

INDUSTRIAL PRODUCT DATASHEET

SenseCAP S600-A 6-in-1 Compact Weather Station

SenseCAP S600-A 6-in-1 Compact Weather Station: an IP66-rated, industrial-grade 6-parameter sensor with RS485/SDI-12 outputs, ultrasonic wind measurement, and thermostatically-controlled heating for agriculture, smart...

SKU	UPDATED	PRICE
101991232	2026-08-26 09:10:21	\$649.00(Excl. VAT)



Overview



The SenseCAP S600-A 6-in-1 Compact Weather Station combines air temperature, relative humidity, barometric pressure, wind speed, wind direction, and light intensity sensors in one industrial-grade unit with an operating range of -40°C to +85°C and IP66 protection. It provides RS485 (MODBUS-RTU) and SDI-12 output interfaces, a thermostatically-controlled heating system, ultrasonic wind sensors, and a 3-meter mounting cable for reliable environmental monitoring in smart agriculture, smart city, power transmission, renewable energy, and transportation applications.

Key Features

Comprehensive 6-parameter Measurement

The S600-A is equipped with multiple sensors measuring crucial parameters for gathering a wealth of environmental data, including air temperature, relative humidity, barometric pressure, wind speed, wind direction and light intensity.

Industrial-level Design

Wide operating temperature range from -40°C to +85°C and High Protection Rating of IP66

Versatile Output Interface

The S600-A offers 2 common and reliable output interfaces, namely RS485 (supports MODBUS-RTU protocol) and SDI-12.

Thermostatically-controlled Heating System

This heating system is thermostatically controlled, ensuring that the device can maintain its normal working state and accurate measurement capabilities at extremely cold temperatures.

Powerful Components

- **Long Cable for Mounting:** A 3-meter cable is provided for pole mounting,
- **Accuracy-enhancing Shields:** Radiation shields are equipped which minimize the impact of external factors on the sensor's readings.
- **Advanced Wind Sensors:** It uses ultrasonic wind speed and direction sensors without movable components. This design with bird-proof structure not only reduces the risk of mechanical wear and tear but also improves the durability and accuracy of wind measurement.

Reliable and High Standard Test Performance

Product Gallery





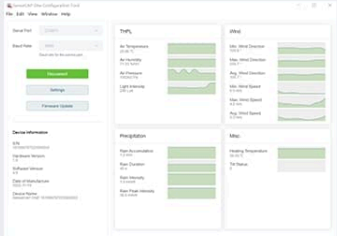
Specification

Specification	Parameter
Measurement parameters	Air temperature(°C) Relative humidity(%) Barometric pressure(Pa) Wind speed(m/s) Wind direction(°) Light intensity(Lux)
Interface	M12 connector
Communication Protocol	RS485(Modbus-RTU)/SDI-12/ASCII
Power Supply	12V~24V 24V(Heating power supply)
Power Consumption	0.4W(heating 21W)
Cable Length	3m
Ambient Condition	
IP Rating	IP66
Operation Temperature	-40 °C ~ + 85 °C
Humidity	0 ~ 100%RH(no condensation)
Mechanical	
Dimension	140x140x320mm
Weight	1470g
Certification	
RoHS	

Hardware Overview



- Light Sensor
- UV protection plastic Rigid design, strong robustness in harsh environment
- Humidity, Temperature, Air pressure
- Industrial IP66 waterproof enclosure
- Ultra-sound Wind Speed and Wind Direction
- Extendable to monitor more meteorological environmental elements
- Supporting multiple interface protocols
- Pole mount with xalange plate

- Set parameters using the SenseCAP One Configuration Tool.

- Connect to Data Logger, Sensor Hub or other RS485/SDI-12 Devices.

- Install the weather station.

