

# TRACK+RAIL

Air Quality Monitoring Station for Underground Railway Stations

Click or scan to discover the product in detail



Nexelec

- Particulate Matter
- Temperature
- Humidity
- Atmospheric Pressure
- CO<sub>2</sub> Carbon Dioxide
- 5 slots BLOCK



## Multi-connectivity



LoRaWAN or LTE (4G) connectivity: the product communicates and adapts to all situations



## Optimized for underground railways

Uses a sensor specially designed to measure fine particles specific to underground railways



## Multi-sensor extensions with BLOCK

5 modular slots for easily adding additional sensors (Ozone, NO<sub>2</sub>, etc.), ensuring flexibility and scalability

## Measurement accuracy

Fine particle sensor validated by an independent metrology laboratory. The device warms the air before measurement to ensure reliable data without the impact of ambient humidity

## Adapted power supply modes

Designed to adapt to multiple terrain specifications: sector, DC voltage, or solar panel

## AirFlow 360°

Well-ventilated aerosol sampling system. Allows fine particles to enter from all angles without blind spots. Ensures reliable air quality measurements and effective protection against the elements

## Local recorder

With its built-in SD card, the station stores up to 20 years of data, ensuring that measurements are recorded even in white zones

## Integrated plug-and-play solution

The open and secure LoRaWAN protocol allows you to freely use the station's measurements in the monitoring software of your choice

## Battery-powered

Ideal for intermittent power supply (street lighting poles, power outages, etc.). Allows the station to operate for up to 3 days without mains power. Automatic battery recharge when power is restored



# TRACK+ RAIL

Air Quality Monitoring Station for Underground Railway Stations

Nexelec

www.nexelec.eu

## Options catalog

See details of options on the next page

Reference	Designation
X951LS	URS LoRaWAN Station

Reference	Designation
P061	CELLULAR
P066	SOLAR



## FUNCTIONS



### Particulate Matter Measurement

Continuous or intermittent measurement. PM measurement by mass on 3 channels



### Choice of power supply

Operates on AC or DC power. Optional solar power kit



### Reduced maintenance

No maintenance required for the Particulate Matter sensor for 1 year (in standard configuration)



### SD Card

Storage of all measurements in a .csv file

## Navixis

### Easy operation\*

Nexelec's NAVIXIS solution provides access to station information and measurements via a web browser or API



### LFP lithium battery\*

High-performance, safe technology. Capacity 100 Wh. Standard battery life : 3 days



### BLOCK

5 locations to enhance the station with new measurements, ensuring flexibility and easy maintenance



### LED

Status of the various station components visible via LED



### Enhanced cybersecurity

The data transmitted by the product is secured end-to-end using AES128 double encryption



### GPS

Automatic station location via GPS and GLONASS networks (for outdoor use)



### Simple installation

Thanks to its compact design and numerous mounting accessories, the product can be easily installed on a wall or pole



### LTE (4G) communication\*

Multi-carrier SIM card included with the station for optimal network coverage in over 150 countries



### NFC

Configuration, diagnostics, and update interface via Nexelec mobile application



### Insect barrier

Pest protection grid integrated into the station. Preserves measurement reliability. Easy to maintain

## FEATURES

### Particulate Matter PM1 / PM2.5 / PM5

Resolution: 1 µg/m3 or 1 pcs/cm3  
Repeatability error: <3%  
Linearity error: <5%  
Mass measurement range:  
0 to 1,000 µg/m3

### Atmospheric Pressure

Resolution: 1 hPa  
Accuracy: ±2.5 hPa  
Measuring range: 300 - 1,100 hPa

### Temperature

Resolution: 0.1°C  
Accuracy: ±0.3°C  
Measuring range: -30°C to +70°C

### Humidity

Res.: 0.5% RH  
Accuracy: ±2% RH  
Measuring range: 0 - 100% RH

### Carbon Dioxide (CO2)

Resolution: 1 ppm  
Accuracy: 30 ppm or ±3%  
Measuring range: 0 - 10,000 ppm

### Terms of use

External environment  
Temperature: -20°C to +60°C  
Humidity: 0% RH to 95% RH (non-condensing)

### Power supply

Alternating current (110V - 230V)  
Direct current (5V - 35V)  
LFP lithium battery (100 Wh)  
Solar power\*

### Connectivity



↑ ↓  
LTE 4G (via CELLULAR)

### Warranty<sup>(1)</sup>

2 years

### Certification



### Mounting type

Wall-mounted  
Pole-mounted

### Box content

1 TRACK+ Rail station  
1 pole mounting kit  
1 wall mounting kit

<sup>(1)</sup> Refer to the information available on the website [www.support.nexelec.fr](http://www.support.nexelec.fr). \*Option available on request

# OPTIONS & ACCESSORIES

## POWER SUPPLY

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### SOLAR

*Solar power kit*

Self-powered via solar panel  
Ideal for remote environments

#### **Kit content**

20 Wp solar panel and cables  
Solar panel mounting bracket

## NETWORK & DATA

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### CELLULAR

*Cellular connectivity*

Data retrieval via the 4G network  
Pre-configured with a Nexelec multi-operator SIM card (comes with 5 years of connectivity included)  
Includes 5 years of data access from the NAVIXIS web platform

### NAVIXIS

*Web platform for station management*

View measurements, graphs, and CSV exports  
Connect and access third-party services via API or webhook  
Configurable email/SMS alerts  
Manage the status of your station fleet