

IOT-S300WS7

7-in-1 Ambient Weather Station, High Accurate Sensors of temperature, humidity, barometric pressure, light, precipitation (Rain), wind speed and direction



IOT-S300WS7 is an ultimate all-in-one RS485 Modbus weather monitoring system for various and continuous atmospheric conditions including air temperature, relative humidity, barometric pressure, total-radiation, rainfall (optical), wind speed, and wind direction (ultrasonic). It boasts high resolution and accuracy with rugged and aesthetic housing.

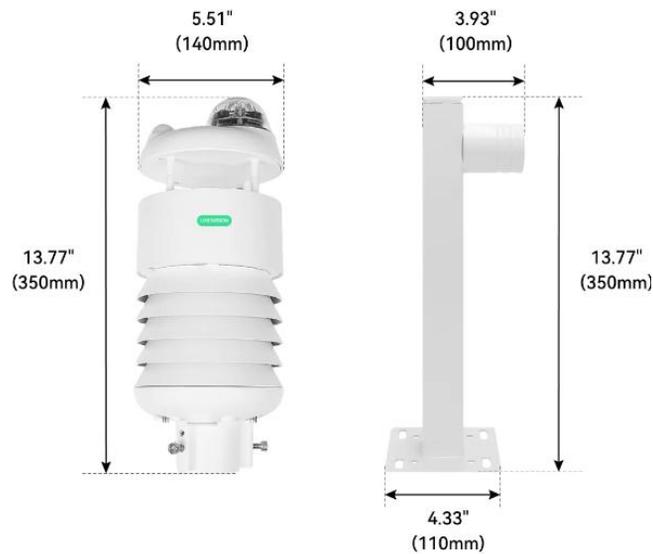
Outstanding Features

- All-in-One Weather Station - This weather monitoring system is designed to monitor various and continuous atmospheric conditions, including air temperature, relative humidity, barometric pressure, light intensity, precipitation intensity, wind speed, and wind direction.
- RS485 Compatibility - The output signal is RS485, the standard Modbus-RTU communication protocol, which supports changing the communication address and wave special rate and other functions. And RS485 support as far as 1200 meters communication. while supports secondary development and is widely used.
- Embedded with the electronic compass - Magnetometer: enabling easy installation and you can choose to disable the electronic compass while orienting to the North manually.
- Built-in heater - Integrated heaters that can be switched on in extreme weather
- Integrated design - Ultrasonic wind speed & direction sensors without moving parts
- Precise measurement - Radiation shields are equipped to ensure accurate ambient measurement.

Specification

Power Supply	12V~ 24V (0.42W)		
Heating Power Supply	24V (21W)		
Support Protocols	RS485 (MODBUS-RTU)		
IP Rating	IP66		
Working Temperature	-40 ~ + 85 (-104 ~ + 185)		
Working Humidity	0 to 100%RH (non-condensing)		
Weight	1551g (3.42 lb)		
Measurement Parameter	Measurement Range	Measurement Accuracy	Resolution
Air temperature	-40~85°C	±0.1	0.01°C
Air humidity	0~100%RH	±1.5%RH	0.01%RH
Barometric pressure	300~1250hPa	±50Pa	10 Pa
Wind speed	0~60 m/s standard range Up to 80m/s extended range withstand range	±0.3m/s(≤10m/s);±3%(10m/s ~ 50m/s)±5%(>50m/s)	0.1m/s
Direction of the wind	0~360° (@-40 ~60)	±3.0°	0.1°
Total Radiation	0~2000 W/m2	5% * reading	1 W/m2
Rain intensity	0~200mm/h	±10%	0.2mm/0.02mm

Dimensions



Weight: 3.46lbs (1.57kg)