airgradient

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Personal Air Quality Monitor

AirGradient Go

Model: P-1PSG

AirGradient Go is a portable air quality monitor that lets you know if the air you're breathing is healthy. It measures CO2, PM2.5, TVOCs, NOx, Temperature, and Humidity. It's weather-proof and can be carried everywhere you go.

Technical Data

Specification	Description
Model	P-1PSG
Dimensions & Weight	31 x 68 x 103, 137g
Microcontroller	ESP32-C5-MINI
Connectivity	Bluetooth LE (Bluetooth Core 6.0 certified), WiFi (5GHz and 2.4GHz IEEE 802.11 b/g/n-compliant)
GPS	Allystar TAU1113
Accelerometer	STMicroelectronics LIS2DH12
Internal Storage	32MB
Display	E-INK 2.1 inch
Peripherals	Three capacitive buttons, power switch, reset button, Status RGB LEDs
External Hardware Watchdog	Texas Instruments TPL5010
Particle Sensor Module	Sensirion SPS30
CO2 Sensor Module	SenseAir S12
TVOC/NOx Module	Sensirion SGP41
Temperature and Humidity	Sensirion SHT40
Pressure	Infineon DPS368
Enclosure	ASA Plastic (bottom), Polycarbonate Plastic (top), UV resistant and weather proof
Battery	2000-2500 mAh Li-Po
Mounting Options	Portable & Stationary use, hook mounting point
Accessories	Wrist strap, Carry bag & 0.5 meter USB C to USB C cable. Power adapter not included
Certifications	Certifications in progress. The AirGradient Go will have certification parity with our other devices CE, RoHS, REACH, FCC ID: 2AC7Z-ESPC5WROOMU (MCU)
License	Open Source Hardware under CC-BY-SA. Firmware Source Code on GitHub.

Key Characteristics



The AirGradient Go is designed to be flexible and go wherever you do. Thanks to its weatherproof enclosure, it can be used confidently in a wide range of environments - whether mounted to a bike, attached to a backpack via the integrated mounting loop, or simply placed on a desk in an office or classroom.

The device features user-adjustable reading intervals, allowing you to choose the right balance between high-frequency data collection and extended battery life. A companion app enables route plotting and data visualisation, making it easy to review exposure during walks, rides, or commutes. At the same time, the monitor is designed to work well as a standalone device, with a built-in screen that provides clear, real-time readings without needing to rely on a phone.

While the final sensor configuration is still being determined, the device will measure particulate matter (PM), carbon dioxide (CO_2), temperature, relative humidity, and air pressure. It will also include a built-in GPS module to support location-based data tracking.



About AirGradient

1% FOR THE PLANET – MEMBER –

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AirGradient started as a volunteer project in a school in Northern Thailand monitoring dangerously high air pollution levels in classrooms during the “burning season.”

Our mission is to enable people to breathe healthy air by providing open-source, reliable and accurate air quality monitors and supporting organizations and citizens in understanding the air quality in their communities.

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