

INDUSTRIAL PRODUCT DATASHEET

SenseCAP Combo 5-in-1 Sensor with 4G(4G-YUN-03-Global)

SenseCAP Combo 5-in-1 Sensor with 4G(4G-YUN-03-Global): solar-powered, IPX5 environmental sensing with built-in 4G, RS485 expansion, local data caching, and OTA updates for smart agriculture, livestock farming, storage & logistics, an...

SKU	UPDATED	PRICE
100035616	2026-09-15 08:23:50	\$259.00(Excl. VAT)



Overview



The SenseCAP Combo 5-in-1 Sensor with 4G(4G-YUN-03-Global) is a compact, weatherproof (IPX5) device that integrates temperature, humidity, atmospheric pressure, light, and CO₂ sensors with built-in 4G communication, designed for greenhouses and indoor agricultural environments (0°C to 40°C). It supports RS485 Modbus-RTU expansion for up to 10 external sensors, solar-powered operation with a 5200mAh rechargeable Li-ion battery and external DC input, local storage of up to 500,000 records, and OTA updates, and is suitable for smart agriculture, livestock farming, storage & logistics, and research & education.

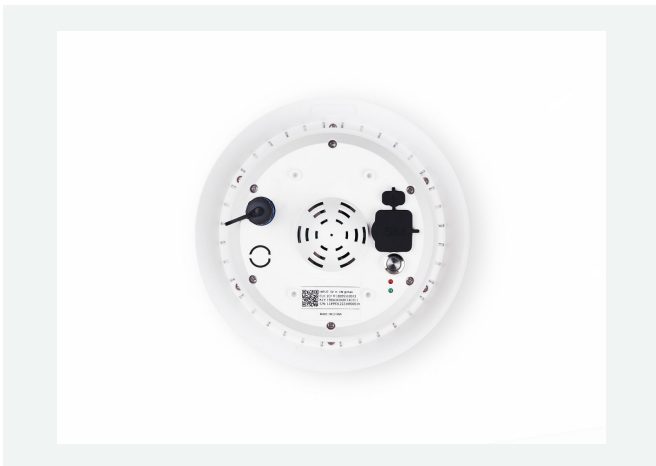
Key Features

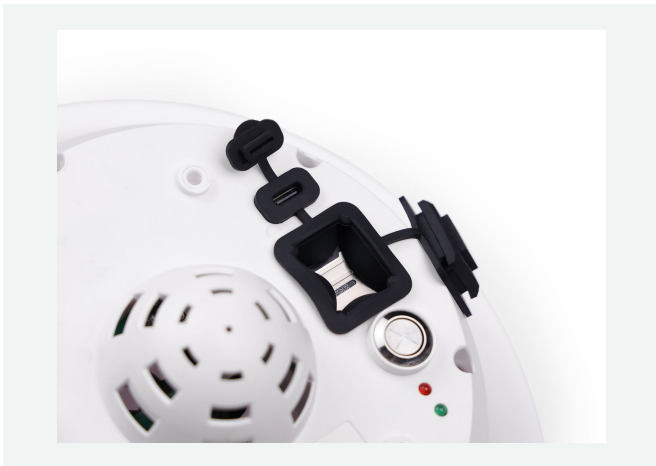
- **Compact & Integrated Design:** A compact all-in-one design integrates multiple environmental sensors, including temperature, humidity, atmospheric pressure, light and CO₂, along with built-in 4G communication, reducing installation complexity and saving space in the field.
- **Multi-Sensor Expansion with Strong Compatibility:** The device is equipped with an RS485 interface and supports expansion via a splitter to connect up to 10 external sensors. It is fully compatible with Modbus-RTU RS485 standard protocol, enabling seamless integration with industrial sensors. It provides both 5V and 12V power output for connected sensors.
- **Solar-Powered & Flexible Power Supply Options:** The device is powered by an integrated solar panel and a built-in 5200mAh rechargeable Li-ion battery, making it ideal for remote deployments. For scenarios that require stable power, it also supports external DC input (Type-C interface), providing greater flexibility across different use cases.
- **Reliable Data Caching:** Stores up to 500,000 records locally during 4G signal loss. Data auto-uploads once connectivity restores, and historical logs can be exported directly for easy analysis.
- **Low Power Design for Long Battery Life:** The device adopts an ultra-low power design and can operate for over two weeks when solar power is insufficient or during power outages.
- **Greenhouse Operation:** Designed for greenhouse and indoor agricultural environments, it operates reliably from 0°C to 40°C.
- **Weatherproof Design:** Featuring an IPX5 rating and UV-resistant materials, the device is protected against rain and aging, making it perfect for greenhouses and outdoor use.
- **Easy Maintenance with OTA Updates:** Support for over-the-air (OTA) firmware upgrades allows remote maintenance and feature updates, reducing the need for on-site servicing and keeping your device always up to date.
- **Easy Deployment:** Designed for quick setup, the device is ready to use out of the box. The device supports flexible mounting options, including pole and hanging installation, making it suitable for various environments.

