

Parts required and costs to build a CWIS datalogger.

Part	Quantity (per logger)	Unit cost *	Cost/ logger	Vendor
3.3 V 8 MHz Arduino Pro (ATmega328p Board)	1	\$15.95	\$15.95	Sparkfun
Datalogging Shield	1	\$15.95	\$15.95	Adafruit
LIS3MDL Magnetometer + Breakout Board	1	\$4.95	\$4.95	Pololu
Male ICSP Headers (2x15 block)	1/5	\$3.23	\$0.65	Mouser
Adafruit SOT23 Breakout Pack	1/5	\$4.95	\$0.99	Mouser
Stripboard	1/4	\$5.72	\$1.43	Mouser
Anderson Powerpole Connectors	1/20	\$25.99	\$1.30	Amazon
MCP1703 3.3 V Regulator	1	\$0.55	\$0.55	Mouser
1A GMA Mini Fuse	1	\$0.17	\$0.17	All Electronics
In-Line GMA Fuse Holder	1	\$0.45	\$0.45	All Electronics
Serial Extender Housing Pack	1/5	\$0.79	\$0.16	Pololu
Screws (100 Pack)	2/100	\$8.26	\$0.17	Mouser
Nuts (100 Pack)	2/100	\$5.83	\$0.12	Mouser
Box Kit	1	\$2.10	\$2.10	Mouser
Cable Glands	1	\$1.95	\$1.95	Mouser
Battery Connectors	2	\$0.54	\$1.08	Mouser
10 kOhm Resistor	1	\$0.50	\$0.50	Mouser
1 uF Ceramic Capacitors	2	\$0.46	\$0.92	Mouser
0.01 uF Ceramic Capacitor	1	\$0.25	\$0.25	Mouser
Button	1	\$0.16	\$0.16	Mouser
Spacers	2	\$0.10	\$0.20	Mouser
2-Position Terminal Block	1	\$0.90	\$0.90	USU ECE Store
5-Position Terminal Block	1	\$4.11	\$4.11	Mouser
Wire (Battery – Positive)	1/20	\$2.95	\$0.15	Mouser
Wire (Battery – Negative)	1/20	\$2.95	\$0.15	Mouser
Wire (prototype board soldering)	1/20	\$15.95	\$0.80	Mouser
Coin Cell (614-CR1220.IB)	1	\$1.14	\$1.14	Mouser
Micro SD Cards with adapters	1	\$9.95	\$9.95	Mouser
Pelican 1150 Case (with foam)	1	\$31.96	\$31.96	Amazon
Battery	1	\$39.99	\$39.99	Batteries + Bulbs
Clasp	1	\$0.739	\$0.739	Amazon
5-Conductor Cable	10'	455.28	\$9.11	Mouser
Female Headers (36 pin) (Five-Pack)	1/5	\$2.95	\$0.59	Mouser
Strap Set: Gear Strapz (+5 Clasps)	1/12	\$18.22	\$1.52	Amazon