# Aeropulse



# A200-CM

#### Introduction

The Aeropulse A200-CM is a comprehensive, battery-powered air quality monitor that tracks a wide range of critical environmental parameters. It delivers high-accuracy measurements of:

- Particulate Matter (PM2.5, PM10)
- Carbon Dioxide (CO<sub>2</sub>)
- TVOC & NOx
- Temperature, Humidity, and Air Pressure

Powered by 6 AAA batteries, the device supports over 300 days of continuous operation on Wi-Fi.

## **Key Features:**

- Comprehensive Monitoring: Monitor 8 critical environmental parameters in one device—including PM2.5, CO₂, and TVOC.
- Extended Battery Life: Operates for over 300 days on 6 AAA batteries with a 60-minute measurement interval while connected to Wi-Fi.
- Dual-Band Wi-Fi Connectivity: Seamlessly connects to both 2.4 GHz and 5 GHz Wi-Fi networks.
- Flexible Installation:Designed for both wall-mounting and tabletop use, offering versatile placement options.

- High-Precision Compliance: Delivers industry-leading accuracy and complies with rigorous global building standards, including ANSI/ASHRAE 62.1-2022, California Title 24, RESET® Grade B, and the WELL Building Standard™ (WELL v2).
- Customizable Settings: Allows for easy adjustment of measurement and data upload intervals via the mobile application.
- Remote Monitoring & Management: Provides real-time access to data and device management through the complimentary Aeropulse dashboard and mobile applications.
- Comprehensive Alerts: Features a 3.7-inch color display for clear visual feedback, a multi-level CO<sub>2</sub> indicator, and a built-in buzzer for immediate audible alarms.

### **Sensors and Measurements**

#### Particulate Matter (PM2.5)

Range	0 to 1,000 μg/m³
Accuracy	0~100μg (±10μg/m3 ), 100~1000μg (±10%)
Resolution	1μg/m³
Technology	Light Scattering

#### Particulate Matter (PM10)

Range	0 to 1,000 μg/m³
Accuracy	0~100μg (±10μg/m3 ), 100~1000μg (±10%)
Resolution	1 µg/m³
Technology	Light Scattering

# Carbon Dioxide (CO<sub>2</sub>)

Range	400 - 5,000 ppm
Accuracy	±30.0 ppm ±3.0 %m.v.
Resolution	1 ppm
Technology	Photoacoustic NDIR

## TVOC

Range	0 – 500
Accuracy	≤ ± 15
Resolution	1
Technology	MOX (MEMS)

# NOx

Range	0 – 500
Accuracy	≤ ± 15
Resolution	1
Technology	MOX (MEMS)

# Temperature (°C)

Range	-40°C~125°C
Accuracy	± 0.2°C
Resolution	0.1°C
Technology	Digital CMOSens® technology (MEMS)

# Humidity

Range	0% ~ 100% RH
Accuracy	± 1.8% RH
Resolution	0.01 % RH
Technology	Digital CMOSens® technology (MEMS)

### Air Pressure

Range	3001100 hPa
Accuracy	~ ±1 hPa for Absolute accuracy (9501050 hPa, 0+40°C) ± 0.12 hPa (typical) equivalent to ±1 m for relative accuracyp = 700900hPa (Temp. @ 25°C)
Resolution	0.01 hPa
Technology	Piezoresistive absolute pressure sensor (MEMS)

### General Device Details

Wi-Fi	2.4&5 Ghz, 802.11b/g/h
Power Supply	6 AAA batteries or USB Type-C
Operating Temperature	0°C~50°C
Operating Humidity	10%~ 90% (non-condensing)
Local Data Storage	2 months at 15 minutes interval
Cloud Data Storage	2 years
Domensions	120mm*94mm*25mm
Weight	235g (not include battery)
LED & Buzzer	3.7 inch screen, AQI level indicator, buzzer alarm
Installation	Wall mount, ceiling mount, tabletop stand
Certifications	CE, FCC, RoHS, REACH
Modbus	Customizable