

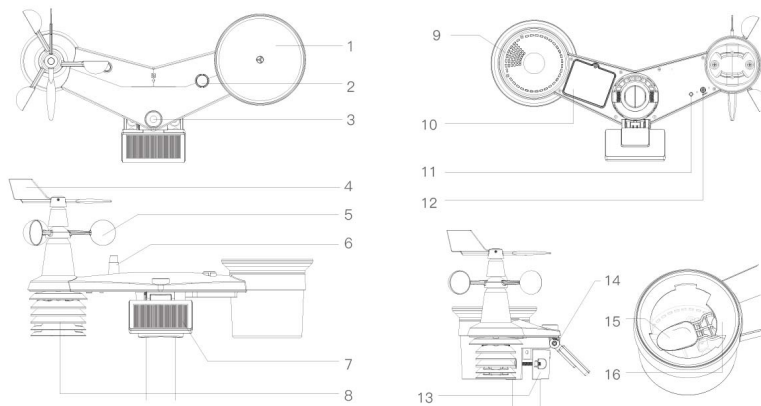
SenseCAP S2120 8-in-1 LoRaWAN Weather Sensor



Features

- **8-in-1 Weather Station:** Collect air temperature, humidity, wind speed/direction, rainfall, light intensity, UV index, and barometric pressure data in one device and upload them via LoRaWAN
- **Bluetooth Configuration in 1 min & Remote Management:** Simple configuration with just a few clicks, supports remote monitoring and managing real-time & historical data via the [SenseCAP Mate App](#) (Download here: 1. [iOS](#); 2. [Google Play](#); 3. [App Center](#)) and [SenseCAP Portal](#)
- **Ultra-low Power Consumption, Easily Replaceable Battery & Expandable Capacity:** Powered by 0.5W solar panel and 3*standard 1.5V AA size dry batteries with up to 2 years service life (support external battery compartment with capacity for six batteries to double the service life)
- **Reliable Performance:** Suitable for outdoor harsh environments such as high UV exposure, heavy rain, dusty conditions, etc
- **One-stop Deployment & Flexible Layout:** Accessories include poles, mounting stand, etc. for quick installation and can be set up at almost any location

Diagram



1. Rain gauge
2. Balance indicator
3. UV and light Intensity sensor
4. Wind vane
5. Wind cups
6. Antenna
7. Solar panel
8. Radiation shield, temperature and humidity sensor, barometric pressure sensor

9. Drain holes
10. Built-in battery box
11. Red LED indicator
12. Config button
13. Mounting clamp
14. Adjustable hinge of solar panel
15. Tipping bucket

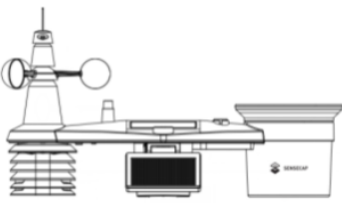
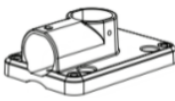





Specification

Air Temperature		Rain Hourly	
Range	-40.0 ~ 80.0 °C	Range	0 ~ 450 mm/h
Accuracy	±0.5°C (0~80°C); ±0.6°C (-40~0°C)	Accuracy	± 7%
Resolution	0.1°C	Resolution	0.254 mm/h
Air Humidity		General Parameters	
Range	1~99 %RH	Product Model	S2120
Accuracy	±3% (1~90%RH); ±4% (90~99%RH)	Microcontroller	WM-LR1110
Resolution	1%RH	Support Protocol	LoRaWAN v1.0.3 Class A
Barometric Pressure		Built-in Bluetooth	App Tool to change parameters

Range	540 ~ 1100hPa	LoRaWAN Channel Plan	IN865/EU868/US915/AU915/AS923/KR920/RU864 *
Accuracy	±5hPa(700~1100hPa); ±8hPa (540 ~ 699hPa)	GPS	Need to customize
Resolution	1hPa	LoRaWAN Max Transmitted Power	21dBm
Wind Speed		LoRa Sensitivity	-141dBm@SF12 BW=125KHz
Range	0~50.0m/s	Communication Distance	2 to10km (depending on gateway antenna and environments)
Accuracy	±0.5m/s(<5m/s); ±10% (> 5m/s)	Protection grade	Suitable for outdoor scenes
Resolution	0.1 m/s	Operating Temperature	-20 to +60 °C (Alkaline battery) -40 to +60 °C (Lithium battery)
Wind Direction		Operating Humidity	0~99%RH
Range	0~360°	Device Weight	1.5kg
Accuracy	± 8°	Certification	CE / FCC / RoHS
Resolution	1°	Power Supply	
Light Intensity		Solar Panel	0.5W (When there is sunlight, solar panels will be used first, otherwise batteries will be used)

Range	0 ~ 200000 lux	Battery Type**	AA size, 1.5V batteries (alkaline or non-rechargeable Lithium battery), batteries not included
Accuracy	± 5%	Number of Battery	Option1, built-in battery box: 3 * AA battery, batteries not included; Option2, external battery box: 6 *AA battery, batteries not included
Resolution	1lux	Battery Life	2 years (Solar Panel + 6*AA Battery, 1h/uplink)
UV Index		External Battery Box	Support 6 * AA 1.5V batteries (batteries not included) Cable: 2m IP Rating: IPX6
Range	0 ~ 16.0	* A device supports different frequencies and can be configured via the Bluetooth App.	
Accuracy	±10%	** The battery life varies from data upload interval and distance between gateways.	
Resolution	0.1		

Partlist

Picture	Name	Quantity
	Weather Station (Batteries not included)	1
	Pole mounting stand	1
	Mounting clamp	1
	Plastic pole	1
	Screw, Hex nut and Flat washer	4
	Screw and Hex nut	1
	External battery box (6*AA battery size, 2m cable, batteries not included)	1