

# Air Sensor

## User Manual



### What's Inside

Installation & Setup

Maintenance

Specifications

Warranty & Support

Growbud Inc.



[www.growbud.io](http://www.growbud.io)



[support@growbud.io](mailto:support@growbud.io)



# Installation & Setup

## 1. Unboxing

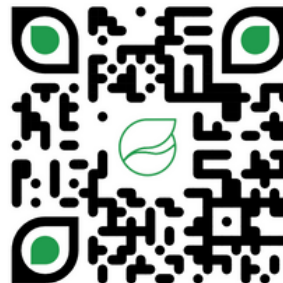
- What's Included: Air sensor with quick start guide
- Check for Damage: Inspect everything for any transit-related issues.

## 2. Power On

- Power On: Power the sensor with the included DC power supply. Once the internal battery is charged the sensor can run without charging when adequate light reaches the solar panel. Optionally leave the sensor powered with the DC supply for low lighting conditions or to use rapid data refresh features.

## 3. App Download & Setup

- Grab the Growbud iOS or Android app: Search “growbud” in the App Store.
- Create an Account: An account is required to save your sensor data.
- Pair the Sensor: Follow the instructions in the app to pair the sensor. Touch the button (no pressure required) without gloves on to put the sensor in pairing mode.



Download the Growbud iOS or Android app from the App or Play Store. Access the web app in any web browser using this URL:

**[www.growbud.app](http://www.growbud.app)**

Growbud Inc.



[www.growbud.io](http://www.growbud.io)



[support@growbud.io](mailto:support@growbud.io)



# Installation & Setup

## 4. Sensor Location

Location: Use the provide rope and carabiner to hang the sensor at canopy level. When using multiple sensors space them evenly. By keeping them at canopy height this allows for the most relevant vapor pressure deficit readings.

## 5. Spot Check

Use the spot check feature in the mobile app to get an instant sensor reading. It is not necessary to press the button to connect with spot check, the button press is only needed for the one time pairing.

# Maintenance

## Regular Cleaning

- Frequency: We recommend cleaning the sensor at least every 6 months to ensure solar panel is operating at full efficiency and ventilation is clear of debris.
- Method: Dampen a soft cloth or cotton swab with isopropyl alcohol (70% or higher) and gently wipe away any debris or residue.

Growbud Inc.



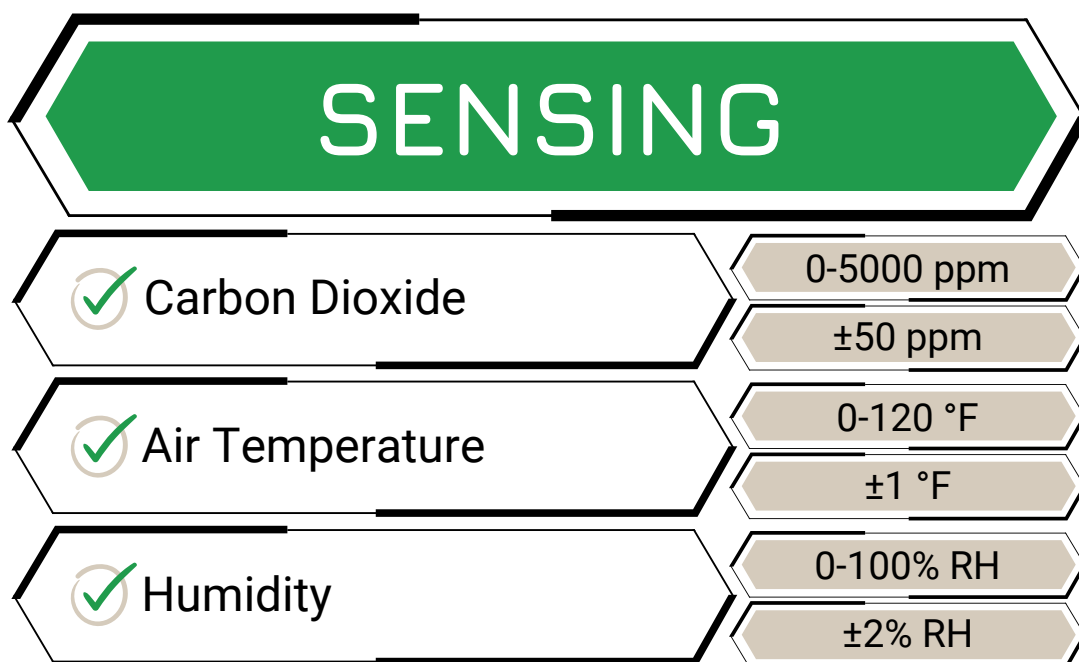
[www.growbud.io](http://www.growbud.io)



