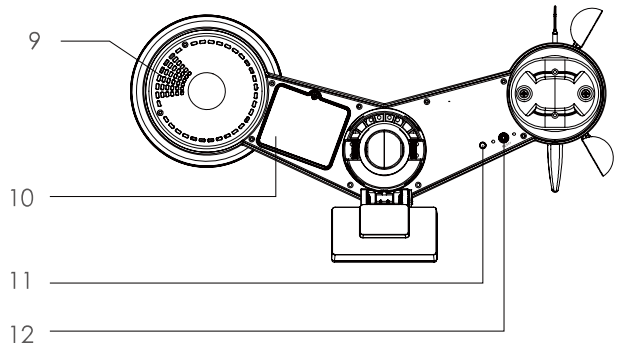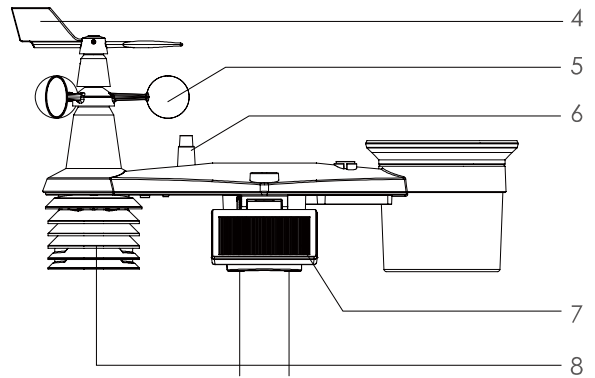# SenseCAP S2120
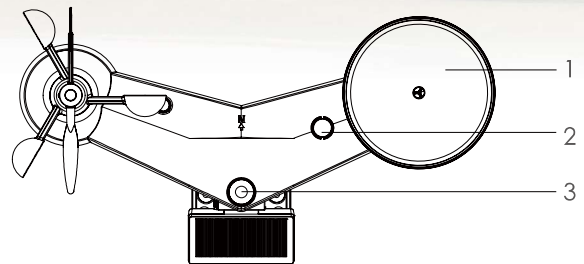## LoRaWAN 8-in-1 Weather Station
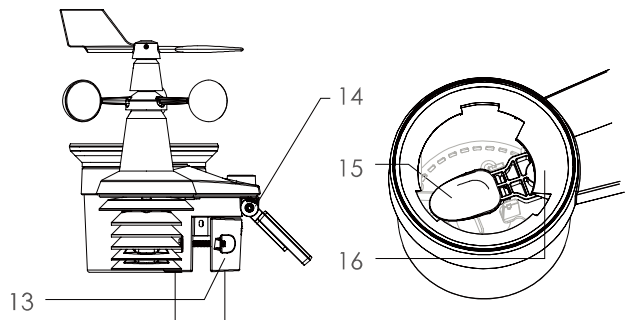
Diagram

