Smart Vent User Manual

Launch Pilot

User Manual Table of Contents

Product Introduction

The Smart Vent is designed to monitor and improve air quality in its surroundings. It features a sensor that detects carbon dioxide levels and temperature. When carbon dioxide levels exceed the set limits, the Smart Vent's fans will activate.
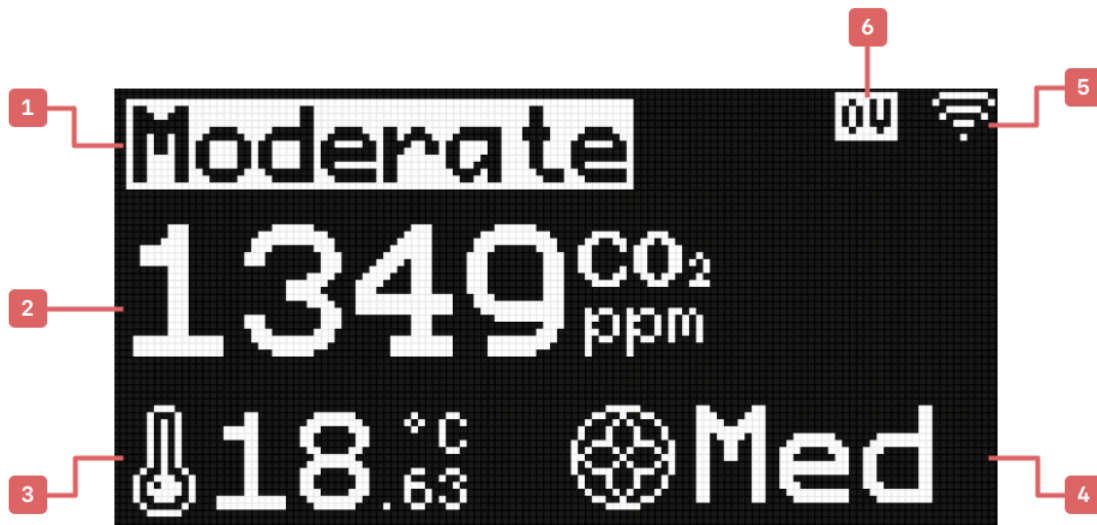
Device Overview

- Sensor: Measures the CO_2 levels and ambient temperature in the surrounding area.

- Display Screen: Displays the CO_2, temperature,

- Buttons: Navigate through the display options.

- Built-in Wi-Fi: Provides access to remote dashboard

- Power plug: Connects to the device barrel jack.

