

Nextriv Sense Industrial

IP67 temperature and humidity sensor

NX-SN-IND

Nextriv Sense

A versatile temperature and humidity sensor in a sealed, UV-resistant IP67 enclosure — the same device works indoors and outdoors, from a freezer room to a loading dock. It measures across the full $-30...70\text{ °C}$ range with $\pm 0.3\text{ °C}$ accuracy, and EN12830 certification qualifies it as a temperature recorder for the cold chain. A tamper-proof local buffer of approx. 2,800 readings with automatic retransmission keeps the history gap-free even after connectivity outages. A replaceable 4,000 mAh battery (optionally 8,000 mAh) lasts for years, and configuration happens contactlessly over NFC — without opening the enclosure.



$\pm 0.3\text{ °C}$

measurement accuracy

IP67

indoor and outdoor

EN12830

cold-chain certification

~15 km

open-terrain range

Key features

- One device for indoors and outdoors — a sealed IP67 enclosure in flame-retardant ABS+PC, UV-resistant
- EN12830 certification — formal approval to act as a cold-chain temperature recorder
- Tamper-proof local log of approx. 2,800 readings with automatic retransmission — gap-free history after connectivity outages
- $\pm 0.3\text{ °C}$ and $\pm 3\text{ % RH}$ accuracy — high-precision digital MEMS sensing element
- Configuration and power-on contactlessly via NFC from a smartphone — no opening the enclosure; remote configuration via downlink
- Replaceable 4,000 mAh battery with an optional 8,000 mAh version — even over 10 years without replacement
- Direct triggering of other devices in the Nextriv network (no server involved) — e.g. switching on a fan when a threshold is crossed
- Three mounting options: screws, industrial 3M tape or cable ties — from a wall to a pipe or mesh

Technical specification

Measurement — temperature	
Measuring range	$-30...70\text{ °C}$
Accuracy	typ. $\pm 0.3\text{ °C}$ ($0...70\text{ °C}$); $\pm 0.6\text{ °C}$ ($-30...0\text{ °C}$)
Resolution	0.1 °C
Sensing element	high-precision digital MEMS

Measurement — relative humidity

Measuring range	0...100 % RH
Accuracy	typ. ± 3 % RH (10...90 % RH at 25 °C); ± 5 % RH below 10 % and above 90 % RH [2]
Resolution	0.5 % RH
Sensing element	high-precision digital MEMS

Radio connectivity

Technology	long-range, low-power radio (LPWAN)
Radio band	EU868 (EU); regional variants: US915, AU915, AS923, IN865, KR920, RU864
Tx power	up to 16 dBm (EU868); up to 20 dBm (US915)
Receiver sensitivity	down to -137 dBm
Antenna	internal
Sensor-gateway range	up to approx. 2 km in built-up areas / approx. 15 km in open terrain
Communication	two-way — readings to the platform, remote configuration via downlink

Device features

Local buffer	approx. 2,800 readings, tamper-proof log; automatic retransmission after a connectivity outage
Threshold alarms	on-device thresholds + alert rules in the Nextriv platform
Direct control	triggers other devices in the Nextriv network without a server (e.g. switching on a fan)
Configuration	mobile app over NFC; remotely via platform downlink
Power on / off	NFC or button (internal)
Indicators	1× status LED (internal)

Power

Battery	1× lithium Li-SOCl ₂ ER18505, 4,000 mAh, replaceable; optional 8,000 mAh version
Battery life	from approx. 5.8 years to over 10 years (EU868, depending on radio configuration) — 10-min interval, 25 °C [1]

Enclosure and operating environment

Operating temperature	-30...70 °C
Ambient humidity	0...100 % RH, non-condensing
Ingress protection	IP67; UV-resistant enclosure — indoor and outdoor use
Housing	ABS + PC (flame-retardant), white
Dimensions	88.5 × 85.3 × 27 mm (3.48 × 3.36 × 1.06 in)
Weight	95.6 g (with 1 battery)
Mounting	wall screw mounting, industrial 3M tape or cable ties

Compliance and approvals

Approvals	CE, FCC, ISED, RCM, Telec, ICASA, EN12830
Environmental	RoHS

Ordering information

Product code (SKU)	NX-SN-IND
Variants	4,000 mAh battery (standard) or an 8,000 mAh version; EU868 band (EU) or a regional variant — specify the variant when ordering
System requirement	a Nextriv Hub gateway (e.g. NX-GW-MINI, NX-GW-PRO)

[1] Life of the 4,000 mAh battery determined under laboratory conditions — indicative value; the actual time depends on the reporting interval and radio configuration (approx. 4.2 years for the US915 variant in a long-range radio configuration). The optional 8,000 mAh battery extends runtime.

[2] Humidity accuracy specified at 25 °C; at other ambient temperatures the typical accuracy may differ.

Specifications are subject to change without notice. The latest document versions are available in the download centre: nextriv.com/files. Questions: nextriv.com/contact.