

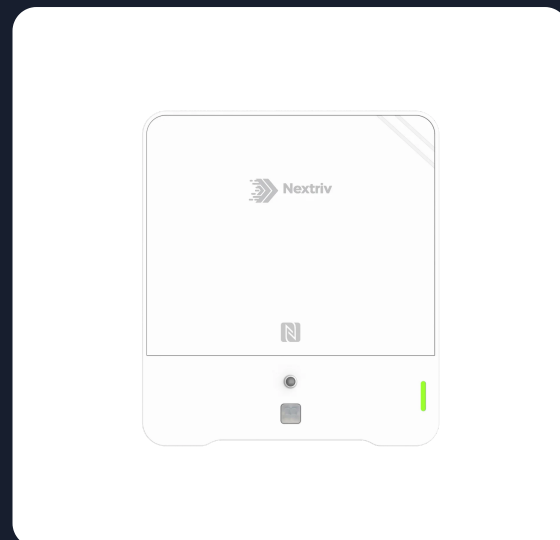
Nextriv Sense IAQ Lite 4-in-1

4-in-1 climate and occupancy sensor

NX-SN-AQ4L

Nextriv Sense

An economical 4-in-1 sensor for mass roll-outs: temperature, humidity, light level and occupancy (PIR) in one compact device. $\pm 0.2\text{ }^{\circ}\text{C}$ and $\pm 2\text{ \% RH}$ accuracy — the class of the full-size sensors in the Sense family. It runs approx. 7.5 to 14 years on four replaceable batteries (USB-C power is also possible), and configuration is a single smartphone tap (NFC). A local measurement buffer with retransmission keeps the history gap-free, and direct device-to-device communication allows e.g. lighting control with no server involved.



$\pm 0.2\text{ }^{\circ}\text{C}$

measurement accuracy

7.5–14 yrs

battery life

~15 km

open-terrain range

4-in-1

temperature, humidity, light,
motion

Key features

- Four parameters key to a building: temperature, humidity, light and motion — comfort and occupancy in one device
- Approx. 7.5 to 14 years on four replaceable batteries (EU868) — built for mass roll-outs
- $\pm 0.2\text{ }^{\circ}\text{C}$ and $\pm 2\text{ \% RH}$ accuracy — high-precision digital MEMS sensing element
- Direct device-to-device communication — triggering e.g. a lighting relay with no gateway or server involved
- Buffer of 4,320 readings with automatic retransmission — gap-free history after connectivity outages
- Configuration over NFC from a smartphone or remotely from the platform (downlink) — reconfiguration of whole device groups
- Traffic-light LED indicates status and threshold alarms on site
- No display — lower cost and longer battery life; one-minute mounting with industrial 3M tape or screws

Technical specification

Measurement — temperature

Measuring range	-20...60 $^{\circ}\text{C}$
Accuracy	typ. $\pm 0.2\text{ }^{\circ}\text{C}$ (0...60 $^{\circ}\text{C}$); $\pm 0.3\text{ }^{\circ}\text{C}$ (-20...0 $^{\circ}\text{C}$)
Resolution	0.1 $^{\circ}\text{C}$
Sensing element	high-precision digital MEMS

Measurement — relative humidity

Measuring range	0...100 % RH
Accuracy	typ. ± 2 % RH (at 25 °C)
Resolution	0.5 % RH
Sensing element	high-precision digital MEMS

Measurement — light level

Measuring range	0...60,000 lx
Accuracy	± 30 % of reading
Resolution	1 lx
Reporting mode	illuminance value (lx) or light level 0–5
Sensing element	photodiode

Measurement — motion (occupancy)

Operating principle	passive infrared (PIR)
Detection area	80° horizontal, 55° vertical, up to 3 m
Reported status	vacant / triggered

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)
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
Direct mode	device-to-device communication within the Nextriv network — e.g. triggering relays with no gateway involved, with minimal latency

Device features	
Local buffer	4,320 readings; automatic retransmission after a connectivity outage
Threshold alarms	on-device thresholds + alert rules in the Nextriv platform
Direct control	triggering actuators (e.g. a lighting relay) with no gateway or server involved
Calibration	on-device reading correction (user calibration)
Configuration	mobile app over NFC; remotely via platform downlink
USB-C port	1× USB-C — power supply or service console
Indicators	traffic-light status LED
Buttons	1× power + 1× reset; button lock

Power	
Batteries	4× lithium Li-SOCl ₂ ER14505 (AA size), 2,700 mAh, replaceable
Wired power	5 V/1 A via the USB-C port
Battery life	approx. 7.5 to approx. 14 years (EU868, depending on the radio link configuration) — 10-min interval, 25 °C [1]

Enclosure and operating environment	
Operating temperature	-20...60 °C
Ambient humidity	10...90 % RH, non-condensing
Ingress protection	IP30 (indoor use)
Housing	PC + ABS (V0), white
Dimensions	100.8 × 114 × 22 mm (3.97 × 4.49 × 0.87 in)
Weight (with batteries)	181.25 g
Mounting	wall mounting — industrial 3M tape or screws

Compliance and approvals	
Approvals	CE, CE (RED), FCC
Environmental	RoHS

Ordering information	
Product code (SKU)	NX-SN-AQ4L
Measured quantities	temperature, relative humidity, light level, motion (occupancy)
Variants	a variant extended with CO ₂ measurement (5-in-1) is available — specify the variant when ordering
System requirement	a Nextriv Hub gateway (e.g. NX-GW-MINI, NX-GW-PRO)

[1] Battery life determined under laboratory conditions with reference batteries — indicative value; the actual time depends on the reporting interval, radio link configuration, ambient conditions and battery type.

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