



# NAVIGATE

## TRAFFIC CLOUD

# The ultimate solution for managing your municipal electronic traffic signage

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### **100% Web-Based**

Complete remote management of your equipment

### **Outstanding Ergonomics**

Icons, action confirmations, intuitive interface

### **Reliable and Secure**

Detailed logs, status monitoring, full operational traceability

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The evolution of connected technologies is transforming how cities manage, monitor, and secure their road networks.

Navigate Traffic Cloud™ is a complete and accessible solution that enables remote supervision, control, and analysis of dynamic signage systems and road safety devices.

Through this centralized platform, municipal managers gain a real-time, global view of their equipment, allowing them to optimize operations, reduce field travel, and adopt a proactive, management approach focused on public safety and operational efficiency.



# NAVIGATE

TRAFFIC CLOUD

Navigate Traffic Cloud™ is an intelligent, cutting edge remote management platform designed for municipal managers seeking to optimize the performance of connected road infrastructure. It provides full control and real-time visibility over all speed displays, variable message signs, and traffic data collection systems.

Designed to maximize operational efficiency and ease of use, it centralizes equipment management within an intuitive web interface, accessible from any browser.





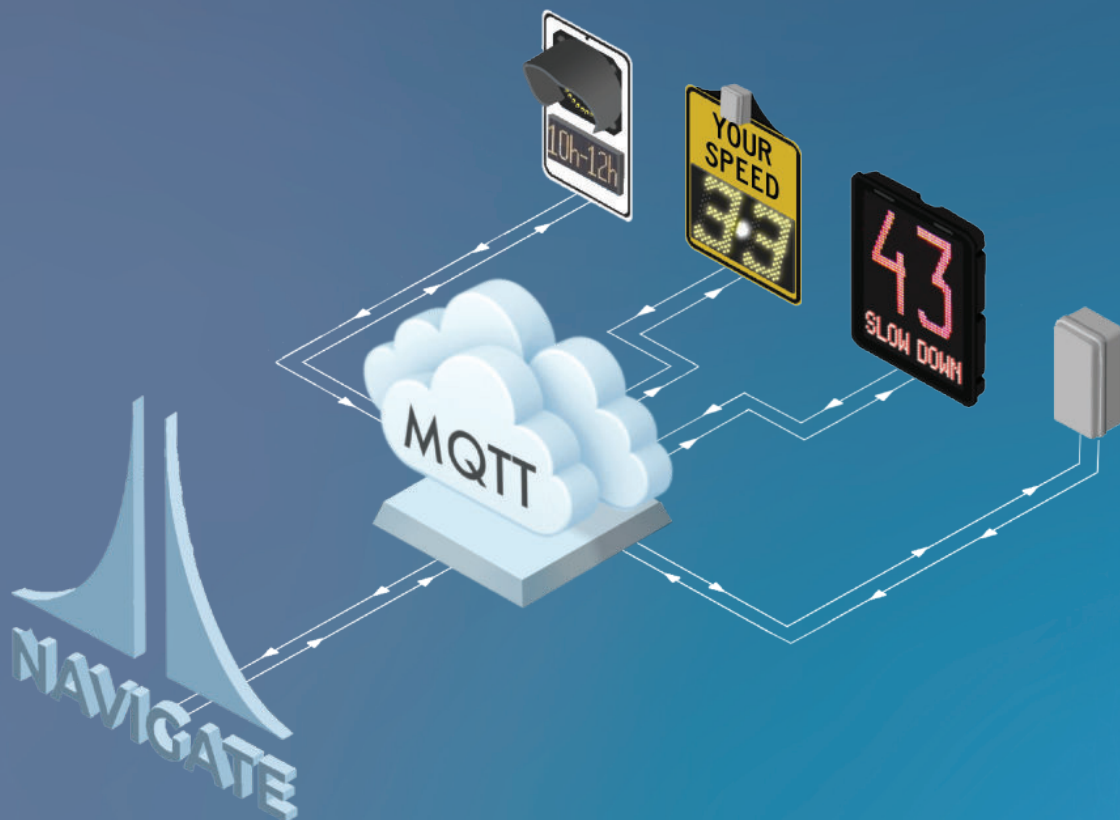
# NAVIGATE

## TRAFFIC CLOUD

## Benefits of the MQTT Protocol for Cloud Management of connected infrastructure

MQTT is a lightweight protocol requiring very little bandwidth, delivering stable performance even on unreliable networks. Ideal for distributed IoT systems, it enables devices to publish only when changes occur or at defined intervals. This reduces energy consumption, extends battery life, and lowers network traffic when integrated into a platform like Navigate Traffic Cloud™.

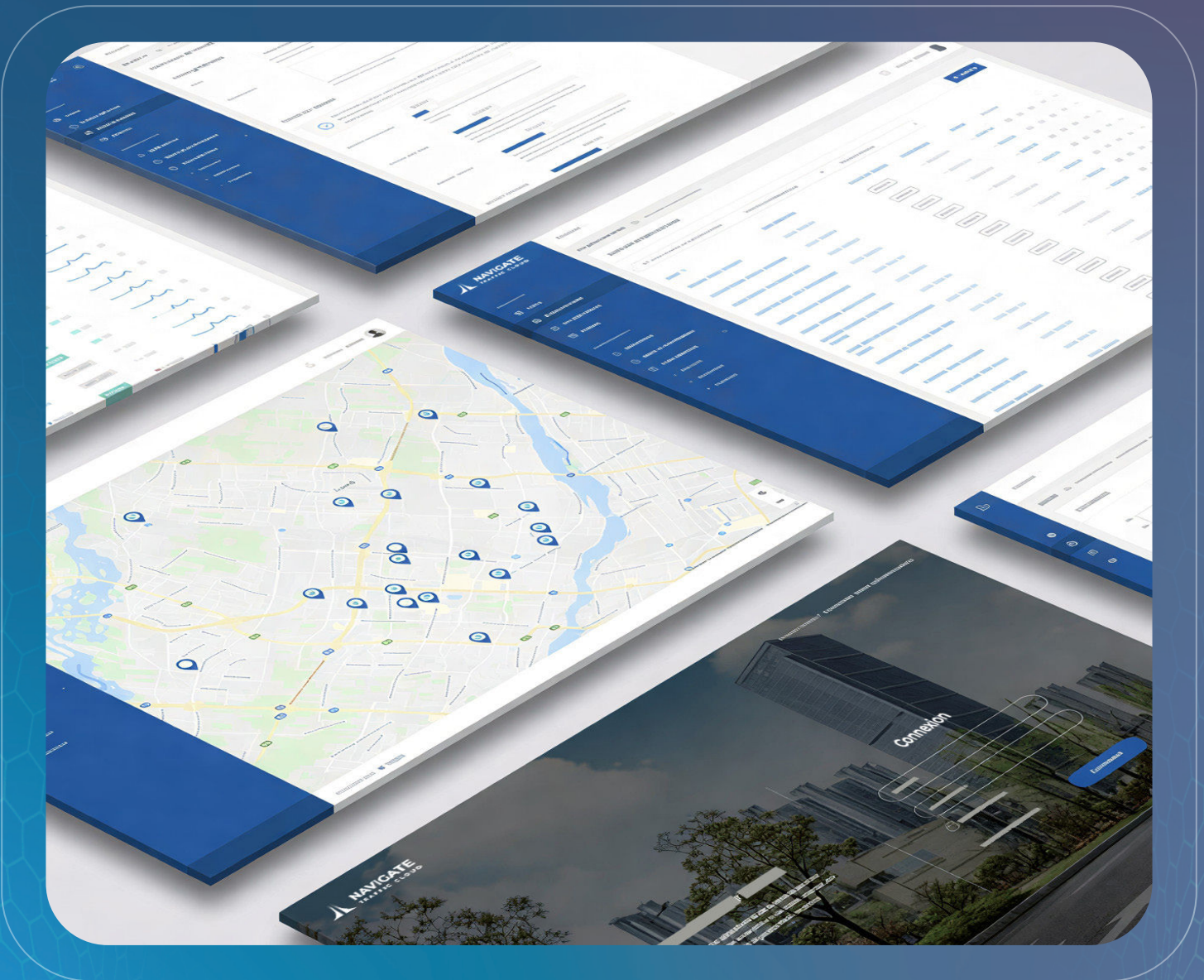
With its Publish/Subscribe model, MQTT distributes data only to subscribed clients, ensuring near-unlimited scalability for connected infrastructures managed via Navigate Traffic Cloud™. Low latency enables instant updates and real-time event management. Network resilience and SSL/TLS security further enhance reliability. Optimized for cloud environments, MQTT integrates seamlessly with Navigate Traffic Cloud™ to maximize efficiency and autonomy.



