

NSS710 7-IN-1 COMPACT WEATHER STATION

ADVANCED 7-IN-1 ENVIRONMENTAL AND WEATHER MONITORING SOLUTION

The NviroSense NSS710 is a 7-in-1 Compact Weather Station engineered to gather and analyze data on air temperature, relative humidity, barometric pressure, light intensity, rainfall (using optical measurement), wind speed, and wind direction (via ultrasonic sensors). This advanced tool is perfectly suited for challenging environments such as outdoor locations, agricultural settings, and urban areas involved in smart city initiatives. Its multi-faceted functionality places it at the forefront of weather and environmental monitoring solutions.

- **7-in-1 Measurement Capability:** Measures air temperature, relative humidity, barometric pressure, light intensity, precipitation intensity, wind speed, and wind direction, all in one integrated device.
- **Electronic Compass/Magnetometer Integration:** Enables easy installation with the option to manually disable the compass for precise orientation to the North.
- **Complete Mounting Kit:** Includes a flange plate and 3m cable for convenient pole mounting.
- **Robust Design – IP66 Rated:** Offers waterproof and dustproof protection, making it suitable for challenging outdoor scenarios.
- **Extreme Weather Adaptation:** Features integrated heaters that can be activated in extreme weather conditions to maintain optimal performance.
- **Advanced Sensing Technology:** Utilizes ultrasonic sensors for wind speed and direction, and an optical rain gauge for compact and user-friendly measurement.
- **Precision Assurance:** Equipped with radiation shields to ensure accurate ambient measurements, calibrated and maintenance-free for dependable results.
- **Multiple Supported Interfaces:** Compatible with RS 485 (MODBUS-RTU), 232, 422 (Modbus), and SDI-12 interfaces for flexible integration.



KEY SPECIFICATIONS

Category	Feature	Specification
General Parameters	Parameters Measured	Air Temperature Relative Humidity Barometric Pressure Light Intensity Precipitation Intensity 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

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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