[support@growbud.io](mailto:support@growbud.io)



# Sensing Specification



## Air Temperature

Precise temperature readings to maintain ideal climate control

## Humidity

Monitor air moisture levels to prevent mold and optimize plant transpiration.

## Carbon Dioxide

Track carbon dioxide levels to ensure proper photosynthesis.

## Vapor Pressure Deficit

Automatic Vapor Pressure Deficit (VPD) calculations based on air temperature and humidity measurements.

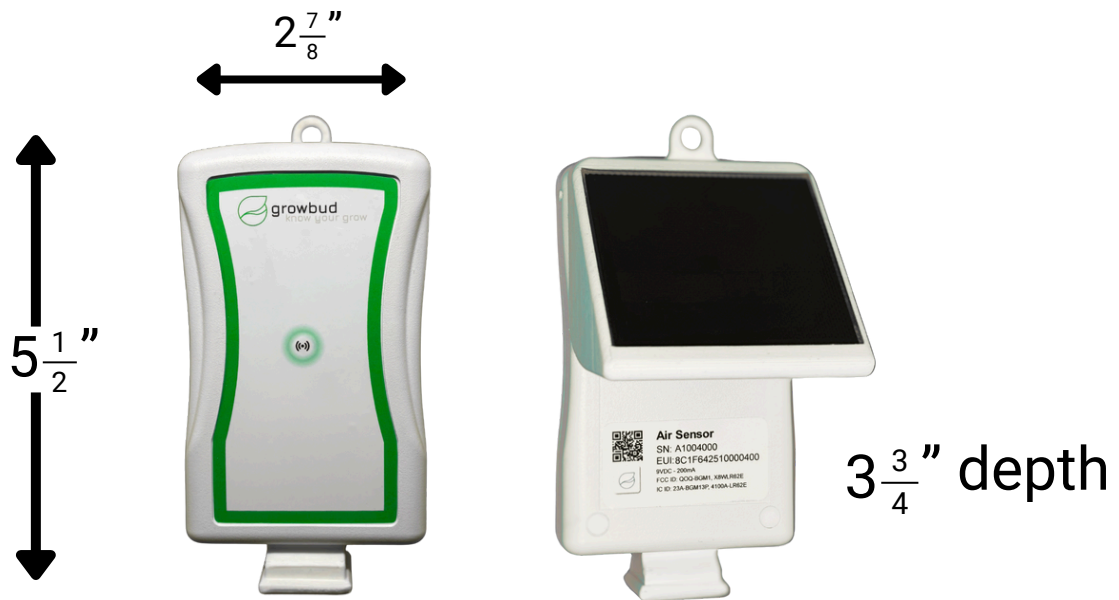
Growbud Inc.

 [www.growbud.io](http://www.growbud.io)

 [support@growbud.io](mailto:support@growbud.io)



# Mechanical Specification



## Housing

- Constructed with robust ABS plastic for durability, impact resistance, and protection against dust and moisture.
- Engineered to withstand the challenging conditions of grow room environments.

## Ventilation

Integrated fan allows for high accuracy measurements even in high intensity lighting conditions.