# The management solution for municipal electronic signage

Thanks to its geolocated dashboard and intelligent configuration profiles, you can plan, adjust, and deploy your equipment consistently while ensuring the reliability and traceability of every action. Navigate Traffic Cloud™ simplifies the deployment of public awareness campaigns, improves citizen communication through dynamic signage, and enables in-depth analysis of road user behavior.

Turn your data into actionable decisions for proactive and secure road network management with Navigate Traffic Cloud.™



# Central dashboard and real-time mapping

**Navigate** is an interoperable Smart City cloud platform designed to integrate easily with municipal systems. Built on a secure IoT architecture using the MQTT protocol, it ensures real-time bidirectional communication and secure integration, allowing cities to automate data flows, synchronize infrastructure, and unify their digital environments.

Its analytics and automation modules transform data into actionable insights, support real-time analysis, and promote smarter infrastructure management. **Navigate** combines performance, reliability, and simplicity to modernize connected signage.



## INTERACTIVE GEOLOCATED MAP

View all your devices on an interactive georeferenced map



## INSTANT TECHNICAL MONITORING

Instantly check the status of each device



## DEPLOYMENT PLANNING

Your electronic signage devices made easy



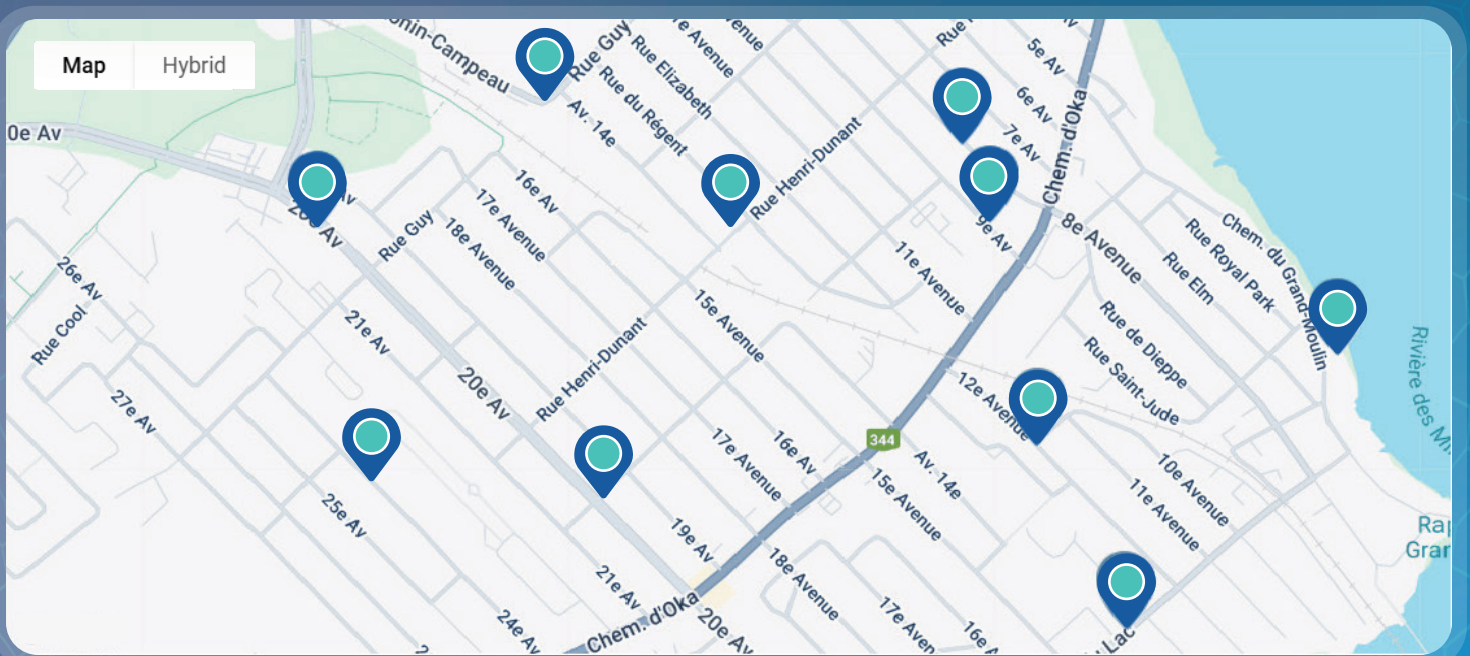
## INTELLIGENT CONTROL

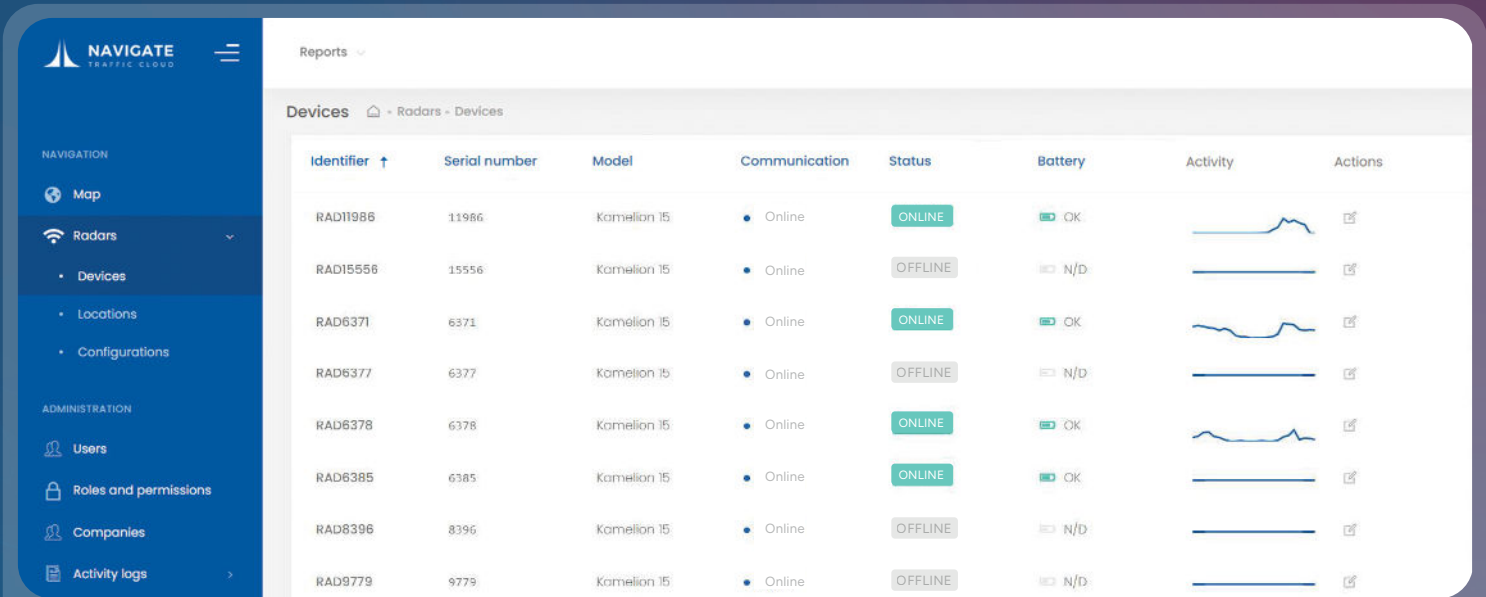
Individualized or grouped ON/OFF management. Create maintenance routes or control scenarios to manage multiple panels simultaneously.



## OPTIMIZED INTERFACE

Adapted to all devices with optimized ergonomics: icon size, text display, and several elements adjusted to fit the screen

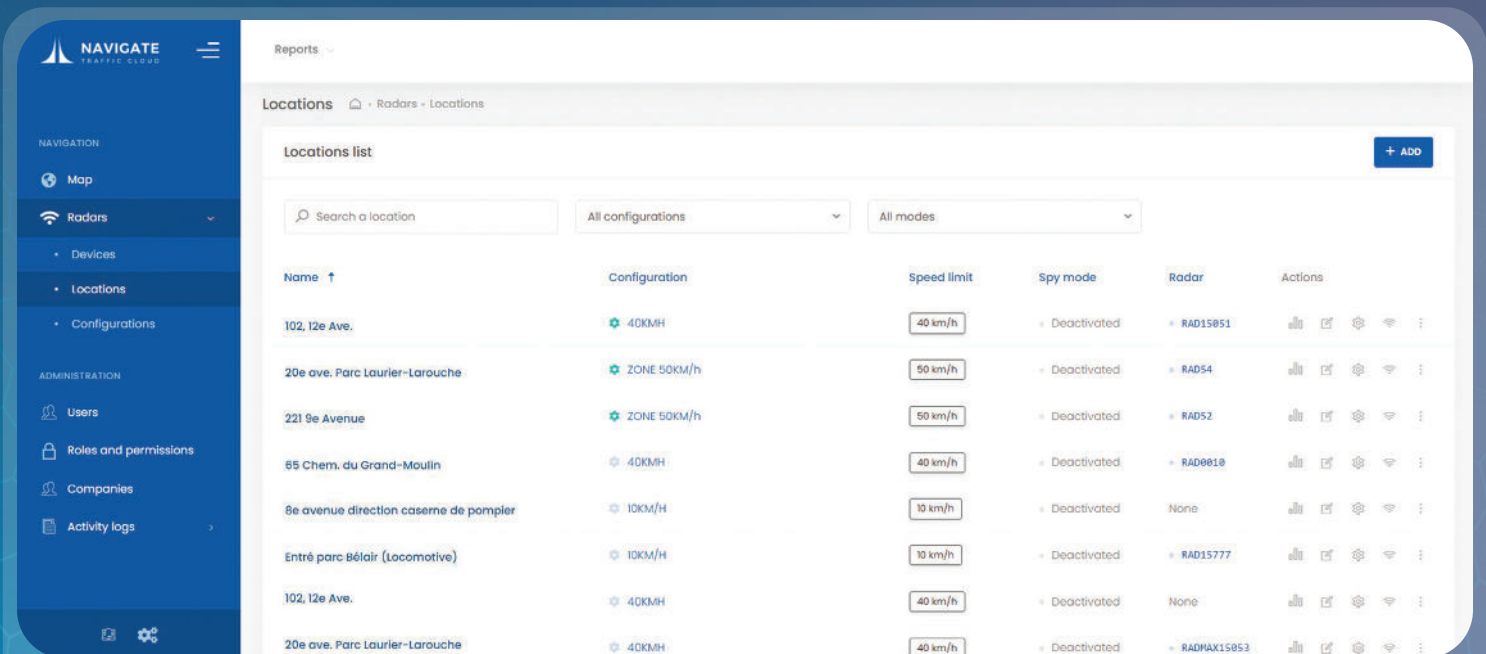




**Devices** 🏠 • Radars • Devices

Identifier ↑	Serial number	Model	Communication	Status	Battery	Activity	Actions
RAD11986	11986	Kamelion 15	● Online	ONLINE	🔋 OK		📄
RAD15556	15556	Kamelion 15	● Online	OFFLINE	🔋 N/D		📄
RAD6371	6371	Kamelion 15	● Online	ONLINE	🔋 OK		📄
RAD6377	6377	Kamelion 15	● Online	OFFLINE	🔋 N/D		📄
RAD6378	6378	Kamelion 15	● Online	ONLINE	🔋 OK		📄
RAD6385	6385	Kamelion 15	● Online	ONLINE	🔋 OK		📄
RAD8396	8396	Kamelion 15	● Online	OFFLINE	🔋 N/D		📄
RAD9779	9779	Kamelion 15	● Online	OFFLINE	🔋 N/D		📄

Device list: Access a comprehensive list of all your traffic displays and analyzers. Manage their settings, view their history, and perform actions from a single interface.



