

# Nextriv Probe Pro Duo

Dual-channel EN 12830 temperature logger with interchangeable probes

**NX-PR-PRO-2P**

**Nextriv Probe**

A dual-channel temperature logger with two inputs: two interchangeable probes, or one probe and a door contact, in a single device — one data source for the chamber and its door. Detachable M12-connector probes span  $-200\text{ }^{\circ}\text{C}$  to  $+500\text{ }^{\circ}\text{C}$ , with accuracy down to  $\pm 0.4\text{ }^{\circ}\text{C}$  in Class A. Shared timestamps across both channels and a 10,000-reading buffer with retransmission keep the history gap-free, with CSV and PDF export. EN 12830 certification plus HACCP and 21 CFR Part 11 support, an IP65 transmitter enclosure, NFC configuration, over-the-air firmware updates and over 2.7 years on replaceable batteries.



**2 channels**

independent probe inputs

**$-200\dots+500$**   
 **$^{\circ}\text{C}$**

range by probe

**$\pm 0.4\text{ }^{\circ}\text{C}$**

accuracy (Class A)

**10,000**

records in memory

## Key features

- Two independent inputs (M12, 5-pin connectors) — two interchangeable probes or one probe and a door contact sensor in a single logger (not two door contacts at once)
- Shared timestamps for both channels — temperature and door opening in one record, with no need to correlate data from two devices
- EN 12830 certification plus CE, FCC, RoHS; supports HACCP and 21 CFR Part 11 — a "recorder"-class device, not an ordinary sensor
- Detachable, interchangeable probes with an M12 connector — calibrate or replace each channel individually, without taking down the transmitter and without interrupting monitoring
- A probe family from  $-200\text{ }^{\circ}\text{C}$  (low-temperature) to  $+500\text{ }^{\circ}\text{C}$  (industrial), accuracy down to  $\pm 0.4\text{ }^{\circ}\text{C}$  in Class A — each of the two channels chosen for a different measurement point
- A 10,000-reading buffer with timestamps, CSV and PDF export, retransmission and backfill polling — gap-free recording from both channels after connectivity outages
- Long-range radio with  $-137\text{ dBm}$  sensitivity plus direct triggering of devices on the Nextriv network — an alarm from one channel can instantly launch a response
- Powered by 2× replaceable lithium battery or from a USB-C port; NFC configuration, over-the-air firmware updates (FUOTA) and over 2.7 years with two probes

## Technical specification

### Measurement — temperature

Measuring range	from -200 °C (low-temperature probe) to +500 °C (industrial probe) — depending on the connected probe
Accuracy	Class A: $\pm 0.4$ °C (-50...+125 °C); Class B: $\pm 0.5$ °C (-40...+40 °C), $\pm 1$ °C (40...125 °C) — depending on the probe
Resolution	0.1 °C
Sensing element	PT100 (Class A or B) in a stainless-steel probe; digital probes also available

### Channels and connectors

Number of inputs	2 independent inputs with shared timestamps across both channels
Probe combinations	two interchangeable probes, or a probe + door contact; does not support two door contacts at once
Connector	M12, 5-pin (A-coded)
Probe design	detachable, interchangeable probes — calibrate or replace each channel individually, without taking down the transmitter

### Compatible probes

Universal (PT100 Class B)	-40...+125 °C; $\pm 0.5$ °C (-40...+40 °C), $\pm 1$ °C (40...125 °C); 304 stainless steel, 2 m cable, IP67
Industrial (PT100 Class A)	up to +500 °C; $\pm 0.4$ °C (-50...+125 °C), $\pm 1.15$ °C (125...500 °C); 304 stainless steel, 1.5 m PTFE cable, IP30
Low-temperature (PT100 Class A)	-200...+50 °C; $\pm 0.5$ °C (-175...+50 °C), $\pm 0.55$ °C (-200...-175 °C); 1.5 m cable, IP67
Food-grade (PT100 Class A)	-40...+125 °C; $\pm 0.4$ °C; food-grade 316 stainless steel, 10 cm needle, 1.5 m silicone cable, IP67
Pipe (PT100 Class A)	-20...+85 °C; $\pm 0.4$ °C; stainless steel with a 46 mm clamp, 2 m cable, IP67
Temperature and humidity	temperature -40...+125 °C ( $\pm 0.2$ °C across 0...+60 °C); humidity 0...100 % RH ( $\pm 2$ % @25 °C); 1.5 m cable
Digital temperature	-40...+125 °C; $\pm 0.5$ °C (-10...+85 °C); low drift; 1.5 m cable
Door contact (magnetic)	contact switch, detects opening at a gap of up to 3 cm; 1.5 m cable

## Radio connectivity

Technology	long-range, low-power radio (LPWAN)
Radio band	EU868 (EU); regional variants: US915, AU915, AS923, IN865, KR920, RU864, CN470
Tx power	16 dBm (EU868); 22 dBm (US915); 19 dBm (CN470)
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; direct triggering of devices on the Nextriv network

## Memory and features

Local buffer	10,000 timestamped records (shared across both channels); CSV and PDF export
Data continuity	automatic retransmission and backfill polling after a connectivity outage
Alarms	on-device thresholds for both channels; alert rules in the Nextriv platform
Configuration	mobile app over NFC; remotely via platform downlink
Firmware updates	over the air (FUOTA)
Indicators	1× LED for status and threshold alarms
Buttons	1× external power button + 1× internal reset button

## Power

Power supply	2× lithium Li-SOCl <sub>2</sub> ER18505, 4,000 mAh, replaceable; alternatively from a USB-C 5 V/1 A port
Battery life	over 3.9 years with a probe and a door contact / over 2.7 years with two probes — 10-min interval, EU868 [1]

## Enclosure and operating environment

Operating temperature	transmitter: -30...+70 °C; probes depend on type (down to -200 °C / up to +500 °C)
Ambient humidity	0...95 % RH, non-condensing
Ingress protection	IP65 (transmitter enclosure); PT100 probes up to IP67
Dimensions	109.35 × 75 × 29 mm
Weight	185 g (transmitter, probes excluded)
Mounting	wall screw mounting, magnetic nut (optional) or in a thermal buffer bottle (optional)

## Compliance and approvals

Approvals	CE, FCC, EN 12830
Process compliance	supports HACCP and 21 CFR Part 11 requirements
Environmental	RoHS

## Ordering information

Product code (SKU)	NX-PR-PRO-2P
Variants	dual-channel version (2 inputs); a single-channel variant is available as Nextriv Probe Pro (NX-PR-PRO-1P)
Accessories	interchangeable probes (universal, industrial, low-temperature, food-grade, pipe, temperature-and-humidity, digital, door contact); thermal buffer bottle; magnetic nut; USB-C power supply
System requirement	a Nextriv Hub gateway (e.g. NX-GW-MINI, NX-GW-PRO)

[1] Battery life determined under laboratory conditions with standard batteries — indicative value; the actual time depends on the battery brand, the number and type of connected probes, the reporting interval, the band and radio conditions.

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