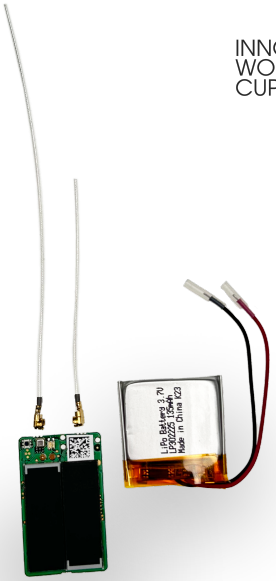
truvami

nomad XS



INNOVATION WORLD CUP®

21 x 27 x 6 mm

truvami® nomad XS is an award-winning and versatile LoRaWAN solar-based geolocation sensor-hub. It combines a multi-standard GNSS receiver and an accelerometer for motion detection in a compact device. Its highly configurable firmware enables precise customization for specific use cases, optimizing performance and extending battery life.

LoRaWAN® GNSS Wi Fi Sniffing BLE Scanning

dedicated high precision GPS receiver

achieves very high accuracy in location monitoring

rechargable,
LiPo battery via charging pads

the onboard solar panels charge the LiPo battery, ensuring continous autonomous operation

built-in accelerometer

features an integrated accelerometer to trigger motion-induced location fixes

integrated light and pressure

features integrated light and pressure sensors for additional ambient information

optional gyroscope / magnetometer

gyroscope and magnetometer can be added on demand

datasheet 2024 version 1.0

mechanics & power

mechanical specifications

weight	5.8g total - battery 3.1g - PCB board (with solar panels) 2.4g - antennas 0.3g
dimensions	battery 21 x 21 x 3 mm - solar panels 15 x 27 x 3 mm - antennas 51 / 91 mm
enclosure	Epoxy resin

operating conditions

temperature	0 - 60 °C
humidity	0 – 95 % RH, non-condensing

power management

battery type	Lithium polymer
power	3.7V, 135 mAh
charging	via the charging pads and solar cell

estimated battery life

1 GPS fix / hour without solar	4-6 days (depending on SF)

communication

LoRaWAN details

LoRaWAN® device type	class A
LoRaWAN® version	LoRaWAN® 1.0.3
supported LoRaWAN® features	OTAA, ADR, adaptive channel setup
LoRaWAN® receiver sensitivity	-127 dBm (SF7, 125 kHz) to -141 dBm (SF12, 125 kHz)
LoRaWAN® transmission power	14 dBm / 22 dBm (depending on region)

location

GNSS

receiver	uBlox GNSS receiver with patch antenna
GNSS	BeiDou, Galileo, GLONASS, GPS / QZSS

sensors and peripherals

pressure sensor

absolute accuracy	± 0.5 hPa
relative accuracy	± 0.06 hPa per 10kPa step
range	30 .. 125 kPa

accelerometer

range	±2, ±4, ±8, ±16
resolution	16 bit
accuracy (typ.)	±20 mg

light sensor

range	0 - 65k lux

disclaimer

truvami

truvami® is an IoT startup specialized in flexible end-to-end tracking solutions, based in Zurich, Switzerland. Our mission is to support enterprises in safeguarding their workforce and valuable assets through cutting-edge tracking technologies at smallest size. truvami offers a portfolio of different trackers that are designed to serve different use-cases in vertical markets like transport, logistics, industrial, construction, fleet- and animal tracking. The innovative multi-protocol approach combined with a dedicated geolocation engine allows seamless in- and outdoor tracking. Together with truvami's cloud software platform, customers can easily integrate the solution into their existing IT landscape.

Get in touch today!

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