**Locations** 🏠 • Radars • Locations

**Locations list** + ADD

🔍 Search a location

All configurations | All modes

Name ↑	Configuration	Speed limit	Spy mode	Radar	Actions
102, 12e Ave.	40KM/H	40 km/h	Deactivated	RAD15051	📄 📄 ⚙️ 📶 ⋮
20e ave. Parc Laurier-Larouche	ZONE 50KM/h	50 km/h	Deactivated	RAD54	📄 📄 ⚙️ 📶 ⋮
221 9e Avenue	ZONE 50KM/h	50 km/h	Deactivated	RAD52	📄 📄 ⚙️ 📶 ⋮
55 Chem. du Grand-Moulin	40KM/H	40 km/h	Deactivated	RAD0810	📄 📄 ⚙️ 📶 ⋮
8e avenue direction caserne de pompier	10KM/H	10 km/h	Deactivated	None	📄 📄 ⚙️ 📶 ⋮
Entré parc Béclair (Locomotive)	10KM/H	10 km/h	Deactivated	RAD15777	📄 📄 ⚙️ 📶 ⋮
102, 12e Ave.	40KM/H	40 km/h	Deactivated	None	📄 📄 ⚙️ 📶 ⋮
20e ave. Parc Laurier-Larouche	40KM/H	40 km/h	Deactivated	RADMAX15053	📄 📄 ⚙️ 📶 ⋮

Device list: Save your devices with their speed limits for quick and efficient deployment, applying the appropriate configuration with a single click.

Create and modify standardized configuration profiles (speed limits, customized messages, activation time slots, trigger thresholds).

Apply these profiles to one or more devices simultaneously to ensure consistency across your campaigns and save valuable time in day-to-day management.

## System security and reliability

**Navigate** is built on a secure cloud infrastructure designed to meet the most stringent standards of the public sector.

Hosted in Canada and compliant with ISO 27001, SOC 2, and PCI-DSS standards, the platform guarantees sovereignty and complete protection of municipal data. Navigate Traffic Cloud™ is built on a modern cloud architecture, deployed on **Microsoft Azure** and hosted in certified Canadian data centers. Communications are encrypted end-to-end, access is managed according to defined roles, and every action performed in the system is logged to ensure traceability. This approach enhances operational reliability and protects essential services from interruptions or intrusions.

All collected data can be exported into standard formats (CSV, PDF, Excel) and integrated into municipal decision-making tools, GIS, or corporate dashboards. Navigate complies with governmental guidelines: secure storage, traceability, and role-based access.

Complete logging of all activities for auditing and traceability purposes



Centralized and traceable authentication, ensuring compliance and transparency



Sovereign compliance: data can be stored locally according to customer requirements



Canadian hosting compliant with international security and privacy standards



TLS encryption for all communications between the platform and field equipment



Role-based access control (RBAC) for granular management of user permissions



# Overview of cloud communication options

	Navigate Traffic Cloud™	Dimonoff/SCMS25 <small>(for the P-150-13 panel)</small>
<b>Key Features</b>		
Individual or grouped ON/OFF control	Yes	Yes
Pictogram and text display	Yes	Text only
Real-time status confirmation	Yes	Yes
Complete and reliable logging	Yes	Yes
<b>User Interface</b>		
Interactive geolocated map	Yes	Yes
Automated scheduling	Yes	Yes
Alarm and alert management	Yes	Yes
Compatibility	Lighting control system from DimOnOff, Honeywell EnergyAxis(R), (Netsense), Current by GE (LightgridTM) Telematics WirelessTM(T-Light), DMX system from Pharos	
<b>Customizable Alerts</b>		
Notifications by Email	Yes	Yes
<b>Security and Permissions</b>		
Role-based access management (RBAC)	Yes	Yes
<b>Advanced Functionalities</b>		
Dynamic groups	Yes	Yes
<b>Communication</b>		
Network Connectivity	Cellular	Private Mesh Network
Homologation	FCC IC	US FCC, NSI/UL 8750, CSA 22.2, DLC & RoHS OVH Cloud : ISO 27001, PCI-DSS Level 1, SOC 1 and SOC 2
Encryption	128 bit	AES 128-Bit, FIPS 197.
MQTT	Yes	Yes
<b>Reports</b>		
Export to standard formats (PDF, Excel)	Yes	Yes
Architecture	SaaS	Option: SaaS ou local

# Advantages and benefits

## Proactive Monitoring and Alerts

Receive email and SMS alerts as soon as an issue is detected, reducing downtime and enhancing safety.



## Remote Planning and Scheduling

Create, adjust, or delete schedules in advance or in real time for one or multiple devices. Modify flashing duration, night dimming, and more anywhere. OTA (Over-The-Air) updates reduce operational costs.



## Plug and Play

Once powered, a Navigate Traffic Cloud system automatically connects to the application and cloud network. No additional configuration or equipment required.



## Secure Web Access



View system data as charts or export for custom analysis. Access event logs, battery status, trigger counts, and usage indicators.

## Centralized System and User Management



Locate systems on a Google map, review alerts, and manage access in just a few clicks. Administrators can restrict local access with three distinct preset user roles for granular control.

## Data Visualization and Analysis



View system data as charts or export for custom analysis. Access event logs, battery status, trigger counts, and usage indicators.

## Dedicated technical support for Navigate Traffic Cloud

At Traffic Innovation, integrating a remote management platform for electronic signage represents a major operational shift for municipalities and public organizations. That's why we offer comprehensive technical support provided by a dedicated team to ensure optimal, scalable, and secure use of Navigate Traffic Cloud™. Our goal is simple: every user fully benefits from their connected signage network, day after day.

### Commissioning & Initial Support

From even before the platform is running, our experts will support you every step of the way.

- Network configuration and module communication
- Integration of connected equipment and electronic signs
- User access creation, management, and hierarchy
- Deployment testing, diagnostics, and validation
- Role-based personalized training

### Multichannel Support & Continuous Assistance

Our support never ends with installation. We offer technical support available by phone and email, enabling quick resolution in case of questions or more complex technical analysis. Our resource library also offers:

- Training videos and evolving documentation
- Troubleshooting articles and release notes

### More than a Tool: A Lasting Technical Partnership

Choosing Traffic Innovation is much more than just adopting a platform.

It means benefiting from a reliable and proactive technical partner who ensures the continuity and efficiency of your digital infrastructure. Our support service guarantees maximum return on your technological investment, while ensuring intelligent, stable, and sustainable management of your electronic signage assets.

