User guide

Aeropulse Aeronode User Guide

Applicability

This guide applies to the Aeropulse Aeronode series models listed below:

A100	PM2.5, PM10, PC0.3,PC2.5,PC 10,TVOC, CO2, NOx, Temperature, Humidity, Air Pressure, Light, Noise, Ozone(selective), NO2(selective), CO(selective)	MQTT, WiFi, Ethernet	CE, FCC, RoHS, REACH, Works with WELL	Global

Safety Precautions

Failure to adhere to these instructions may result in device malfunction or damage:

- Do not disassemble or modify the device.
- Avoid placing the device outdoors if temperatures or humidity exceed the operational range.
- Keep the device away from open flames, heat, cold, and liquid sources.
- This device is not intended as a reference monitor; Aeropulse will not be liable for any damage caused by inaccurate readings.
- Prevent shocks or impacts to the device.

Declaration of Conformity

The Aeropulse Aeronode series meets essential requirements for CE, FCC, RoHS, and REACH certifications.

Product Introduction

1.1 Overview

The Aeropulse Aeronode Series is a versatile indoor air quality monitoring device capable of measuring a wide range of parameters, including CO_2, PM2.5, PM10, TVOC, temperature, humidity, light, noise, and air pressure. It features two interchangeable modules, allowing for flexible configurations with additional sensors or extended battery life.

The Aeronode Series supports multiple connectivity options, including WiFi, LoRa, and SIM card compatibility for cloud connections. It also integrates seamlessly with building automation systems through protocols such as Modbus, BACnet, and MQTT.

Designed for real-time insights, the Aeronode Series pairs with the Aeropulse dashboard to provide comprehensive data access and analysis.

1.2 Features

- Replaceable capsules
- Sensor and battery capsules are interchangeable
- Up to 16 measurements in one device
- Multiple connectivity options
- Flexible power supply options
- Over 1.5 years of local data storage
- Aeropulse App: A straightforward application for device configuration.
- Visual and Audio Indicators: Equipped with a traffic light and buzzer to signal threshold levels.
- Minimalist design

Hardware Introduction

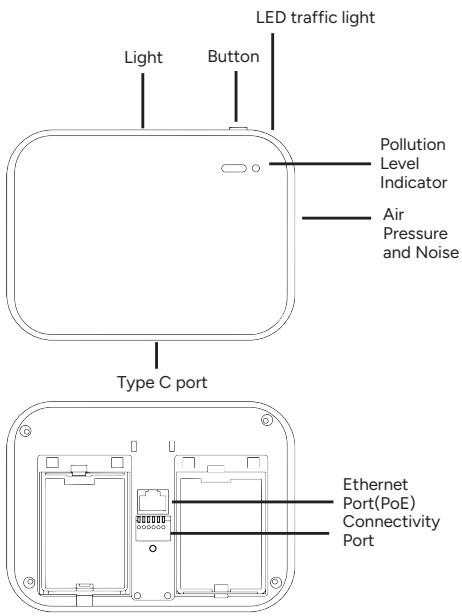
1.1 Packing List

Each Aeropulse Aeronode package contains the following components:

- 1 Aeronode device

- 3 mounting brackets
- Screws and charging cable
- 1 battery casings (batteries not included),1 sensor casing
- 1 User guide

1.2 Hardware Overview



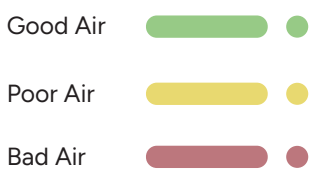
1.3 Button

The device includes a multi-function button and indicators to assist with configuration:

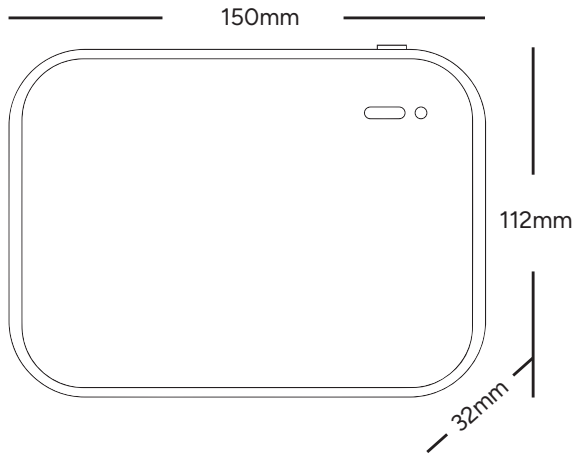
- **Press the button twice** consecutively to activate Bluetooth for WiFi connection or configuration via the Aeropulse App.
- **Press the button seven times** consecutively to turn the buzzer on or off.
- **Press the button eight times** consecutively to disable the device's buzzer setting
- **Press the button ten times** consecutively to toggle the pollution level indicator on or off.
- **Press the button twenty times** consecutively to perform a factory reset.