Note:

The device is suitable for greenhouse and indoor agricultural applications. The included power adapter is for indoor use only and must be installed in a waterproof enclosure or electrical cabinet when used outdoors. The device should also be operated within the specified temperature range of 0°C to 40°C.

Product Gallery





Specification

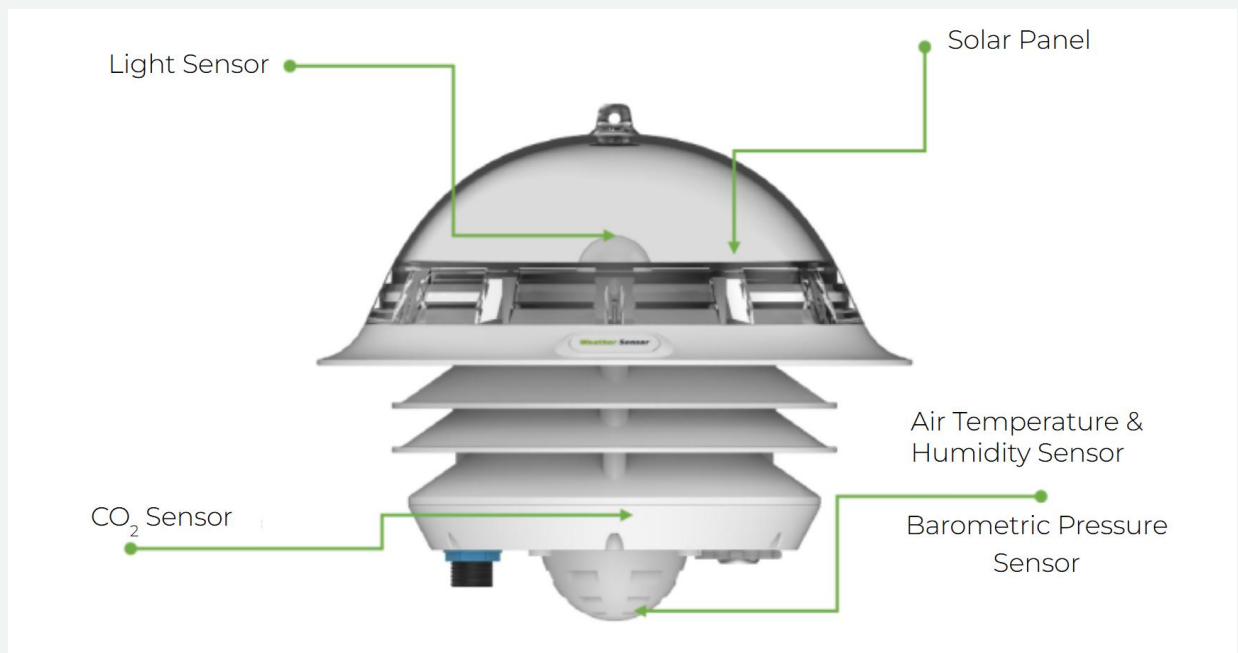
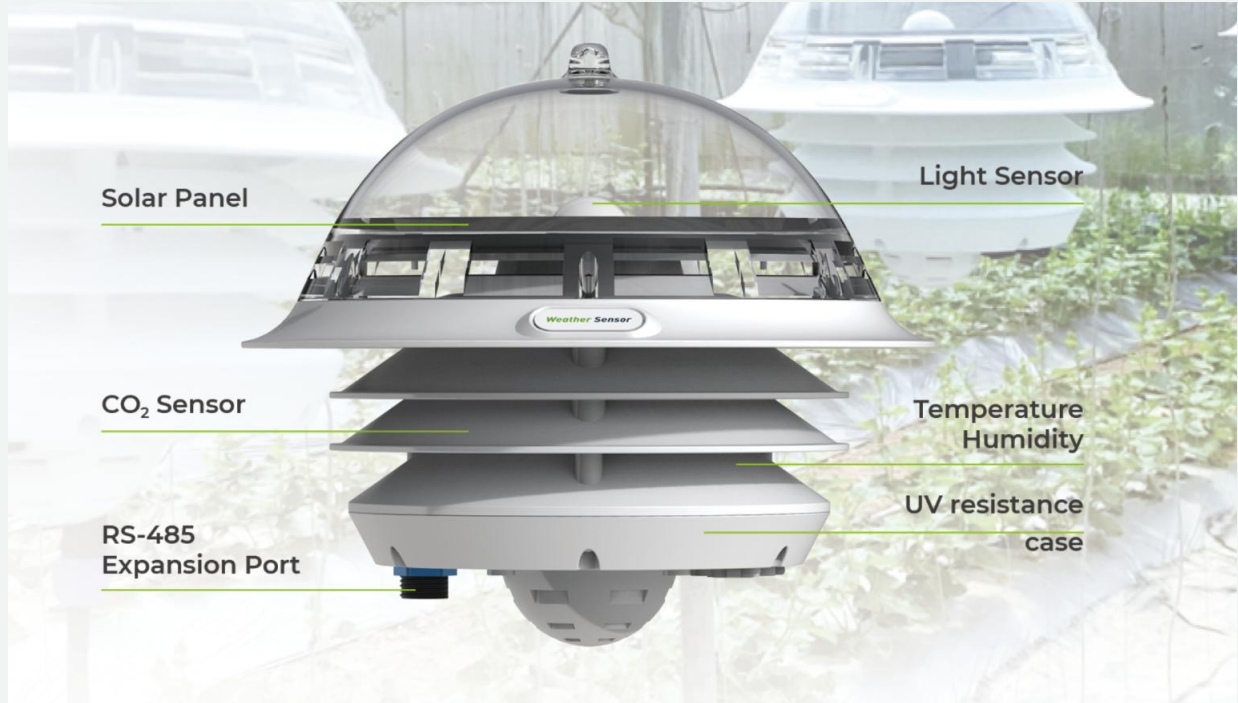
General Parameters	
Power Supply	Type-C interface, 5V/2A input
Expansion Interface	1x RS485 (Modbus-RTU)
Number of Connectable Sensors	Supports up to 10 external sensors using Splitter
External Sensor Power Output	12V / 0.35A, 5V / 0.35A
Protocol	MQTT protocol; supports user-configured servers via Sensor Hub Configuration Tool NG
4G Cat.1	Global frequency bands / APN configurable; Micro SIM card / 3FF
Data Caching	Local storage for up to 500,000 cached records / Supports local export
Antenna	Built-in antenna
Switch / LED Indicators	1x Power Switch, 2x LED Indicators
IP Rating	IPX5, PCBA Waterproof Treatment
UV Resistance Rating	F1
Enclosure Material	PC/ASA
Operating Temperature	0°C ~ 40°C Note: The operating temperature of the device is limited by the included power adapter, which supports an operating temperature range of 0°C to 40°C. The power adapter is designed for indoor use only. Do not expose the power adapter directly to outdoor environments. The power adapter must be installed inside a waterproof enclosure or electrical cabinet to ensure proper protection.
Charging temperature	0°C ~ 40°C
Operating Humidity	0 ~ 100 %RH (non-condensing)
Battery	5200mAh, 3.7V rechargeable Li-ion battery
Solar Panel	Maximum power 1W
Installation	Hanging or Pole-mount (Requires wire for hanging; brackets for pole-mount. Not included in package)
Dimensions	202 * 202 * 175 mm
Net Weight	0.8 kg