# TNS-SV Road Traffic Analyzer



## TNS-SV Road Traffic Analyzer

The **TNS-SV** traffic analyzer integrates with Navigate to provide comprehensive, automated traffic data monitoring. It transmits vehicle speeds, volumes, and types in real time, which the platform organizes into graphs, interactive maps, and downloadable reports.

This direct connection makes it possible to observe trends, assess road safety, and adjust municipal interventions from a single, reliable, centralized interface.

This section of the platform is also compatible with **THIN** and **KAMELION** technologies, enabling uniform and centralized management of the entire equipment fleet.



Kamelion Speed Display



Thin-12 Speed Display

### TNS-SV Road Traffic Analyzer

Radar Type	Doppler
Width	12° x 24°
Speed Range	5 to 200 km/h (3 to 124 mph)
Transmission Range	300m (1000 pi)
Data Collection	Bidirectional
Wireless Communication	Bluetooth (as option)
Power Source	7.4V Lithium Battery
Battery Autonomy	7 days
Housing	ABS
Support	Stainless steel
Weight	1.1 kg (2.4 lbs)
Operational Temperature	-40 to 50°C (-40 to 122°F)
Power source options	Solar panel or AC/DC

# TNS-SV Road Traffic Analyzer



## See. Understand. Act. The Power of TNS-SV

The TNS-SV traffic analyser transforms traffic data into a concrete decision-making tool. Integrated into **Navigate**, it provides a clear and continuous view of user behaviour, enabling the effectiveness of developments to be assessed and interventions to be targeted.

Its real-time connectivity and automated reporting simplify the monitoring of traffic trends and the communication of results. Compact, accurate and fully autonomous, it helps municipalities improve road safety and plan actions based on real data.



Vehicle type identification



Simple installation on standard poles



Discreet, lightweight design



Real-time data transmission



Reports and interactive maps

## Driving behavior analysis

The graphs illustrate **Navigate's** ability to manage, analyze, and compare traffic data collected by radars. The platform aggregates speed, volume, and classification measurements to generate clear visualizations based on time period, vehicle type, or traffic direction.

These analyses highlight behavioral trends, such as rush hours or recurring speeding.



Daily Report



Weekly Report

# THIN Dynamic LED Street Parking Management



## Dynamic Parking Sign

The THIN P-150-13 dynamic LED parking sign is specially designed to optimize seasonal and winter parking management.

With wireless communication and activation, this cutting-edge solution allows your team to control and update signage remotely, greatly simplifying maintenance operations. By leveraging dynamic communication, this sign improves message clarity and ensures that parking regulations are easily understood by citizens, promoting better compliance and smoother traffic flow. In addition, its ability to broadcast information in real time reduces response time, limiting manual interventions and optimizing maintenance efforts.

Case study in Laval from 2020 to 2023: *“The rate of vehicles in violation in the pilot project areas was 16% and 7%, a decrease ranging from 50% to 78% lower than in other areas of Laval.”*