Quick Start

I. Mount the Device: Attach the Smart Vent device to the wall near your vent or duct.

II. Power the Device: Plug the power adapter into an electrical outlet.

III. Initial Display: The display screen will light up, showing the main interface.

IV. Stabilization Period: Allow the device one to two minutes to stabilize.

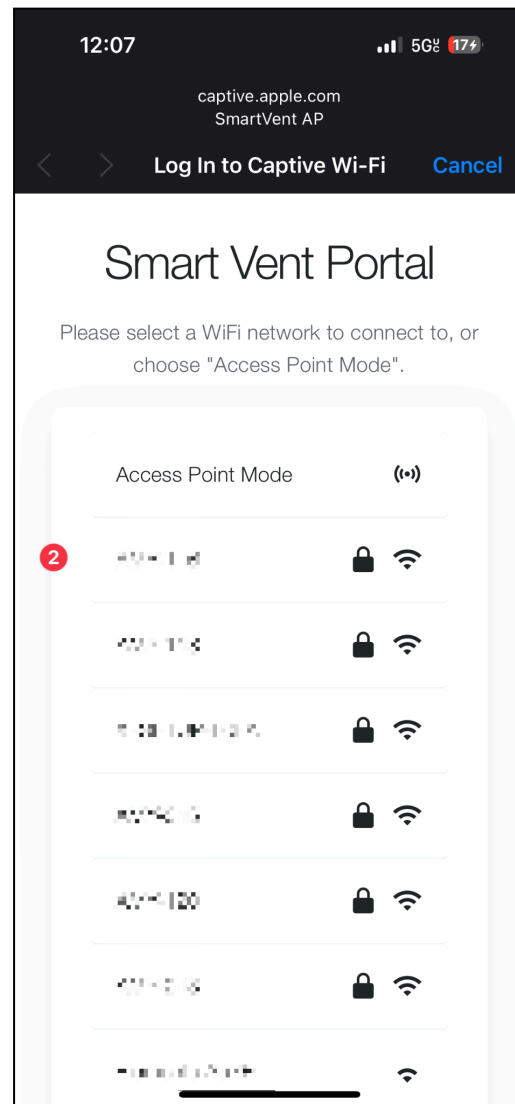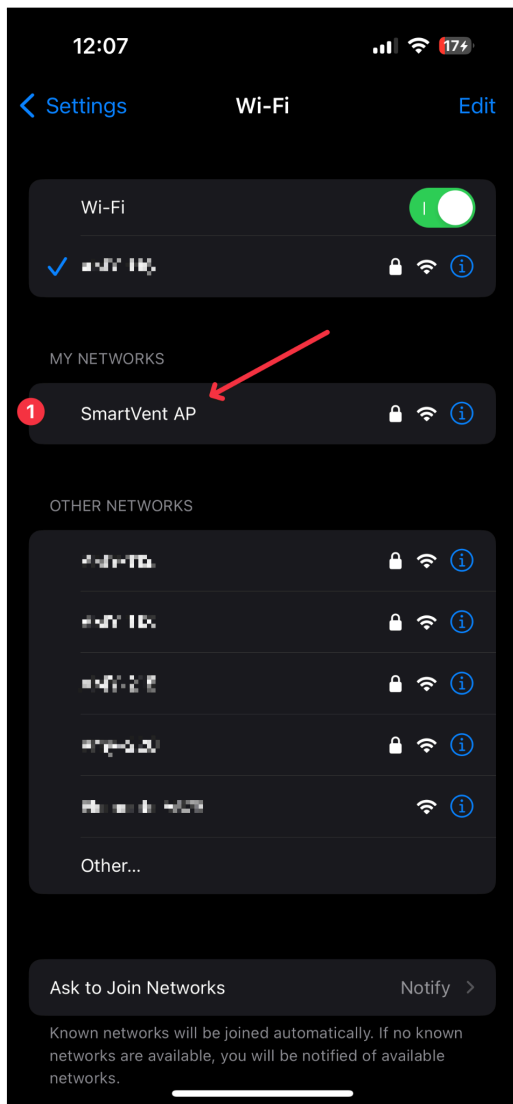V. Reading Display: When the readings begin to appear, your device is correctly set up.