Note: When the device is powered on for the first time, Bluetooth is enabled by default. If no operation is performed within 30 minutes, Bluetooth will automatically turn off.

1.4 Indicator Light Functions



1.5 Dimensions



Power Supply Options

The Aeronode series supports multiple power options for flexible installation:

- ◯ Type C
- ◯ PoE (Power over Ethernet)
- ◯ Battery-powered

Configuration via the Aeropulse App

The Aeropulse App enables seamless device configuration and WiFi network setup.
Download the app and follow the provided instructions to complete the setup process.

Please download the app on www.aeropulse.com/resources and follow the instructions.

Installation Instructions

1. Mounting on DryWall

1. Attach the small bracket to the device with screws.
2. Mount Bracket A on the wall.
3. Slide the device onto Bracket A for secure placement.

2. Regional Installation Variants (China & EU, US)

1. Attach the small bracket to the device using screws.

2. Secure Bracket A (for EU and CN) or Bracket B (for the US) to the wall, then slide the device onto the appropriate bracket.

Please download the installation manual on www.aeropulse.com/resouces for more detailed introductions.

Data Export for Local Analysis

The Aeropulse device stores data for up to 1.5 years at 1-minute intervals, allowing users to download and analyze data as needed.

1. Use a USB cable to connect the device to a computer.
2. Use the Aeropulse App to connect the device and get the pin code to access the local data

Aeropulse Dashboard

The Aeropulse Dashboard allows users to monitor real-time data, export records, create alerts, and visualize air quality information. Users can log in at www.aeropulse.com/dashboard for full access to dashboard features.

Pollutants and Air Quality Guidelines

The Aeropulse Aeronode device measures various pollutants, each classified into levels that indicate air quality. Below are the guidelines for each pollutant, showing the threshold readings and corresponding air quality levels.

Air Quality Index (AQI)

0 - 50	Good
51 - 100	Moderate
101 - 150	Unhealthy for sensitive groups
151 - 200	Unhealthy
201 - 300	Very Unhealthy
301 - 500	Hazardous

Carbon Dioxide (CO_2)

400 - 800	Good
801 - 1500	Moderate
1501 - 2000	Unhealthy for sensitive groups
2001 - 2500	Unhealthy
2501 - 5000	Very Unhealthy
> 5000	Hazardous

Particulate Matter (PM2.5)

0.0 - 9.0	Good
9.1-35.4	Moderate
35.5 - 55.4	Unhealthy for sensitive groups
55.5 - 125.4	Unhealthy
12.5-224.4	Very Unhealthy
> 225.4	Hazardous

Particulate Matter（PM10）

0 - 54	Good

54.1 - 154	Moderate
154.1 - 254	Unhealthy for sensitive groups
254.1 - 354	Unhealthy
354.1 - 424	Very Unhealthy
> 424	Hazardous

Total Volatile Organic Compounds (TVOC)

0 - 100	Improving Air Quality
100	Baseline
101 - 199	Slight Increase
200-249	Moderate Increase
250-349	Significant Increase
350-500	Severe Increase

Nitrogen Oxides (NOx)

0 - 50	Good

51 - 100	Moderate
101-150	Unhealthy for sensitive groups
151-200	Unhealthy
201-300	Very Unhealthy
300-500	Hazardous

Ozone(O3)

0 - 54	Good
55- 70	Moderate
71- 85	Unhealthy for sensitive groups
86- 105	Unhealthy
106- 200	Very Unhealthy
201-604	Hazardous

Nitrogen Dioxide (NO_2)

0 - 53	Good

54 - 100	Moderate
101 - 369	Unhealthy for sensitive groups
361- 649	Unhealthy
650- 1249	Very Unhealthy
1250-2049	Hazardous

Carbon monoxide (CO)

0 - 4.4	Good
4.5- 9.4	Moderate
9.5 - 12.4	Unhealthy for sensitive groups
12.5- 15.4	Unhealthy
15.5-30.4	Very Unhealthy
30.5-50.5	Hazardous

Legal Information

For detailed legal information, please visit www.aeropulse.com/legal

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ◯ Reorient or relocate the receiving antenna.
- ◯ Increase the separation between the equipment and receiver.
- ◯ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ◯ Consult the dealer or an experienced radio/TV technician for help.

Caution:
Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

RF EXPOSURE INFORMATION

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Contats us

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