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INDUSTRIAL PRODUCT DATASHEET

# SenseCAP S700-B 7-in-1 Compact Weather Station with Station-Solar Radiation

S700-B 7-in-1 Compact Weather Sensor with pyranometermeasures air temperature, relative humidity, barometric pressure, total solar radiation, sunshine duration,rainfall (optical), wind speed, and wind direction (ultrasonic).

| SKU | UPDATED | PRICE |
| --- | --- | --- |
| 101991102 | 2026-11-11 09:40:57 | $799.00(Excl. VAT) |



# Overview




S700-B 7-in-1 Compact Weather Sensor with pyranometermeasures air temperature, relative humidity, barometric pressure, total solar radiation, sunshine duration,rainfall (optical), wind speed, and wind direction (ultrasonic). It is ideal for application in a rough environment like the outdoors, agriculture, or smart cities. As a compact agriculture weather station, the S700-B provides localized weather and solar radiation data in multiple agricultural environments. Use it with SenseCAP LoRaWAN Data Logger or SenseCAP 4G Data Logger.

# Key Features

01 **Comprehensive 7-parameter Measurement**

02 **Industrial-level Design**

03 **Versitile Output Interface**

04 **Thermostatically-controlled Heating System**

05 **Powerful Components**

06 **Long Cable for Mounting**

A 3-meter cable is provided for pole mounting,

07 **Accuracy-enhancing Shields**

Radiation shields are equipped which minimized the impact of external factors on the sensor's readings.

08 **Advanced Wind Sensors**

It uses ultrasonic wind speed and direction sensors without movable component. 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.

09 **Reliable and High Standard Test Performance**

# Product Gallery
















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# Hardware Overview



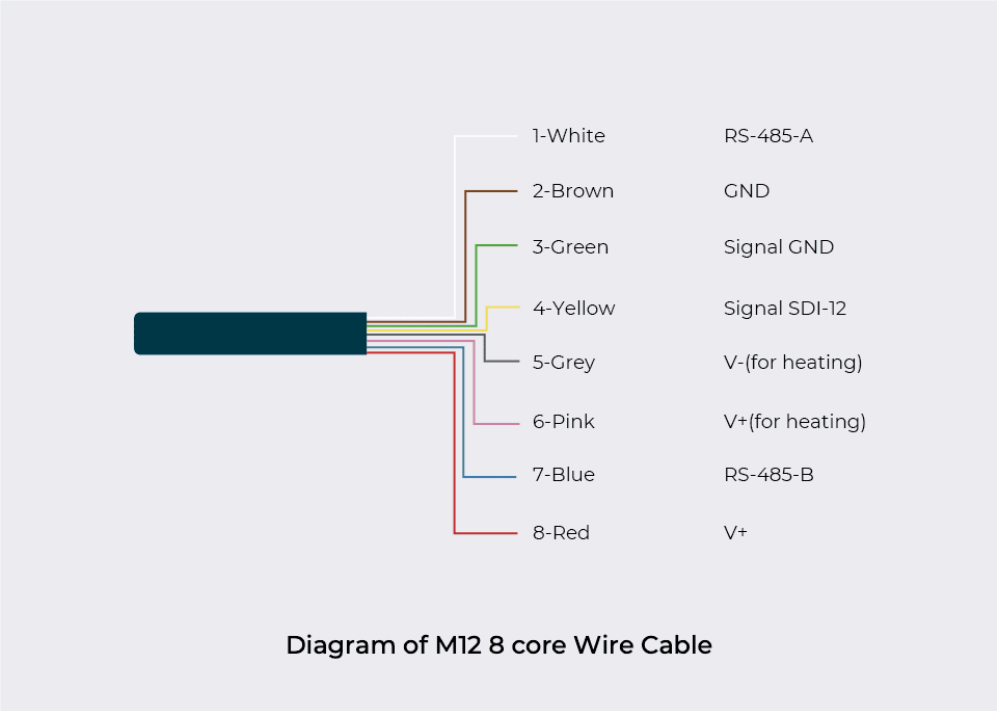




Diagram of M12 8 core Wire Cable

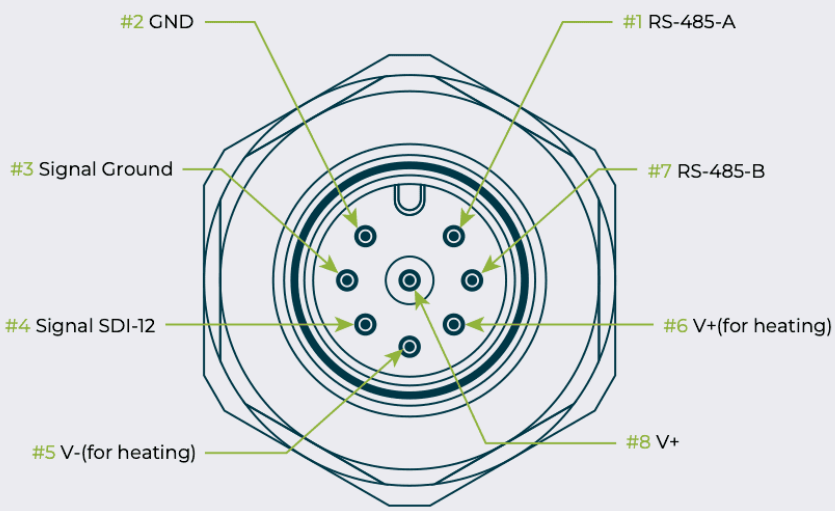



Diagram of M12 8 core Connector




| | 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

- **Backyard and Garden: Measure air temperature and humidity, Rainfall Intensity, UV index, etc. in the backyard and garden to protect your family.**
- **Smart Agriculture： Enable farmers to obtain climate data and information in time, take scientific management measures into production, and improve agricultural production capacity and level.**
- **Meteorology: Support applications in the professional meteorological field, for example, timely reflect the changes of various abnormal meteorological conditions in the field of traffic and transportation to provide real-time scientific basis data for traffic management departments.**
- **Urban Weather: Provide real-time data for urban squares, parks, scenic spots, golf courses, and other urban areas.**
- **Transportation and Traffic: Supplies real-time local weather measurements for roads, transport facilities, and traffic management systems operating under changing outdoor conditions.**
- **LoRaWAN Application**

# Resource Links

- https://www.seeedstudio.com/SenseCAP-S700-7-in-1-Compact-Weather-Station-Solar-Radiation-p-6305.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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