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

Installation Steps
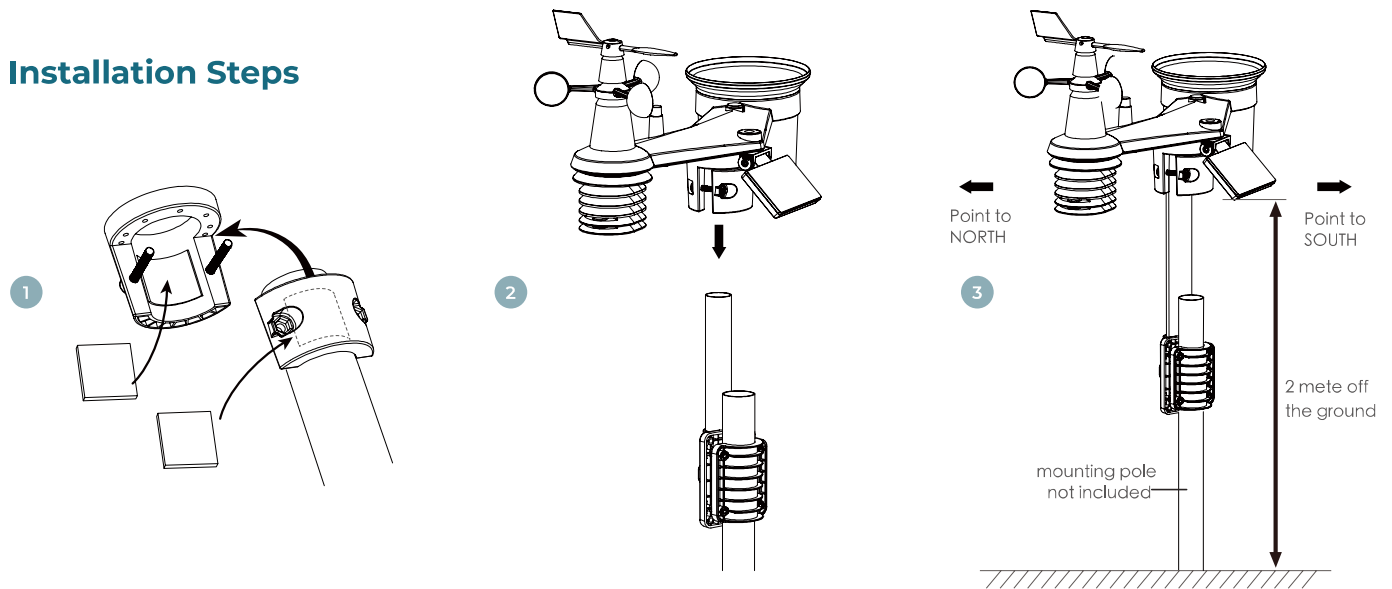
Specifications

Air Temperature	
Range	-40.0 ~ 80.0 ℃
Accuracy	±0.5℃ (0~80℃); ±0.6℃ (-40~0℃)
Resolution	0.1℃
Air Humidity	
Range	1~99 %RH
Accuracy	±3% (1~90%RH); ±4% (90~99%RH)
Resolution	1%RH
Barometric Pressure	
Range	540 ~ 1100hPa
Accuracy	±5hPa(700~1100hPa); ±8hPa (540 ~ 699hPa)
Resolution	1hPa
Wind Speed	
Range	0~50.0m/s
Accuracy	±0.5m/s(<5m/s); ±10% (> 5m/s)
Resolution	0.1 m/s
Wind Direction	
Range	0~360°
Accuracy	± 8°
Resolution	1°
Light Intensity	
Range	0 ~ 200000 lux
Accuracy	± 10%
Resolution	1lux
UV Index	
Range	0 ~ 16.0
Accuracy	±1.5
Resolution	0.1
Rain Hourly	
Range	0 ~ 450 mm/h
Accuracy	± 7%
Resolution	0.254 mm/h
General Parameters	
Product Model	S2120
Microcontroller	WM-LR1110

Support Protocol	LoRaWAN v1.0.3 Class A
Built-in Bluetooth	App Tool to change parameters
LoRaWAN Channel Plan	IN865/EU868/US915/AU915/ AS923/KR920/RU864*
GPS	Need to customize
LoRaWAN Max Transmitted Power	21dBm
LoRa Sensitivity	-141dBm@SF12 BW=125KHz
Communication Distance	2 to 10 km (depending on gateway antenna and environments)
	Suitable for outdoor scenes
Protection grade Operating Temperature	-20 to +60 ° C (Alkaline battery) -40 to +60 ° C (Lithium battery)
	0~99%RH
Operating Humidity	1.5kg
Device Weight	CE / FCC / RoHS
Certification	
Power Supply Solar Panel	0.5W (When there is sunlight, solar panels will be used first, otherwise batteries will be used)
Battery Type**	AA size, 1.5V batteries (alkaline or non-rechargeable Lithium battery)
Number of Battery	Option1, built-in battery box: 3 * AA battery ; Option2, external battery box: 6 * AA battery
Battery Life	2 years (Solar Panel + 6*AA Battery, 1h/uplink)
External Battery Box	Support 6 * AA 1.5V batteries Cable: 2m IP Rating: IPX6

* A device supports different frequencies and can be configured via the Bluetooth App.

** The battery life varies from data upload interval and distance between gateway.