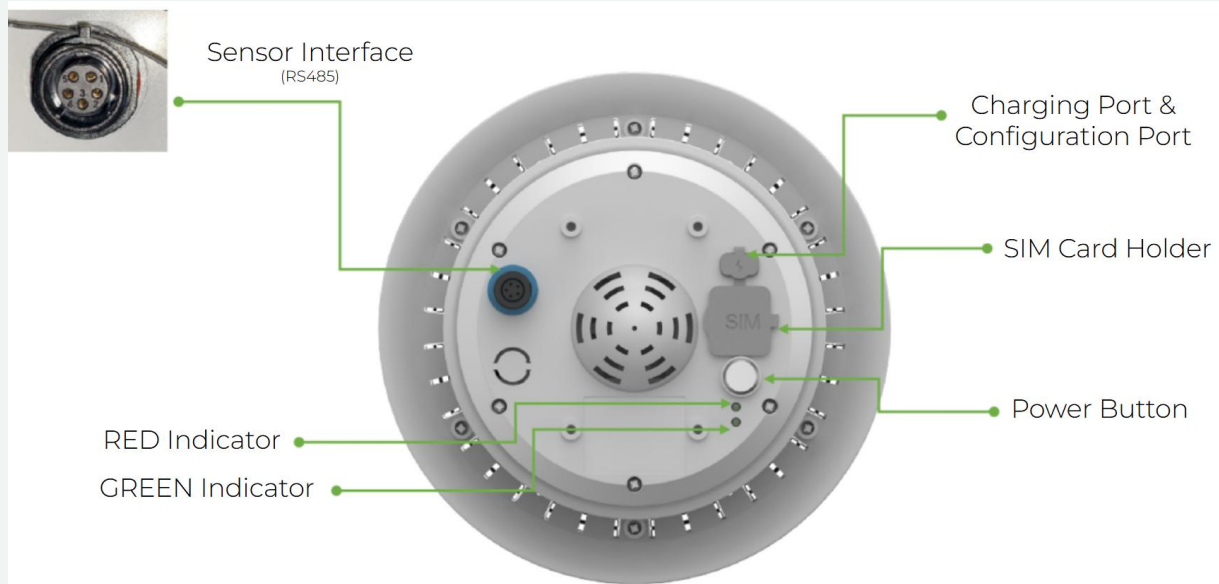
Sensor Specifications			
Parameter	Range	Accuracy	Resolution

Air Temperature	-40°C ~ +85°C	±0.2°C	0.01°C
Air Humidity	0 ~ 100%RH (non-condensing)	±2%RH	0.01%RH
Dew Point (calculated by T/H algorithm)	-100°C ~ 80°C	±2°C	0.01°C
Barometric Pressure	300 ~ 1200 hPa	1 hPa	10 Pa
Light Intensity	0 ~ 200,000 Lux	±5%	5 Lux
CO ₂	0 ~ 10,000 ppm	±50ppm ±3%*reading (0~5000ppm); ±5% (5000~10000ppm)	1 ppm

Model	Specification
4G-YUN-03-Global	Air Temp & Humidity, Atmospheric Pressure, Light Intensity, CO ₂

Hardware Overview





Applications

- **Smart Agriculture:** Optimizes crop growth by providing real-time monitoring of microclimates in greenhouses or other indoor agricultural sites, ensuring the balance of temperature, humidity, and light intensity.
- **Livestock Farming:** Monitors air quality and CO₂ levels in barns, helping farmers maintain a healthy environment for their livestock.
- **Storage & Logistics:** Protects sensitive goods and prevents spoilage in warehouses or cold chains by ensuring precise, continuous climate control and stable data logging.
- **Research & Education:** Serves as a reliable tool for schools and laboratories, allowing students and researchers to collect accurate environmental data for scientific studies and climate analysis.

Part List

SenseCAP Combo 5-in-1 Sensor with 4G(4G-YUN-03-Global)	x1
Power Adapter	x1
USB Cable	x1

Compliance & Logistics

HSCODE	9025800090
USHSCODE	9025801000
UPC	
EUHSCODE	9013101000
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/SenseCAP-Combo-5-in-1-Sensor-with-4G-p-6906.html>
- [SenseCAP Combo 5-in-1 Sensor with 4G User Guide](#)

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