

SenseCAP S700 V2 7-in-1 Compact Weather Station



S700 7-in-1 Compact Weather Sensor measures air temperature, relative humidity, barometric pressure, light intensity, rainfall (optical), wind speed, and wind direction (ultrasonic). It is ideal for application in a rough environment like the outdoors, agriculture, or smart cities.

Key Features

- **7 parameters measurement:** Measures air temperature, relative humidity, barometric pressure, light intensity, precipitation intensity, wind speed, and wind direction in 1 single sensor
- **Industrial-level design:** -40°C to +85°C operating temperature, IP66 rated: waterproof, and dustproof, suitable for outdoor scenarios
- **Output interface:** RS485 (MODBUS-RTU) / SDI-12
- **Thermostatically-controlled heating system:** Independent heating power supply for use in extremely cold environments
- **Powerful Components Included:** A 3m cable for the pole mount; radiation shields are equipped to ensure accurate ambient measurement; ultrasonic wind speed & direction sensors without moving parts

Specifications

General Parameters

Parameters Measured	air temperature, relative humidity, barometric pressure, wind speed, wind direction, rainfall intensity and light intensity
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Protocol	RS485 (MODBUS-RTU) / SDI-12
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Power Supply	12V~24V 24V(Heating power supply)
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Cable Length	3m
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Operating Temperature & Humidity	-40 °C ~ + 85 °C, 0 ~ 100%RH
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IP Rating	IP66
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Device Weight	2kg
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Air Temperature

Range	- 40 °C ~ + 85 °C
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Accuracy	± 0.1°C
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Resolution	0.01 °C
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Air Humidity

Range	0 ~ 100% RH
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Accuracy	± 1.5% RH
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Resolution	0.01% RH
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Barometric Pressure

Range	300 ~ 1250 hPa
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Accuracy	± 50 Pa
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Resolution	10 Pa
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Wind Speed (Ultrasonic)

Range	0~60 m/s standard range 0~75m/s extended range Up to 80m/s withstand range
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Accuracy	± 0.3 m/s(≤ 10 m/s); $\pm 3\%$ (10m/s ~ 50m/s) $\pm 5\%$ (>50m/s)
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Resolution	0.1 m/s
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Wind Direction (Ultrasonic)

Range	0 ~ 360 °
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Accuracy	$\pm 3.0^\circ$
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Resolution	0.1°
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Rainfall Intensity (Optical)

Range	0 ~ 200 mm/h
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Accuracy	$\pm 10\%$
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Resolution	0.2 mm/h
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Light Intensity

Range 0 ~ 200,000 Lux

Accuracy $\pm 5\%$ of reading

Resolution 5 Lux

Part List

SenseCAP ONE All-in-one Compact Weather Sensor	x1
M12 8-pin communication cable (default length 3-meter hook-up wire and there is a waterproof aviation connector type to choose from when working with SenseCAP SensorHub datalogger. If the aviation connector is not needed, cut it off by yourself)	x1
USB Type-C cable, for configuring devices	x1
Screw	x6
Flat washer (to open the configuration port)	x1