

NSS425/30 TEMPERATURE & RELATIVE HUMIDITY SENSOR

SECURE, SCALABLE WIRELESS SENSORS FOR LONG RANGE IOT APPLICATIONS

NviroSense's NSS425/30 is a **battery powered, long range sensor platform** leveraging the benefits of LoRaWAN. Its small, rugged form factor contains superior RF performance and flexibility with a **precise temperature and humidity sensor**. At its core, the NSS425/30 utilises NviroSense's field proven and reliable NviroSense hardware, providing LoRaWAN options in 868, 915, and 923 MHz frequencies. It offers a LoRa range up to 15 kilometers with a local 2.4 GHz connectivity option to smartphones and tablets. NSS425/30 Series works with NviroSense's NSS5000 series of LoRa/multi- wireless gateways for simple out-of-the-box integration and is compatible with third-party cloud and LoRa network ecosystem partners.

- **Multi-wireless:** LoRaWAN (868/915/923 MHz) and Bluetooth v4.2 (Central/Peripheral) with fully integrated high-performance antennas.
- **Multi-sensor:** Temperature and humidity.
- **Simple wireless configuration** using mobile application and BLE.
- **Integrated out of the box networks:** Default configuration with NviroSense's NSS5000 gateways for simple, out-of-the-box cloud connectivity.



KEY SPECIFICATIONS

Category	Feature	Specification
Chipset	LoRa	Frequencies: 868/915/923 MHz
	Bluetooth	Nordic nRF51822-256k/32k
LoRa	Frequencies	863-870MHz (EU), 902-928MHz (US), 915-928MHz (AU+AS923)
Sensors	Built-in Temp Accuracy Ranges	-40°C to 80°C (±0.8°C)
	External Temp Accuracy Ranges	±0.5°C accuracy from -10°C to +85°C ±2°C accuracy from -55°C to +125°C
	Built-in RH Accuracy Ranges	0 – 99.9% RH (+/- 10%)
Power	Battery	Built-in 2400mAh battery for over 10 years of use
Software	Web Application	NviroSense for Environmental Monitoring: Onsite, Cloud, Hybrid Multi-site or API Monitoring, Reporting & Control
	Mobile application	Android and iOS - Remote sensor display and config + firmware updates

Storage	Data Logging	3200 data records with datetime which can be retrieved with datetime for further analysis.
LED	Status	Tri-colour LED to indicate status
Physical	Dimensions	135mm x 70mm x 30 mm
Environmental	Operating Temperature	-40°C to 125°C (Note: External probe capable of -55°C to 125°C)
	Storage Temperature	-40°C to 85°C
Warranty	Time-period	One-year

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.



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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NEW: The NviroSense NSS450 Series now offers a range of additional sensor options available via expansion port. For more details, visit the [EUCAstore](#)