## Solar Panel

Durable high efficiency solar panel ensures makes installation and maintenance a breeze!

Growbud Inc.



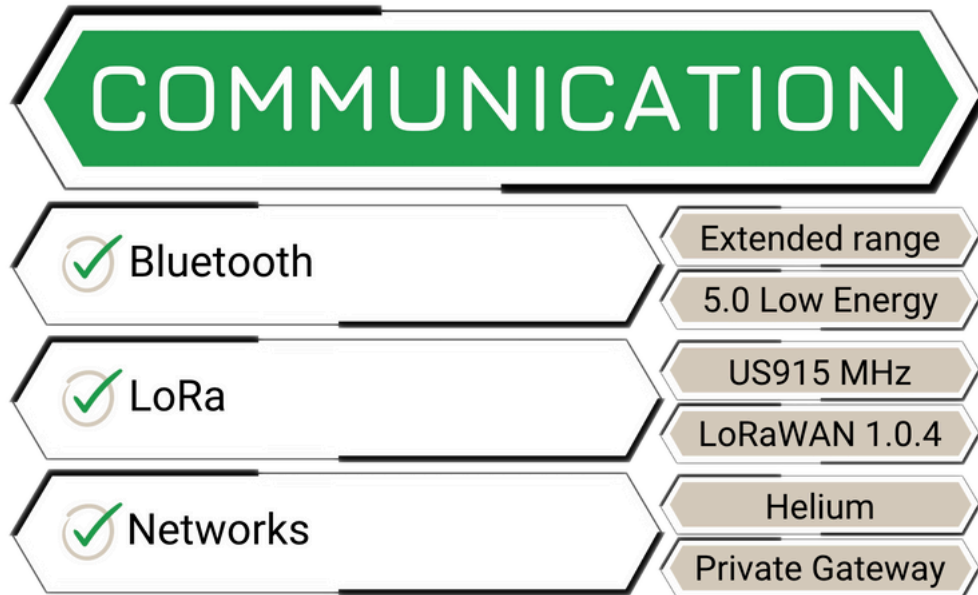
[www.growbud.io](http://www.growbud.io)



[support@growbud.io](mailto:support@growbud.io)



# Communication Specification



## Bluetooth® 5.0 Low Energy

- Provides quick, direct pairing to smartphones or tablets.
- Ideal for nearby monitoring, setup, and real-time data reads.
- Up to 300 feet (100 m) range.

## LoRa® / LoRaWAN®

- Operates at US915 or AS923 MHz for long-range connectivity.
- Use with a Growbud gateway for automatic data syncing.
- Up to 2 mile (3 km) range from sensor to gateway.
- Each gateway can support at least 100 sensors and multiple gateways can be used in concert to cover larger regions.

Growbud Inc.



[www.growbud.io](http://www.growbud.io)



[support@growbud.io](mailto:support@growbud.io)



# Warranty & Support

## Warranty Coverage

- The Air Sensor comes with a 1-year limited warranty from the date of purchase. This warranty covers manufacturing defects and component failures under normal operating conditions.
- Note: Misuse, unauthorized repairs, or damages (including those from improper cleaning with harsh chemicals) may void the warranty.

## 90-Day Return Policy

- If you're not completely satisfied, our 90-day return policy allows you to return the product in its original condition.

## Getting Help

- For troubleshooting, warranty claims, or general support, please contact our dedicated team:
  - Email: [support@growbud.io](mailto:support@growbud.io)
  - Website: [www.growbud.io](http://www.growbud.io)
  - Our support team is available Monday through Friday from 9 AM to 5 PM. Please include your purchase details and a clear description of your issue when you reach out.

Thank you for choosing Growbud —your reliable partner in optimizing your cultivation environment. We're here to ensure you get the most out of your sensor every step of the way.

Growbud Inc.



[www.growbud.io](http://www.growbud.io)



[support@growbud.io](mailto:support@growbud.io)

