

Nextriv Track GPS

Cold chain temperature logger

NX-TR-GPS

Nextriv Track

A temperature and humidity logger for transport and the cold chain. It connects directly over the 4G cellular network (LTE Cat.1), so it works along the entire route — independent of any gateway infrastructure. The shipment's approximate position, derived from cellular base stations, is tracked live on a map in the Nextriv app alongside the latest readings. An IP67-sealed food-grade housing, a 5,000-record memory with retransmission, and compartment-opening and tilt detection deliver a complete record of transport conditions.



±0.2 °C

measurement accuracy (0...
65 °C)

IP67

ingress protection

5,000

records in local memory

~4 yrs

battery life

Key features

- 4G cellular connectivity (LTE Cat.1, its own micro-SIM card) — works along the entire route, with no gateways and no infrastructure of your own
- Approximate location from cellular base stations reported alongside the measurements — shipment position live on a map in the Nextriv app (typical deviation approx. 1 km)
- Typ. ±0.2 °C (0...65 °C) and ±2 % RH accuracy — high-precision digital MEMS sensing element
- IP67 sealing with a separately sealed battery compartment; food-grade housing — safe contact with food and medicines
- 5,000-record memory with automatic retransmission — a gap-free measurement history after coverage outages
- A 0...600 lx light sensor detects cargo-compartment opening and a 3-axis accelerometer registers tilt (±90°) — risk-event alarms
- Cumulative reporting (batched packets) saves battery, and flight mode meets air-freight requirements
- Configuration over NFC from a smartphone, remote management and OTA updates from the Nextriv platform; mounting with cable ties, 3M tape, screws or a magnetic bracket

Technical specification

Measurement — temperature	
Measuring range	-35...70 °C
Accuracy	typ. ±0.2 °C (0...65 °C); ±0.3 °C (-35...0 °C); ±0.5 °C (65...70 °C)
Resolution	0.1 °C
Sensing element	high-precision digital MEMS

Measurement — relative humidity

Measuring range	0...100 % RH
Accuracy	typ. ± 2 % RH
Resolution	0.1 % RH
Sensing element	high-precision digital MEMS

Cellular connectivity

Technology	LTE Cat.1 (4G)
Bands	LTE-FDD: B1/B3/B5/B7/B8/B20/B28 — EMEA plus Australia and New Zealand
SIM card	1× micro-SIM (3FF) slot, 1.8 V / 3 V — your own carrier card
Transmission protocols	TCP, UDP, MQTT; native integration with the Nextriv platform
Communication	two-way — readings and positions to the platform, remote management and OTA updates

Shipment location

Method	cellular base-station positioning
Parameters	longitude and latitude
Accuracy	typ. deviation approx. 1 km, max 5 km (on urban main roads)

Event detection

Light sensor	0...600 lx range; light/dark status — cargo-compartment opening detection with an alarm
Accelerometer	3-axis; position status: normal / tilt
Tilt measurement range	-90°...+90° (X, Y, Z axes)

Interfaces and indicators

Indicators	1× status LED — device status and threshold alarms
Button	1× reset / power
USB	1× USB-C port (internal) for power supply
NFC	quick configuration and data readout from a smartphone

Device features

Local memory	5,000 records; automatic retransmission after a connectivity outage
Threshold alarms	on-device thresholds + alert rules in the Nextriv platform
Reporting modes	cumulative reporting (batched packets) to save power; one-click on-demand reporting
Min. packet transmission interval	15 min (operating temperature > 0 °C); 30 min (≤ 0 °C) [2]
Flight mode	disables transmission in line with aviation safety requirements; measurements are still logged locally
Configuration	mobile app over NFC; remote management and OTA updates from the Nextriv platform
Power on / off	NFC, USB or button

Power

Batteries	2× lithium Li-MnO ₂ CR18505, 2,500 mAh, replaceable — separately sealed battery compartment
Battery life	approx. 4.8 years (TCP/MQTT) up to approx. 5.1 years (UDP) — 6 reports per day of 8 packets each, 30-min collection interval, positioning disabled, -20 °C [1]
Service power	internal USB-C port

Enclosure and operating environment

Operating temperature	-35...70 °C
Ambient humidity	0...95 % RH, non-condensing
Ingress protection	IP67 — waterproof design for harsh environments
Housing	food-grade ABS + PC, white — safe contact with food and medicines
Dimensions	112 × 72 × 29 mm
Weight	192 g (batteries included)
Mounting	cable ties, industrial 3M tape, screws; optional magnetic mounting

Compliance and approvals

Approvals	EN 12830
Industry compliance	supports HACCP requirements; FDA-approved food-contact housing materials

Ordering information	
Product code (SKU)	NX-TR-GPS
Variants	standard version with integrated sensing and a status LED; a variant with a 0.96" OLED display and an external measuring probe socket (temperature or temperature-humidity probes) — specify the variant when ordering
Accessories	magnetic mounting bracket (optional)
System requirement	a micro-SIM card with a data plan; no gateway required — the device connects directly to the Nextriv platform over the cellular network

[1] Battery life determined under laboratory conditions with the standard battery — indicative value; operation above 0 °C significantly extends service life, while intensified communication (poor coverage) and temperatures below -20 °C or above +55 °C shorten it.

[2] Packet transmission interval = reporting interval × number of readings accumulated per packet.

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