



## 5G SENS

### Powerful Tracking & Monitoring Solution

#### Tracking of assets and their conditions with a compact flat device

Whether you work in manufacturing, security, health or logistics and have valuable mobile assets such as machinery, pallets, containers or even electric vehicles, it is essential to track & monitor them in order to reduce loss. Optimize your costs and increase your efficiency while gaining peace of mind that your freight is safe and secure during its journey.

#### Sensors



- Up to six sensors on board
  - Outdoor Location
  - Indoor Location via BLE
  - Temperature
  - Humidity
  - Air Pressure
  - 6D-Acceleration
  - Light
- External sensors can be connected via Bluetooth Low Energy (BLE)

#### Long Battery Lifetime

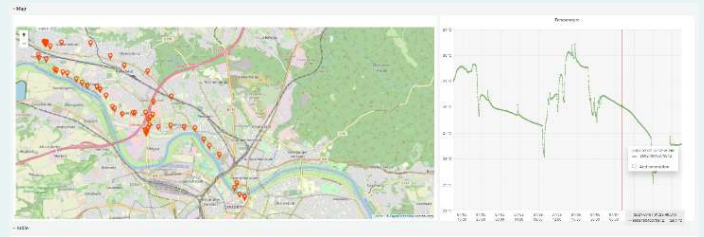
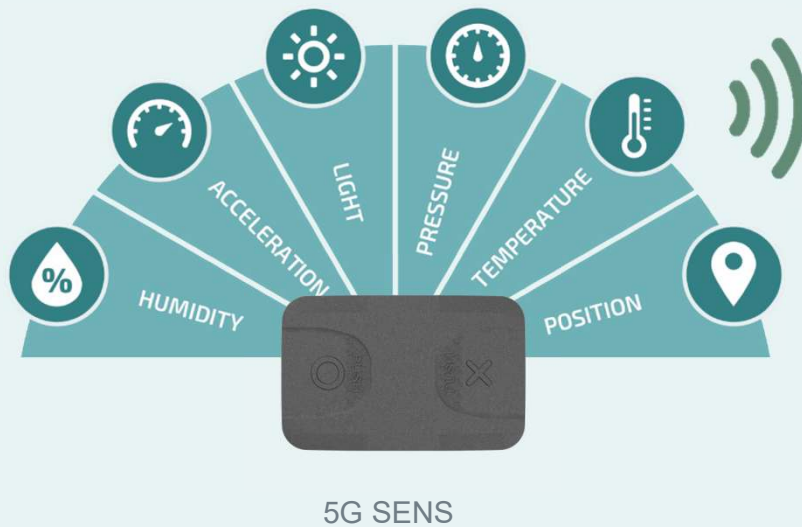


- Two power supplies options
  - Rechargeable battery
  - 3AA Primary batteries
- Low Power wireless technology
- Appr. 2000 position messages (per battery capacity)
- Up to 5 years of operation

#### Flexibility



- Various parameter can be adapted
  - Time between periodic messages
  - Time between motion triggered messages
  - Daily tracking schedule
- Remote device management service
  - Parameter Update
  - Firmware update
  - Battery monitoring
  - Coverage monitoring



Cloud Backend



Clip Holder\*



USB-C Charger

## Connectivity:

3GPP Release 14 LTE Cat NB2  
3GPP Release 13 LTE Cat M1  
Bands: B3/B8/B20  
GPRS Bands: 900/1800MHz  
SIM-Card: 3FF (Micro SIM)



## Location Services

GNSS (GPS, Galileo)  
QuecLocator\* (positioning via cellular base stations)  
Quuppa Support (BLE indoor Tracking)

## Local Connectivity:

Bluetooth Low Energy Rx  
Bluetooth Low Energy Rx/TX



## Chipset

Qualcomm MDM9205

## Data Transfer Protocols

TCP/ SSL/ TLS/ HTTPS

## Security Features

Protected device memory  
Secure communication via transport level security (TLS)  
Device authentication via ECDSA signatures

## Certifications

CE-RED, GCF, Vodafone  
RoHS, REACH, WEEE  
Battery: EC 62368-1, UN38.3, 2006/66/EC, UL1642,  
IEC62133 -2, IEC 62321-4, IEC 62321-5

## Sensors

Acceleration & Gyrosensor: 6 – axis  
Temperature: -10 °C ... 70 °C ± 1 °C  
Humidity: 5% - 95% RH ± 5%  
Barometer: 260 to 1260 hPa ± 1 hPa  
Real-Time Clock: max. 20ppm at 25°C  
Light sensor: approx. 0,2 Lux and above

## Interfaces

4 I/O Ports (via USB-C)

## Indicator/Buttons

3 LEDs  
2 Buttons

## Electrical data

Power Supply via USB-C  
Rechargeable LiPo battery 3.7V, 2.750 mAh  
Primary Cells: 3AA ENERGIZER L91 batteries

## Housing:

Housing: IP40

Dimension:

- 90x58x25 mm 120g (with LiPo battery)
- 90x58x34 mm 130g (with 3 AA-Type battery)

## Environmental Conditions

Min/Max. Temperature:

- Rechargeable -10 °C to +55 °C
- 3AA Battery -40° C to +60 °C  
(with ENERGIZER L91 batteries)

## Online ressources:

<https://www.exelonix.com/produkte/5g-sens-plattform>

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