

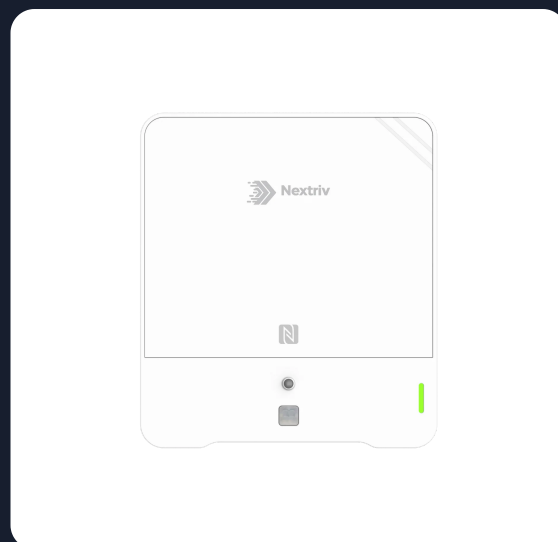
Nextriv Sense IAQ Lite 5-in-1

5-in-1 air quality sensor with CO₂

NX-SN-AQ5L

Nextriv Sense

An affordable 5-in-1 sensor for monitoring air quality and room usage: CO₂, temperature, humidity, light and motion in a single device. CO₂ is measured by a full-grade optical NDIR path with a 400...5000 ppm range — the same one used in the family's higher-end models. Around 6 years on replaceable batteries, configuration with a single smartphone tap (NFC) and a local measurement buffer with retransmission that keeps the data history gap-free. A traffic-light LED signals the CO₂ level right on site.



±(30 ppm + 3 %)

CO₂ measurement accuracy

~6 yrs

battery life

~15 km

open-terrain range

5-in-1

parameters in one sensor

Key features

- Full-grade optical NDIR CO₂ measurement, 400...5000 ppm, with calibration support — the same measurement path as the premium models
- Around 6 years on four replaceable batteries reporting every 10 minutes; optional USB-C power
- Five parameters (CO₂, temperature, humidity, light, motion) — the complete data set for demand-controlled ventilation and building automation
- A traffic-light LED signals the device status and a 3-level CO₂ rating on site (green / yellow / red)
- Direct device-to-device communication — simple control scenarios without a gateway
- Buffer of approx. 4,320 readings with automatic retransmission — gap-free history after connectivity outages
- Configuration over NFC from a smartphone or remotely from the platform (downlink); a button lock prevents tampering
- No display — discreet, tamper-resistant and economical at the scale of hundreds of units

Technical specification

Measurement — carbon dioxide (CO₂)

Measuring range	400...5000 ppm
Accuracy	±(30 ppm + 3 % of reading) (0...50 °C, 0...85 % RH)
Resolution	1 ppm
Sensing element	optical NDIR (non-dispersive infrared)
Calibration	manual (to 400 ppm), automatic background calibration (7 days), numerical, altitude compensation, factory calibration restore

Measurement — temperature

Measuring range	-20...60 °C
Accuracy	typ. ±0.2 °C (0...60 °C); ±0.3 °C (-20...0 °C)
Resolution	0.1 °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

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

Measurement — motion (occupancy)

Sensing element	passive infrared (PIR)
Detection range	80° horizontal, 55° vertical, up to 3 m
Status	vacant / triggered; instant trigger report, vacancy report after a set time (default 120 s)

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
Device-to-device communication	sends data and control commands directly to other Nextriv devices, without a gateway

Indicators and controls

Indicators	traffic-light status LED — device status and a 3-level CO ₂ rating (green / yellow / red)
Display	none — display-free variant, discreet to install
Buttons	1× power + 1× reset; button features can be locked
USB-C port	power supply or service console

Device features

Local buffer	approx. 4,320 readings; automatic retransmission after a connectivity outage; remote history query
Threshold alarms	on-device temperature, light and 3-level CO ₂ thresholds + alert rules in the Nextriv platform
Calibration	numerical calibration of temperature, humidity and CO ₂ ; dedicated CO ₂ calibration methods
Configuration	mobile app over NFC; remotely via platform downlink (incl. in bulk, using templates)
Power on / off	power button (lockable)

Power

Batteries	4× lithium Li-SOCl ₂ ER14505 (AA size), 2,700 mAh, replaceable
External power	USB-C 5 V/1 A; takes priority over batteries when connected (the port does not charge the batteries)
Battery life	approx. 6.3 years — 10-min interval, 25 °C, EU868 [1]; up to approx. 11 years in favourable radio conditions

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
Weight	187.55 g (with batteries)
Dimensions	100.8 × 114 × 22 mm (3.97 × 4.49 × 0.87 in)
Mounting	wall mounting on a bracket — industrial 3M tape or screws, incl. a theft-detering fixing screw

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

Ordering information	
Product code (SKU)	NX-SN-AQ5L
Variants	a 4-in-1 variant without CO ₂ measurement (temperature, humidity, light, motion) is available separately; specify the regional radio band when ordering
System requirement	a Nextriv Hub gateway (e.g. NX-GW-MINI, NX-GW-PRO)

[1] Battery life determined under laboratory conditions using the manufacturer-recommended batteries — indicative value; the actual time depends on the reporting interval, radio settings and environmental conditions.

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