

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
- 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, NO₂, 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

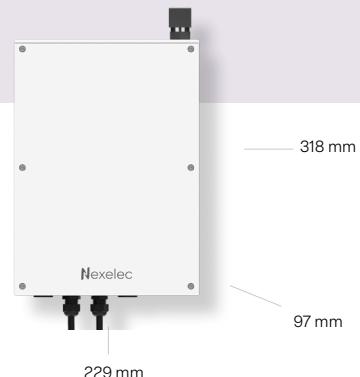
Nexelec

www.nexelec.eu

Options catalog

See details of options on the next page

Reference	Designation	Reference	Designation
X951LS	URS LoRaWAN Station	P061	CELLULAR
		P066	SOLAR



Net weight: 2.6 kg

FUNCTIONS



Particulate Matter Measurement

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

NAVIXIS

Easy operation*

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



Enhanced cybersecurity

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



LTE (4G) communication*

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



Choice of power supply

Operates on AC or DC power. Optional solar power kit



LFP lithium battery*

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



GPS

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



NFC

Configuration, diagnostics, and update interface via Nexelec mobile application



Reduced maintenance

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



BLOCK

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



Simple installation

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



Insect barrier

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



SD Card

Storage of all measurements in a .csv file



LED

Status of the various station components visible via LED

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

LoRaWAN

↑ ↓ LTE 4G (via CELLULAR)

Warranty⁽¹⁾

2 years

Certification



Mounting type

Wall-mounted

Pole-mounted

Box content

1 TRACK+ Rail station

1 pole mounting kit

1 wall mounting kit

⁽¹⁾ Refer to the information available on the website www.support.nexelec.fr. *Option available on request

OPTIONS & ACCESSORIES

POWER SUPPLY

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

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