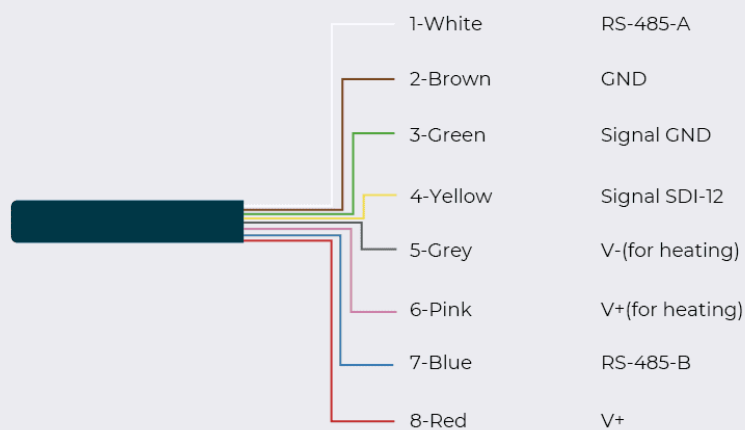



Diagram of M12 8 core Wire Cable

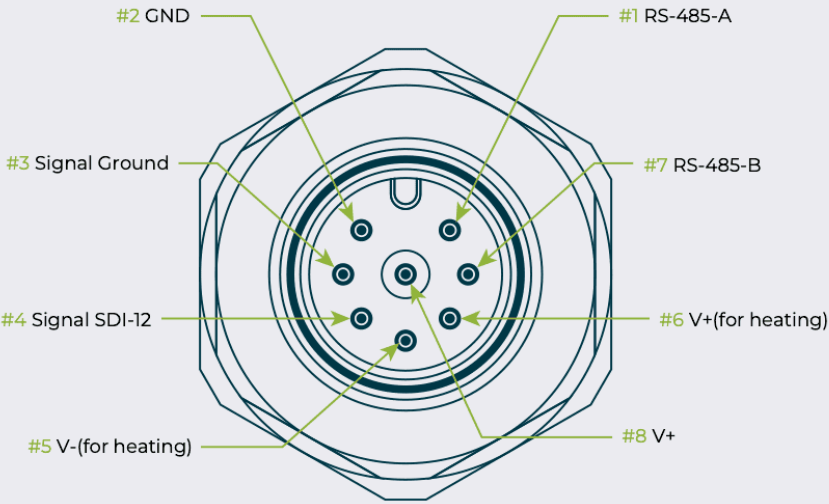


Diagram of M12 8 core Connector

S2120 S1000 S800 S700 S700-B S600 S500 S200

	Temperature	Humidity	Air Pressure	Light	Wind Speed	Wind Direction	Rainfall	PM2.5	PM10	CO2	Noise	Total Solar Radiation	Sunshine Duration
S200					●	●							
S500	●	●	●		●	●							
S600	●	●	●	●	●	●							
S700	●	●	●	●	●	●	●						
S700-A	●	●	●	●	●	●	●						
S700-B	●	●	●		●	●	●					●	●
S700-C	●	●	●		●	●	●					●	●
S800	●	●	●		●	●		●	●		●		
S1000	●	●	●	●	●	●	●	●	●	●			
S2120	●	●	●	●	●	●	●						

Applications

- **Smart Agriculture:** Serves as a compact agriculture and farm weather station, providing localized weather, rainfall, wind, and solar radiation data to support irrigation scheduling, crop management, and daily farm operations.
- **Smart City:** Provides localized weather data for environmental monitoring, public infrastructure management, and weather-aware urban operations.
- **Power Transmission:** Monitors wind, rainfall, temperature, and other local weather conditions around transmission infrastructure to support inspection and operational planning.
- **Renewable Energy:** Measures solar radiation and surrounding weather conditions to support the monitoring and operation of solar and other renewable energy sites.
- **Transportation and Traffic:** Supplies real-time local weather measurements for roads, transport facilities, and traffic management systems operating under changing outdoor conditions.

Part List

component name	quantity
SenseCAP S600-A 6-in-1 Compact Weather Station	x 1
M12 8-pin communication cable	x 1
USB Type-C cable	x 1
Screw	x 6
Flat washer	x 1

Compliance & Logistics

HSCODE	9031809090
USHSCODE	9031808085
UPC	
EUHSCODE	9013101000
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/SenseCAP-S600-A-6-in-1-Compact-Weather-Station-p-6585.html>
- [SenseCAP ONE/SenseCAP ONE V2 Compact Weather Station User Guide](#)
- [SenseCAP Weather Sensor Catalogue](#)
- [SenseCAP Weather Station Power Consumption Table](#)
- [SenseCAP Sensor Hub Catalog \(Data Logger & Sensor Probes\)](#)
- [SenseCAP Document Center](#)
- [Resource](#)

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