#### ADVANCED 9-IN-1 ENVIRONMENTAL AND WEATHER MONITORING SOLUTION

This NviroSense NSS910 9-in-1 Compact Weather Station can help you collect and monitor environmental and weather data, measuring air temperature, relative humidity, barometric pressure, light intensity, rainfall (optical), PM2.5, PM10, wind speed, and wind direction (ultrasonic). It is ideal for applications in rough environments like outdoors, agriculture, or smart cities.

- Measures 9 parameters: air temperature, relative humidity, barometric pressure, light intensity, precipitation intensity, PM2.5, PM10, wind speed, and wind direction
- Embedded with the electronic compass/magnetometer: enabling easy installation, and you can choose to disable the electronic compass while orienting to the North manually
- A flange plate and 3m cable are included in the package for the pole mount
- IP66 rated: waterproof, and dustproof, suitable for outdoor scenarios
- Integrated heaters that can be switched on in extreme weather
- Ultrasonic wind speed & direction sensors without moving parts
- Optical rain gauge, compact in size and user-friendly
- Radiation shields: Equipped to ensure accurate ambient measurement
- Supported interface: RS 485 (MODBUS-RTU) / 232 / 422 (Modbus) / SDI-12



### **KEY SPECIFICATIONS**

Category	Feature	Specification
General Parameters	Parameters Measured	Air Temperature Relative Humidity Barometric Pressure Light Intensity Precipitation Intensity PM2.5 PM10 Wind Speed Wind Direction
	Protocol	RS 485 (MODBUS-RTU) / 232 / 422 (Modbus) / SDI-12
	Cable Length	3m
	Operating Temperature & Humidity	-40 °C ~ + 85 °C, 0 ~ 100%RH
	IP Rating	IP66
Air Temperature	Range	- 40 °C ~ + 85 °C
	Accuracy	± 0.1°C
	Resolution	0.01 °C
Air Humidity	Range	0 ~ 100% RH
	Accuracy	± 1.5% RH
	Resolution	0.01% RH

Barometric Pressure	Range	300 ~ 1250 hPa
	Accuracy	± 50 Pa
	Resolution	10 Pa
Light Intensity	Range	0 ~ 188000 Lux
	Accuracy	± 5% x (measurement value)
	Resolution	5 Lux
Wind Speed (Ultrasonic)	Range	0 ~ 60 m/s
	Accuracy	± 3%
	Resolution	0.1 m/s
Wind Direction (Ultrasonic)	Range	0~360°
	Accuracy	± 3°
	Resolution	0.1°
Rainfall Intensity (Optical)	Range	0 ~ 200 mm/h
	Accuracy	± 10%
	Resolution	0.02 mm/h
PM 2.5	Range	0-1000μg per m3
	Accuracy	± 10μg/m3 at 0-100μg/m3 ±10± at 0-100
	Resolution	1μg/m3
PM 10	Range	0-1000μg per m3
	Accuracy	± 15μg/m3 at 0-100μg/m3 ±15± at 0-100μg/m3
	Resolution	1μg/m3

# FEATURES AT A GLANCE



### YOUR WIRELESS NETWORK

Develop a fully owned private LoRa network to capture, route and process IoT data for your application at multiple facilities.



### RUGGED DURABILITY WITH A BROAD SENSOR ARRAY

Robust enclosures provide a resilient platform for recording and delivering data from within a range of harsh environments.



### COMPREHENSIVE SECURITY AND RELIABILITY

Robust multi-layer security at each interface to safeguard your network at every level.



### BROAD CERTIFICATION AND APPROVALS

CFR 21 (part 11), PPECB, FCC, IC, CE, ASNZS, NCC, and Bluetooth SIG listing.



### THE PLATFORM FOR BUILDING ACTIONABLE IOT INTELLIGENCE

Route sensor data to the cloud with NviroSense's simplified wireless connectivity deployment.



#### PERSONAL SUPPORT FOR YOUR IMPLEMENTATION

Support works with NviroSense engineering to help configure and deploy your application.

## **APPLICATION AREAS**



PHARMACEUTICAL WAREHOUSING



**COLD CHAIN MANAGEMENT & FOOD SAFETY** 



IN-FIELD AGRICULTURAL MONITORING



**INDUSTRIAL & MINING APPLICATIONS** 

## **NVIROSENSE SUPPORT**



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