NSS300 OCCUPANCY, TEMPERATURE, AND LIGHT SENSOR

ROBUST, EFFICIENT, COMPREHENSIVE MULTI-SENSOR INDOOR MONITORING SOLUTION

NSS300 is a wireless tenancy temp/light sensor designed for NviroSense ClassA type devices, based on the LoRaWAN open protocol, and compatible with the LoRaWAN protocol. It combines occupancy, temperature, tamper switch, and light sensors, making it ideal for detecting human movement indoors, illuminance, and temperature.

- **Wireless Communication:** Features SX1276 module for robust connectivity.
- **Power Supply:** Operates on 2 ER14505 batteries (3.6V/section) in parallel.
- **Wide Detection Angle:** Horizontal 110°, vertical 60°, with 40° mechanical rotation.
- **Integrated Sensors:** Equipped with light, temperature, occupancy sensors, and tamper switch.
- **Speedy Detection:** Alarms triggered at speeds of ≥0.2 meters/second.
- **Adaptive Light Sensing:** Measures light intensity in the range of 2-1100 Lux with ≤15% accuracy.
- **Battery Monitoring:** Ensures battery health with ±0.1V measurement accuracy.
- **Third-Party Integration:** Compatible with Actility/ThingPark, TTN, MyDevices/Cayenne.
- **Smart Alerts:** Supports online sensor monitoring and customizable alerts via SMS and email (optional).

KEY SPECIFICATIONS

Category	Feature	Specification
Electric	Input Power	2pcs of 3.6V ER14505
	Operating Voltage	3.1V～3.65V
	Standby Current	110uA
	Transmitting Current (max)	120mA
	Receiving Current (max)	11mA
	Measurement Accuracy	±0.1V
Frequency	TX Power	EU868 16dbm
	Receiving Sensitivity	-136dBm (LoRa, Spreading Factor=12, Bit Rate=293bps) -121dBm (FSK, Frequency deviation=5kHz, Bit Rate=1.2kbps)
	Antenna Type	Built-in antenna
	Communication Distance	Up to 10 km (visible linear obstacle-free transmission distance, actual transmission distance depends on the environment)
	Data Transfer Rate	0.3kbps～50kbps
	Modulation	LoRa/FSK (Note: You can choose one of them)

Physical	Dimension	78mm x 78.8mm x 82.2mm
	Weight	125.8g
	Operating Humidity	＜90%RH
	Operating Temperature	-20°C ～ 55°C
	Storage Temperature	-40°C ～ 85°C

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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