Built-in Display

1. Air quality threshold indicator. The following are the threshold levels:
    a. **Good**: below 800 ppm.
    b. **Moderate**: 800 to 1400 ppm.
    c. **Poor**: 1400 to 2000 ppm.
    d. **Unhealthy**: 2000 to 3000 ppm.
    e. **Hazardous**: above 3000 ppm.
2. CO_2 concentration level in ppm (parts per million).
3. Temperature of the air in Celsius or Fahrenheit.
4. Current speed of the fans (Off, Low, Med, High, Max).
5. Wi-Fi connection indicator.
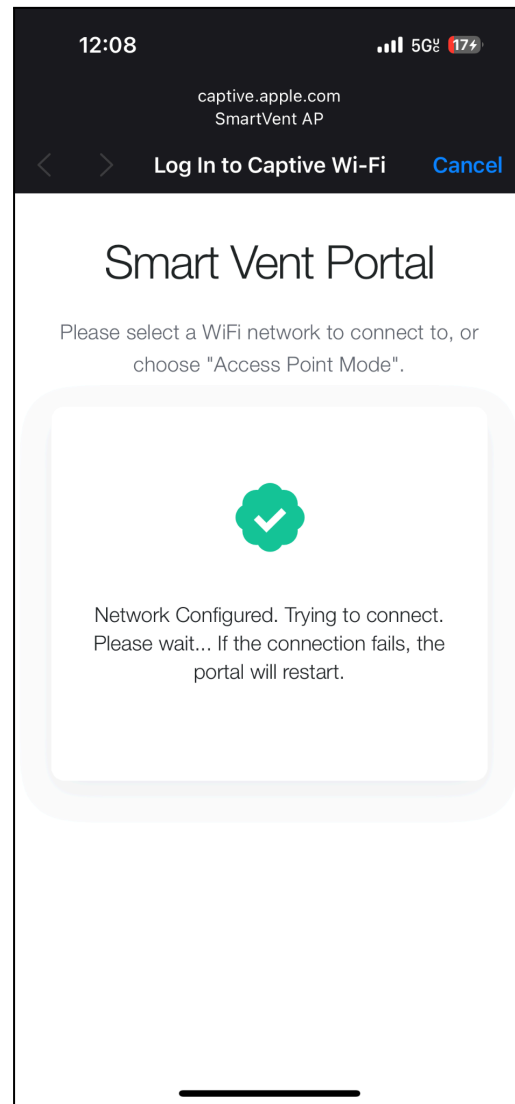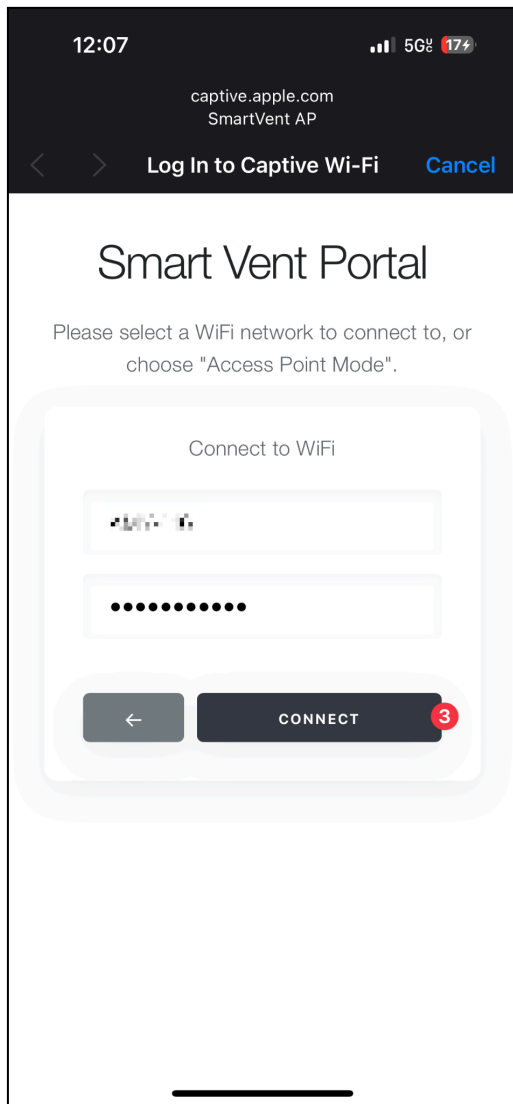6. Fans override indicator
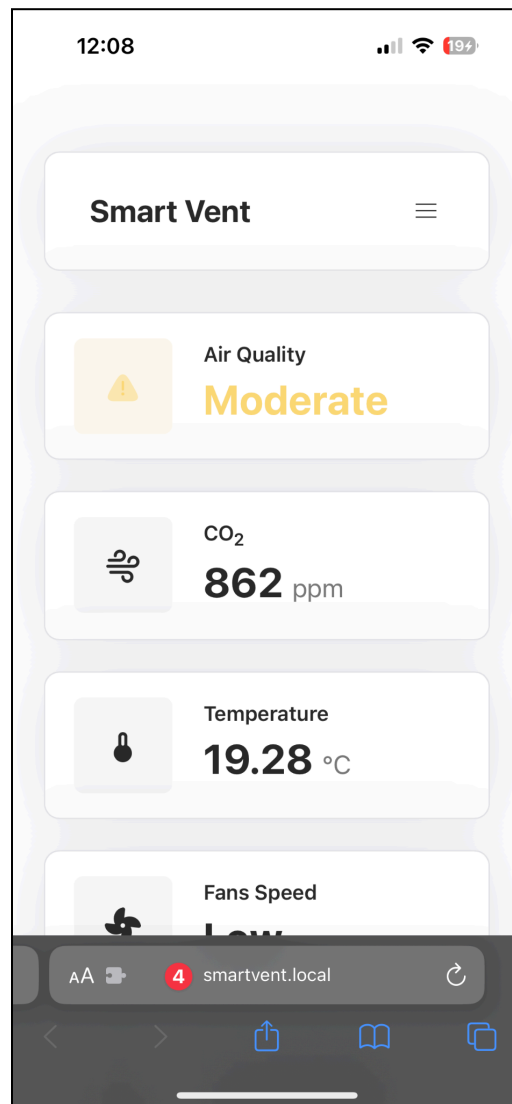
How to Connect to Wi-Fi

1. Once the smart vent is powered on, head to your Wi-Fi settings on a compatible device and connect to the smart vent network under "**SmartVent AP**" SSID using the password "**capstone**"

2. Once connected, the smart vent portal should pop up on your device, using the portal select your home Wi-Fi you wish to connect the smart vent to.