Source: City of Laval

**i** Over 4,000 P-150-13 panels deployed in the city of Laval since 2024



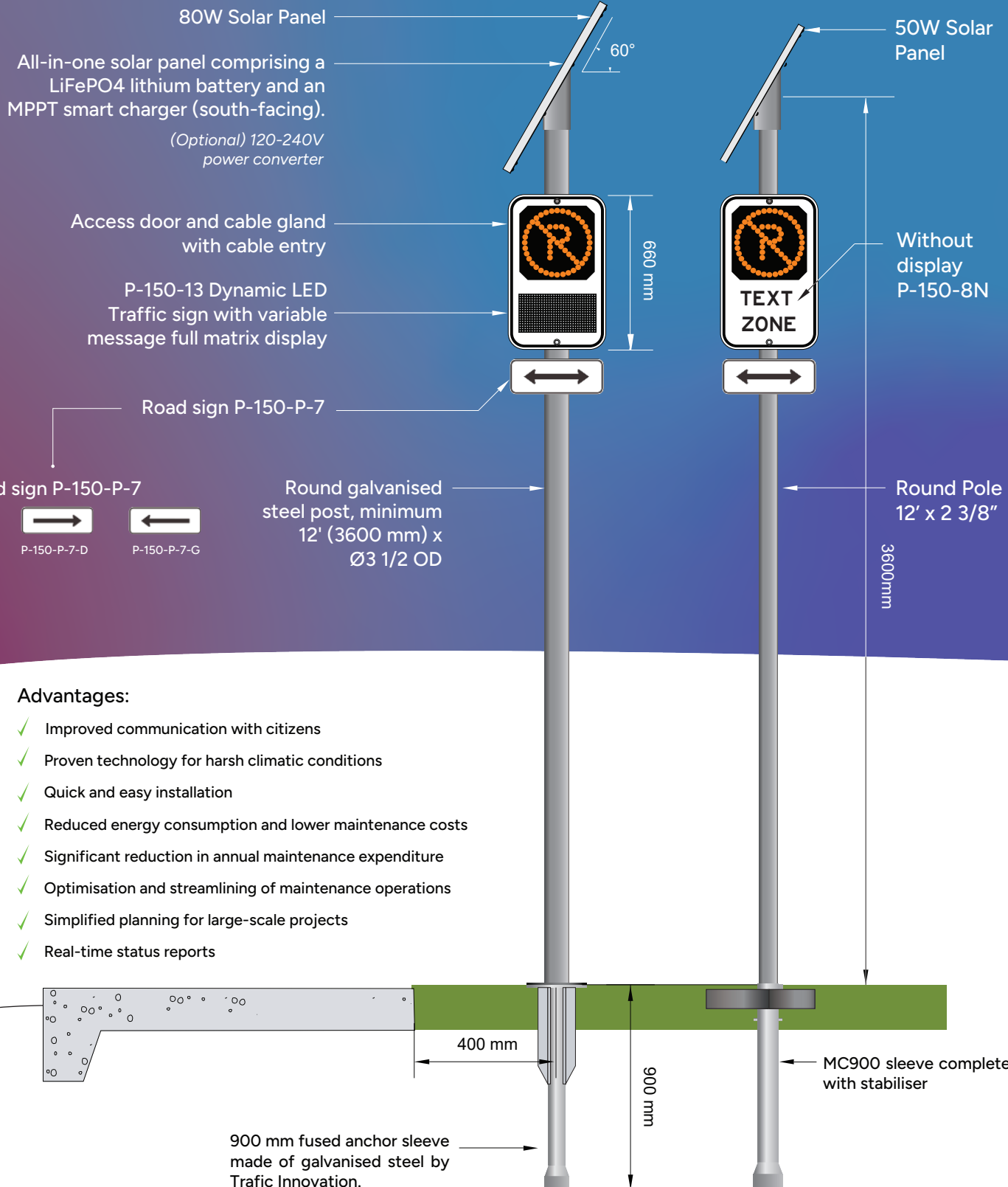
Variants of the P-150 standard panel

### THIN Dynamic LED Street Parking Management

Panel	3,2mm thick Aluminum (0.125")
Protective Housing	HMW Polyethylene+cable cover
Dimensions	406 x 660 x 280 mm (16" x 26" x 11")
Reflective Sheeting	3M HI Type IV (ASTM D-4956)
Number of LEDs	60 LEDs
Angularity of LEDs	60°
Luminous Intensity	Variable from 25 to 330 cd
LED Lifespan	50 000 hours
P8 Matrix	320 x 160mm (12.5" x 6.25")
Flasher Dimensions (P)	300mm (12")
Conformity	Tome V
Connection	Snap-in, overmolded IP67, 10 mm OD
Operational Temperature	-40 to 55°C (-40 to 131°F)



# THIN Dynamic LED Street Parking Management

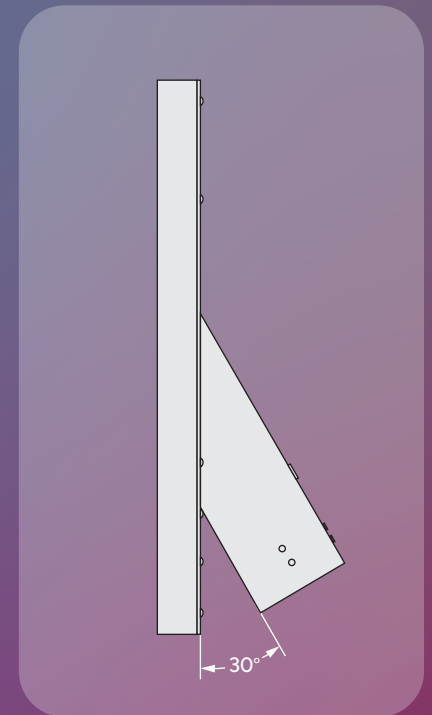


# THIN Dynamic LED Street Parking Management

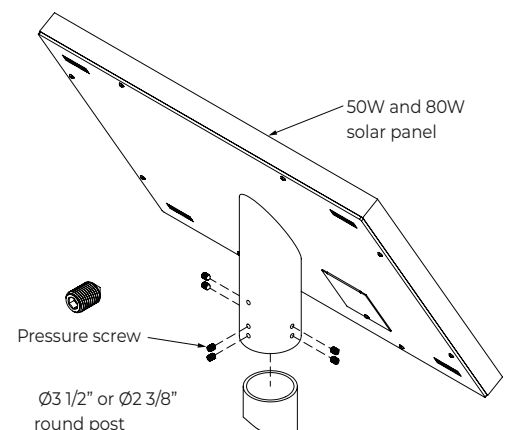


Specifications	80W	50W
Product No.	#39517	#40020
Lithium Batteries	63 Ah LiFePO4	
Recharge time (1000W/m <sup>2</sup> )	10 hours	14 hours
Battery life after 5 years of use*	7 days Minimum 80% charge 15-20 years	
Dimensions	750 mm L x 580 mm H x 45 mm Thickness	537 L x 670 mm H x 30 mm Thickness
Weight (battery included)	18.7 kg	11 kg
Communication protocol	RS-485	
Exit voltage	11 to 14.4V depending on battery charge	
Indicator lights	Battery status LED indicator Red, Yellow, Green	
Solar charger	MPPT, 10A, IP67 with connection cable	
Connector	10mm OD, IP67	
Operational temperature	-30 to 40°C	
Battery support and MPPT	Aluminum support with inserts	

\* Light intensity of the P-150-13 panel (200-300 cd during the day, 75-150 cd at night)



Structural Compatibility	80W	50W
Suggested post	Round Ø 3 1/2" Standard galvanised steel ASTM A123	Round Ø 2 3/8" Galvanised steel, standard ASTM A123 and painted
Charge calculations	Completed	Completed
Soil anchor	Fused anchor	MC900 Anchor
Soil stabilisation	No	Yes
Support for installation	Tenon for round post Ø3 1/2" 360°	Tenon for round post Ø 2 3/8" or square 360°



# P-150-8 Dynamic LED Parking Management Sign with remote activation



## Electronic signage for winter parking

The P-150-8-N smart sign is designed for seasonal and winter parking management. Thanks to wireless communication and activation, your managers will be able to manage signage efficiently, greatly reducing maintenance operations.

The P-150-8-N No Parking flashing sign stands out for its ultra-slim design and smart technology. Fully autonomous and easy to install, it enables dynamic, remote management in real time, offering municipalities a modern, efficient solution without the need for heavy infrastructure.



