Nextriv Probe Duo

EN 12830 temperature and humidity logger

NX-PR-DUO-2P | Nextriv Probe

A data logger with a detachable dual-parameter probe: temperature and relative humidity at a single measurement point, EN 12830 certified for refrigeration applications. The food-grade 304 stainless-steel probe measures from -40 to +125 °C with ±0.2 °C accuracy and humidity from 0 to 100 % RH with ±2 % accuracy. An IP67-sealed enclosure and a 4,000-reading buffer with retransmission keep the record continuous in a freezer room, a ripening room or a pharmaceutical warehouse. Around 9 years on a replaceable battery and NFC configuration keep maintenance to a minimum.

±0.2 °C	-40…+125 °C	~9 yrs	IP67
measurement accuracy	probe measuring range	battery life	ingress protection

Key features

- Two parameters from one detachable probe (M12 connector): temperature -40…+125 °C and humidity 0…100 % RH
- ±0.2 °C and ±2 % RH accuracy — high-precision digital MEMS sensing element
- Exceptionally low annual drift: below 0.03 °C and 0.2 % RH — longer, predictable calibration intervals
- EN 12830 certified for cold-chain use — supports HACCP and good distribution practice
- 4,000-reading buffer with retransmission and backfill polling — gap-free history; CSV export from the Nextriv platform
- Threshold alarms and a rapid-change alarm independently for both parameters; software offset correction
- IP67 sealing with a specially sealed battery compartment — works in harsh, humid environments
- NFC configuration, remote firmware updates (FUOTA); around 9 years on a replaceable battery

Technical specification

Measurement — temperature	
Measuring range	-40…+125 °C
Accuracy	typ. ±0.2 °C (0…60 °C); ±0.3 °C (-40…0 °C); ±0.5 °C (60…125 °C)
Resolution	0.1 °C
Long-term drift	typ. < 0.03 °C/year
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
Long-term drift	typ. < 0.2 % RH/year
Sensing element	high-precision digital MEMS

Measuring probe	
Probe type	dual-parameter — temperature and humidity from a single measurement point
Connector	5-pin M12 (A-coded); detachable probe
Probe material	304 stainless steel (food grade)
Cable	TPE, white, 1.5 m long
Probe length	50 mm
Probe + cable weight	26.5 g
Calibration	the detachable probe is calibrated independently — without removing the logger

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
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	4,000 readings; automatic retransmission after a connectivity outage and backfill polling
Alarms	thresholds and a rapid-change alarm for both parameters + alert rules in the Nextriv platform
Measurement correction	software calibration (offset) for temperature and humidity
Configuration	mobile app over NFC; remotely via platform downlink
Firmware updates	remote, over the air (FUOTA)
Indicators	1× LED — device status and threshold alarms
Button	1× external power button

Power	
Battery	1× lithium Li-SOCl$_2$ ER14505 (AA size), 2,700 mAh, replaceable
Battery life	approx. 9 years (EU868) / approx. 10 years (US915) — 10-min interval, 25 °C, fast radio settings; approx. 2.8–3 years at maximum-range settings [1]

Enclosure and operating environment	
Operating temperature	-30…55 °C (logger); the probe measures -40…+125 °C
Ambient humidity	0…95 % RH, non-condensing
Ingress protection	IP67, sealed battery compartment
Housing	ABS + PC, white
Dimensions	58 × 65 × 25 mm (2.28 × 2.56 × 0.98 in)
Weight	70 g (logger) + 26.5 g (probe with cable)
Mounting	wall screws, cable tie or magnetic mount (optional)

Compliance and approvals	
Approvals	CE, FCC, EN 12830
Environmental	RoHS

Ordering information	
Product code (SKU)	NX-PR-DUO-2P
Variants	a temperature-only probe variant is available as the Nextriv Probe Solo; magnetic mount as an accessory
System requirement	a Nextriv Hub gateway (e.g. NX-GW-MINI, NX-GW-PRO)

[1] Battery life determined under laboratory conditions — indicative value; the actual time depends on the reporting interval, radio settings and ambient 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.