3. You will be prompted to enter your home Wi-Fi password, once filled click on connect to connect the smart vent to your home network.

4. Once connected successfully, your device should automatically disconnect from the smart vent access point and portal will be dismissed.
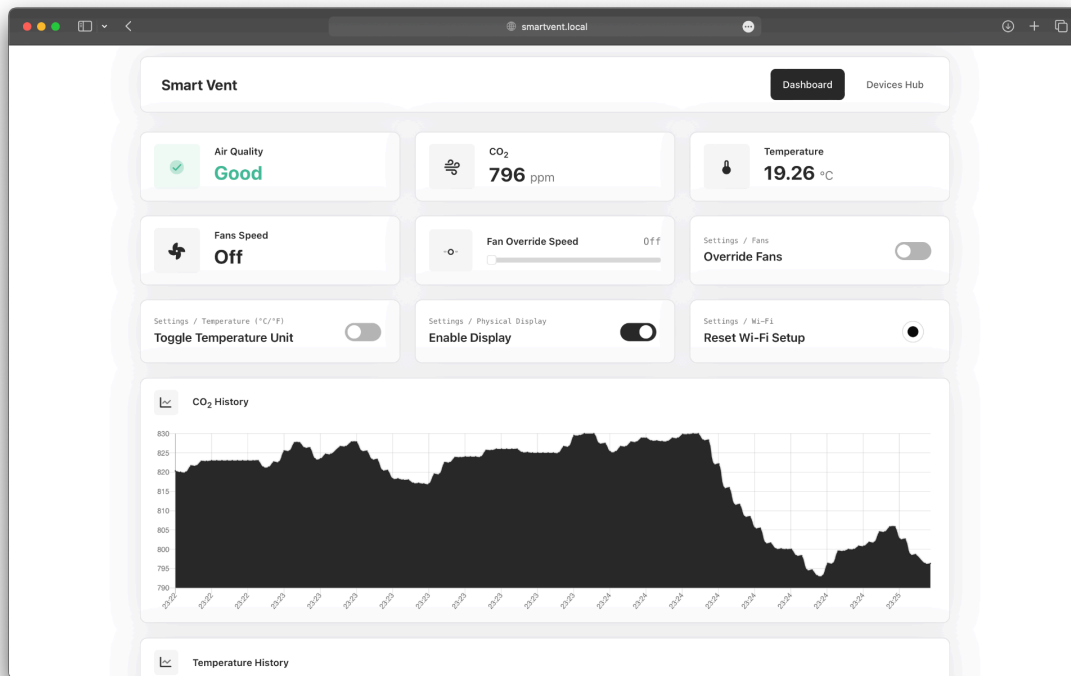
5. Then connect your device to your home Wi-Fi and enter the web address '**smartvent.local**' in your browser to access the remote dashboard.

Wi-Fi Remote Dashboard

The smart vent dashboard can be accessed using 'smartvent.local' web address on your browser if your device is connected to the same Wi-Fi network as the smart vent. The dashboard offers a remote overview of the smart vent and displays the same readings as the display on the smart vent.

Technical Specifications

- Power Input: 12V - 1A via barrel jack
- Connectivity: Wi-Fi (2.4GHz)
- Nondispersive infrared (NDIR) sensor to measure CO_2 concentration
- CO_2 Sensor Range: 400-5000 ppm
- Temperature Range: 0°C to 50°C (32°F to 122°F)

Safety Information

- Indoor Use Only: The Smart Vent is designed for indoor use only.
- Avoid Moisture: Do not expose the device to water or moisture.
- Avoid Extreme Temperatures: Do not put the device in an extremely hot or cold environment (0°C to 50°C).
- Power Safety: Use only the provided power adapter (DC 12V - 1A).

Customer Support

- **Email**: support@smartvent.com
- **Phone**: +1 (800) 123-4567
- **Website**: www.smartvent.com/support