com/PACK-SanDisk-MicroSD-SDSDOAB-008G-Packaging/dp/B00MHZ6ZJO">https://www.amazon.com/PACK-SanDisk-MicroSD-SDSDOAB-008G-Packaging/dp/B00MHZ6ZJO</a>
- USB adaptor (for computer that cannot accommodate SDHC adaptor), \$10.99: <a href="https://www.amazon.com/Reader-Adapter-Micro-UHS-I-Cards/dp/B07L63Z54G">https://www.amazon.com/Reader-Adapter-Micro-UHS-I-Cards/dp/B07L63Z54G</a>

## Power:

- Lipo Charger, PRT-15217, \$9.95:
  - o https://www.sparkfun.com/products/15217
  - o <a href="https://www.digikey.com/en/products/detail/sparkfun-electronics/PRT-15217/10244131">https://www.digikey.com/en/products/detail/sparkfun-electronics/PRT-15217/10244131</a>
  - o https://www.adafruit.com/product/1904
- USB wall adapter 5V, TOL-11456, \$3.95:
  - o <a href="https://www.sparkfun.com/products/11456">https://www.sparkfun.com/products/11456</a>
  - https://www.digikey.com/en/products/detail/phihong-usa/PSAA05A-050QL6-R/6560437
- Lithium Ion Battery Pack 3.7V 4400mAh, \$19.95:
  - o <a href="https://www.amazon.com/Battery-Packs-Lithium-Pack-3-7V/dp/B0137IRGHG">https://www.amazon.com/Battery-Packs-Lithium-Pack-3-7V/dp/B0137IRGHG</a>
  - o https://www.digikey.com/en/products/detail/adafruit-industries-llc/354/5054541
  - o <a href="https://www.adafruit.com/product/354">https://www.adafruit.com/product/354</a>
- USB Type A to Type C Cable, \$4.95:
  - o https://www.adafruit.com/product/4474
  - https://www.digikey.com/en/products/detail/adam-tech/CA-USB-AM-CM-1FT/9830207
  - o <a href="https://www.sparkfun.com/products/15425">https://www.sparkfun.com/products/15425</a>

## Cleaning/Maintenance:

- Brush (for Meter Hydros 21 CTD sensor and Campbell OBS3+ Turbidity sensor), \$4.18: https://www.lowes.com/pd/Scotch-Brite-Poly-Fiber-Dish-Brush/50273199
- Hose clamp driver, example \$3.98: <a href="https://www.lowes.com/pd/Sheffield-5-Piece-7-5-in-Multi-Bit-Screwdriver/50146890">https://www.lowes.com/pd/Sheffield-5-Piece-7-5-in-Multi-Bit-Screwdriver/50146890</a>
- UV resistant zip ties, \$6.99: <a href="https://www.amazon.com/TR-Industrial-TR88302-Multi-Purpose-Cable/dp/B01018DC96">https://www.amazon.com/TR-Industrial-TR88302-Multi-Purpose-Cable/dp/B01018DC96</a> (8in recommended)
- Wire cutter, \$5.98: <a href="https://www.lowes.com/pd/CRAFTSMAN-4-5-in-Diagonal-Cutting-Pliers/1000596395">https://www.lowes.com/pd/CRAFTSMAN-4-5-in-Diagonal-Cutting-Pliers/1000596395</a> (5in recommended)
- Q-tip cotton swabs

### **Quality Control:**

- Conductivity and Temperature hand-held meter, e.g., Hanna Dist 3, \$52.00: <a href="https://www.hannainst.com/hi98303-dist-3-ec-tester.html">https://www.hannainst.com/hi98303-dist-3-ec-tester.html</a>
- Conductivity calibration solution, e.g., Hanna 1413 uS/cm Conductivity Standard, \$26.00: https://www.hannainst.com/hi70031p.html
- Temperature, e.g., Durac 1229T59 (for higher accuracy temperature readings), \$62.36: <a href="https://www.thomassci.com/Instruments/Digital-Thermometers/">https://www.thomassci.com/Instruments/Digital-Thermometers/</a> /DURAC-Waterproof-Electronic-Thermometers?q=1229t59
- Metric ruler, example \$6.29: <a href="https://www.amazon.com/Inches-Plastic-Straight-Measuring-Student/dp/B07N777XWH/">https://www.amazon.com/Inches-Plastic-Straight-Measuring-Student/dp/B07N777XWH/</a>
  Troubleshooting:
  - Mayfly Data Logger, \$80.00: <a href="https://www.amazon.com/EnviroDIY-Mayfly-Logger-Arduino-Compatible/dp/801F9B4WCG">https://www.amazon.com/EnviroDIY-Mayfly-Logger-Arduino-Compatible/dp/801F9B4WCG</a>
  - Vertical microSD card adapter, \$35.00: <a href="https://www.envirodiy.org/product/envirodiy-vertical-microsd-card-adapter-pack-of-5/">https://www.envirodiy.org/product/envirodiy-vertical-microsd-card-adapter-pack-of-5/</a> (single units available soon)
  - Grove cable, \$8.59: https://www.amazon.com/Seeedstudio-Grove-Universal-Buckled-Cable/dp/B01CNZ9RJO
  - Stereo jack (for Hydros21 CTD), \$27.00: <a href="https://www.envirodiy.org/product/envirodiy-grove-to-3-5mm-stereo-jack-pack-of-5/">https://www.envirodiy.org/product/envirodiy-grove-to-3-5mm-stereo-jack-pack-of-5/</a> (single units available soon)
  - Replacement screw terminal port (for Turbidity sensor), \$27.00: <a href="https://www.envirodiy.org/product/envirodiy-grove-6-pin-screw-terminal-adapter-pack-of-5/">https://www.envirodiy.org/product/envirodiy-grove-6-pin-screw-terminal-adapter-pack-of-5/</a> (single units available soon)
  - EnviroDIY cell board, \$230.00: <a href="https://www.envirodiy.org/product/envirodiy-lte-bee-pack-of-5/">https://www.envirodiy.org/product/envirodiy-lte-bee-pack-of-5/</a> (single units available soon)
  - \*Multiple above items included in Mayfly Starter Kit, \$115.00: <a href="https://www.amazon.com/EnviroDIY-Mayfly-Arduino-Compatible-Starter/dp/B01FCVALDW/ref=sr\_1\_2">https://www.amazon.com/EnviroDIY-Mayfly-Arduino-Compatible-Starter/dp/B01FCVALDW/ref=sr\_1\_2</a>; includes Mayfly logger, waterproof enclosure, grove cables, vertical microSD card adapter, USB cable, microSD card and adapter