Simple and easy to install



Ultra bright LEDs



Solar power



Wireless activation



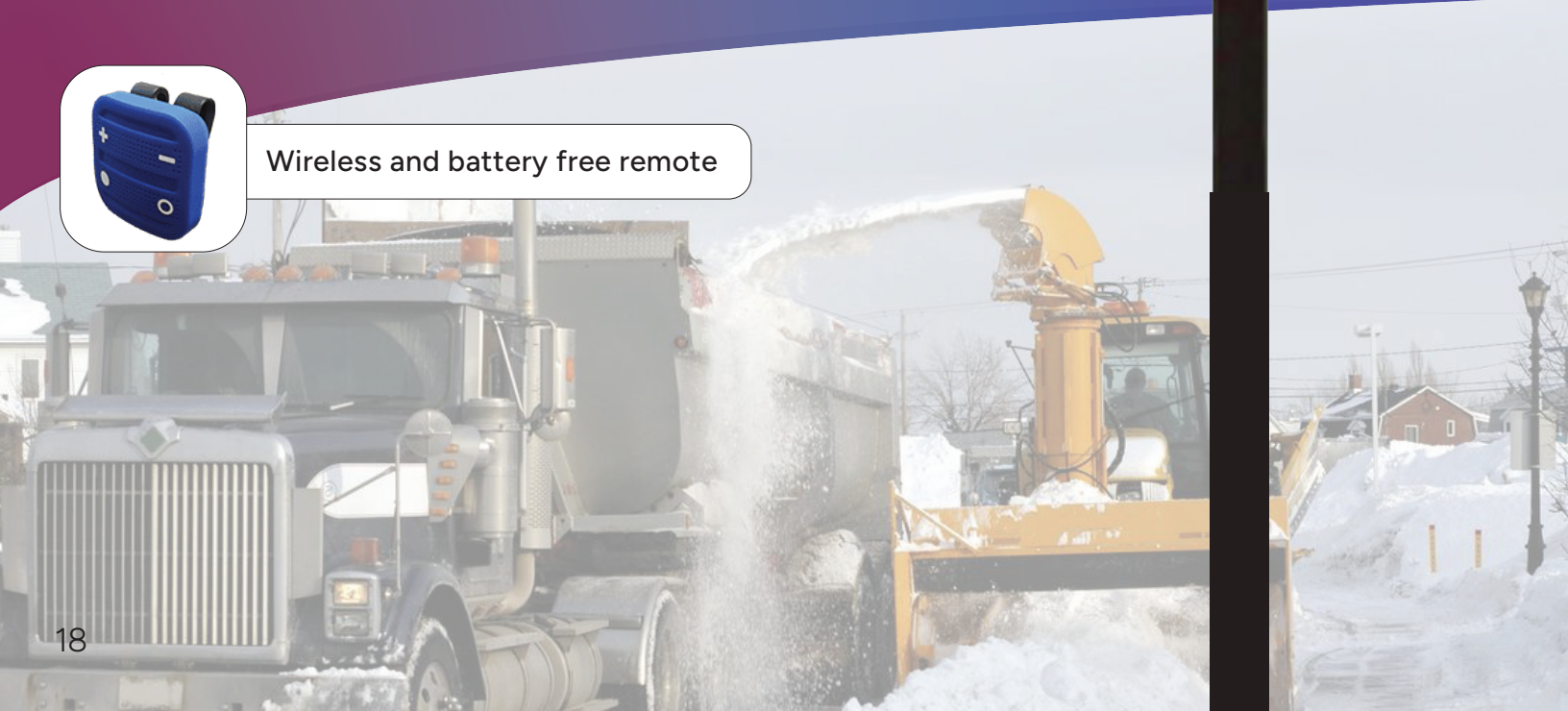
Multiple configurations



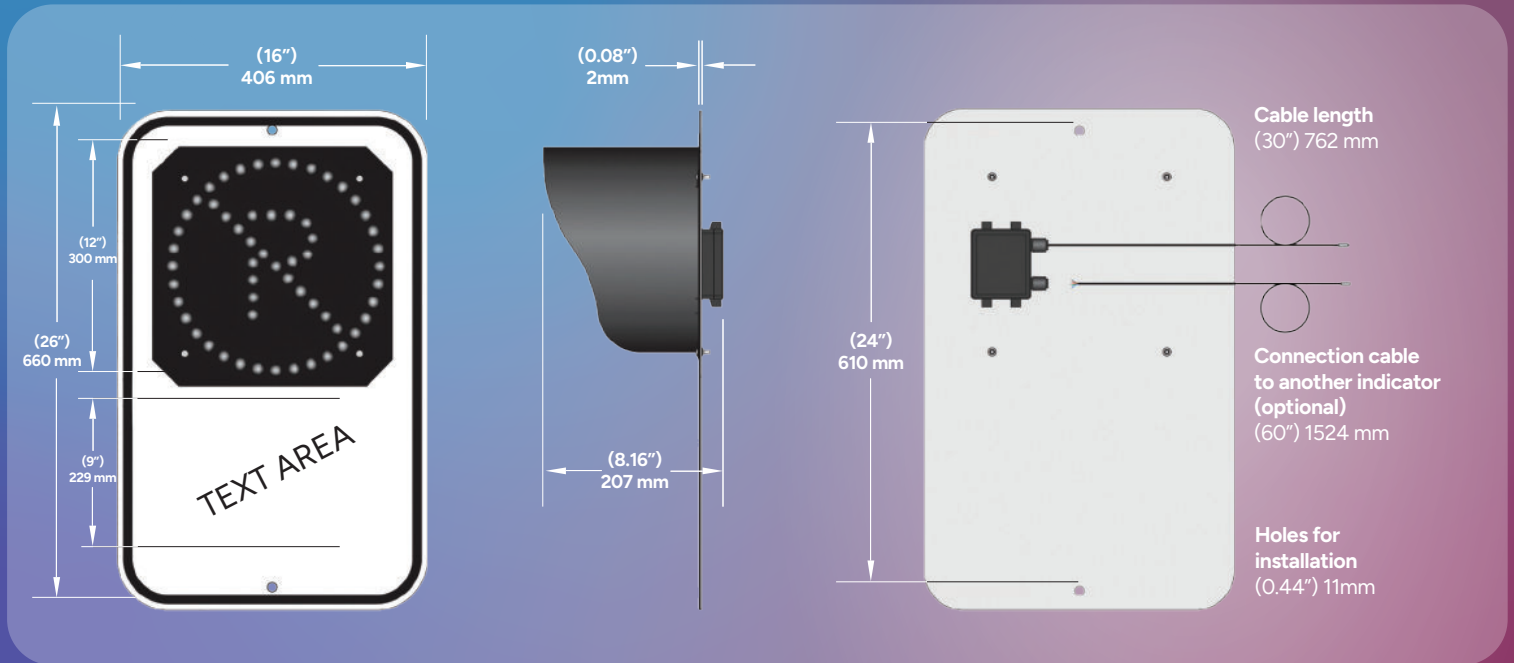
Ergonomic and ultra light



Wireless and battery free remote



# P-150-8-N Dynamic LED Parking Management Sign with remote activation



## TECHNICAL INFORMATION

**Product No.** #36174

**Material**

Reflective Sheeting	3M high intensity prismatic D 4956-09 ASTM type IV
Panel	2mm (0.08") Aluminum 5052-H38
Visor	Aluminium, powder coated black
Lens	Transparent PPMA UV protection
Environmental Protection	IP67
Weight	5 lb (2.3 kg)

**Delivery**

Box 406 x 660 x 254mm  
(16 x 6 x 10") Weight 6 lb (2.7 kg)

**Warranty**

2-year limited warranty against manufacturing defects

**Display component "P"**

Flasher dimensions	300mm (12")
Standard	MTQ - Book V Chapter 8.14
LED Lifespan	50 000 hours
Luminous intensity	Variable from 25-330cd (±3%)
Color	Portland Orange (605nm)
12V Power consumption	up to 2,85 W day - 1.5W night
Controller	Integrated
Controller voltage	10.8 to 15V DC
Connection	Snap-in, overmolded connector IP67 10mm OD
Flash profile	MUTCD (0.5 sec) or solar panel mode (0.2 sec)
Operation modes	Night only or on demand

# Variable Speed Limit Sign (VSLs)



## Variable Speed Limit Sign (VSLs)

The Kamelion-VSLs speed display is a variable speed limit sign that can be programmed according to a schedule based on specific requirements. It can be programmed to activate a maximum speed according to a schedule (daily, weekly, or yearly).

Its **full-screen matrix** displays all standard speeds with excellent readability, while the **smart photocell** automatically adjusts brightness according to the environment. **Flashing lights** activate when the reduced speed is in effect, maximizing driver attention at the most critical moments.

