

Table 1. Summary of hardware components and materials used in this study. Total system cost is ~\$700 USD

Component	Cost (USD)	Source of materials	Comments
Feather M0 Adalogger	19.95	<a href="#">Adafruit</a>	
RTC DS3231	17.5	<a href="#">Adafruit</a>	Provides accurate time for the data logger; can be purchased from other suppliers
Gravity 1-to-8 I2C Multiplexer	6.9	<a href="#">DFRobot</a>	Enables the connections of multiple CO <sub>2</sub> /O <sub>2</sub> sensors to one data logger; Can be purchased from other suppliers
0.96" 128x64 OLED Graphic Display	17.5	<a href="#">Adafruit</a>	Can be purchased from other suppliers
Lithium-Ion Cylindrical Battery - 3.7v 2200mAh	9.95	<a href="#">Adafruit</a>	Can be purchased from other suppliers
SCD30 CO <sub>2</sub> sensor	61.79	<a href="#">Digikey</a>	Four sensors were used (240 USD); can be purchased from other suppliers
Calibrated Electrochemical O <sub>2</sub> Sensor	84.90	<a href="#">DFRobot</a>	Four sensors were used (340 USD)
SD/MicroSD memory card (8GB SDHC)	9.95	<a href="#">Adafruit</a>	Can be purchased from other suppliers
300 ml glass jar	~2	Local suppliers or online (e.g., Amazon)	Four jars were used (8 USD)
Cables, wires, and general equipment: + Eight-wire cable 1.5 m + STEMMA QT 4pin cable + JST PH 2pin cable-female connector + 4-pin cable + Wires in colors white, green, red, black + On/off switch for the battery + Snap-action 5-Wire Block connectors for connecting wires + M2.5 Standoffs (Spacer) + Cable glands	~30	Local suppliers or online (e.g., Amazon)	