### Variable Speed Limit Sign

Housing	Polyethylene (PE) with anti-UV
Window	Polycarbonate .188" (5mm), antiglare
Display size	640 x 480mm (25 x 19")
Resolution	64 x 48 pixels
LED angularity	50° x 100°
Digits height	370 mm (14,6")
Visibility	More than 200m
Connector	10mm OD, Male, 36", IP67
Luminous Intensity	Variable based on ambient light
LED Colour	White
Weight	12 kg (26 lbs)
Operating Temperature	-40 to 50°C (-40 to 122°F)

# Variable Speed Limit Sign (VLS)



## Where the Limit Follows the Context

The VLS panel is specially designed to display clear, dynamic messages that adapt to speed variations throughout the day. Its superior readability ensures that drivers can quickly take in the information, improving compliance with speed limits and directly supporting traffic calming objectives.

Programmed and adjusted remotely in just a few clicks via our Navigate Traffic Cloud platform, it enables agile and instantaneous management. The VLS is establishing itself as a strategic tool for modernizing speed management.



Suitable for sensitive areas



Effective teaching tools



Ultra-Bright LEDs



Speed reduction tool



Automated scheduling

## VLS Control and Programming

The platform allows for highly flexible operational management of the VLS. Municipal teams can remotely modify speed limits, activate or deactivate flashing lights, or even automatically schedule their activation periods.

This centralized management facilitates the adaptation of signage according to the context: school drop-off and pick-up times, difficult road conditions, rush hours, or seasonal needs, ensuring that speeds are always appropriate and safe.



L'interface utilisateur est sujette à changement

# Navigate Traffic Cloud™ Alert and Diagnostic Center



## Always Informed, Always Ready

Navigate's Alerts & Diagnostics module continuously monitors the status of your connected devices and automatically reports technical anomalies. The platform detects low battery levels, communication losses, and solar inefficiencies, then reports them in the form of detailed alerts.

Each event is time-stamped and associated with the correct device, facilitating monitoring and maintenance. Thanks to this centralized monitoring, municipal teams can respond more quickly, reduce unnecessary travel, and ensure that signage is always operational.



Automatic anomaly detection



Immediate alerts



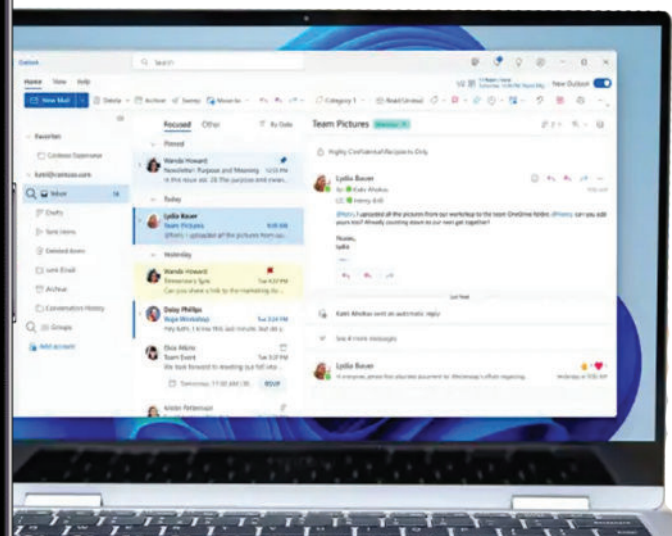
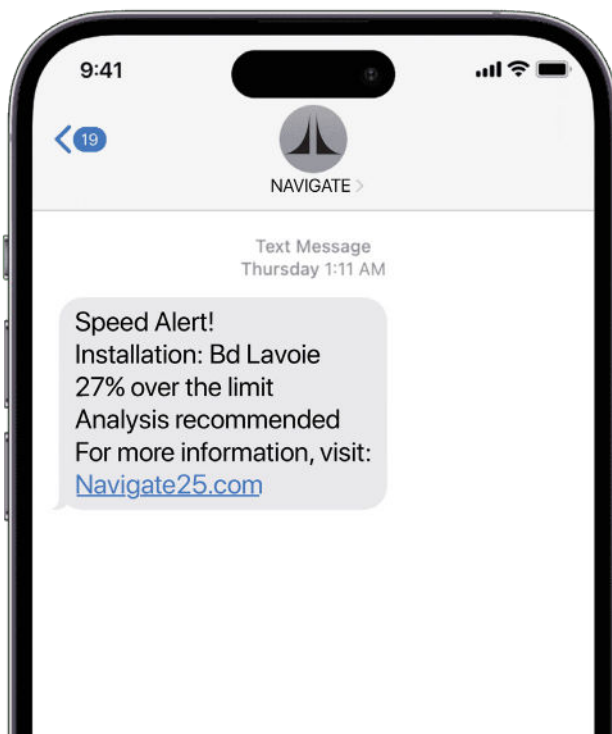
Battery and solar panel monitoring



Event History



Targeted and effective interventions



Many more features  
are coming soon...  
Stay tuned!



## Variable Message Sign (VMS)

The Variable Message Sign (VMS) displays dynamic, clear, and visible messages to inform users or manage traffic according to municipal needs. With its high-intensity LED technology and wireless connectivity, it integrates directly with the Navigate platform, where operators can program, modify, or activate messages remotely. The perfect tool for citizen communication.



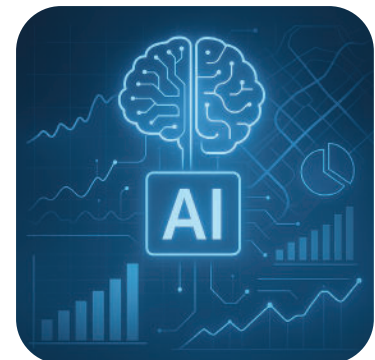
## Rectangular Rapid-Flash Beacon (RRFB) and Flashing Beacon

Rectangular Rapid-Flash Beacons and Flashing Beacons integrate with **Navigate** to provide centralized control and real-time technical monitoring. The platform displays the status of each device, battery charge, solar panel efficiency, and scheduled activation ranges, facilitating preventive maintenance and service continuity. An upcoming update will introduce automatic calendar activation, ensuring that signaling is always synchronized with network needs.



## Intelligent Data Analysis

Thanks to its **AI analysis modules**, **Navigate** transforms traffic data into relevant visual reports and indicators. The system detects behavioral trends, risk areas, and peak traffic periods, then generates recommendations for action. This approach enables municipalities to adopt proactive, data-driven management, improving the safety and efficiency of the road network.





# NAVIGATE

TRAFFIC CLOUD

Control your signage,  
Transform your city.

Powered by



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Video Presentation

