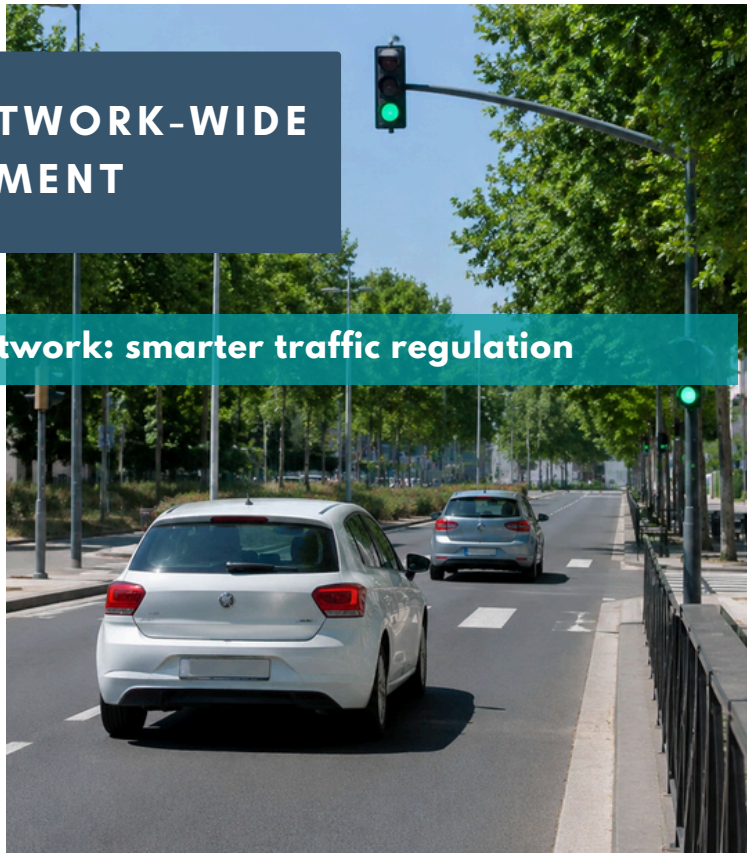
TRAFFIC DETECTION: MICRO-MACRO-REGULATION

FROM LOCAL DETECTION TO NETWORK-WIDE TRAFFIC FLOW MANAGEMENT



From individual intersections to the entire network: smarter traffic regulation

CAPSYS detection solutions help optimize traffic management both locally and across an entire route, corridor or network.

Thanks to their real-time detection capabilities, CAPSYS microwave radars and magnetic detectors address a wide range of traffic regulation and urban mobility applications.

MICRO-REGULATION

Micro-regulation operates locally at an intersection or along a specific route to optimize traffic signal cycles according to actual traffic conditions. It's allows :

TRAFFIC SIGNAL TIMING OPTIMIZATION

Dynamic adjustment of traffic signals according to traffic conditions: signal timing management, demand-responsive signals and dynamic signalling.

ROAD USER PRIORITIZATION

Taking public transport, priority vehicles and active mobility users into account to improve their movement through the network.

MANAGEMENT OF COMPLEX AND MULTIMODAL INTERSECTIONS

Simultaneous detection of different road users to improve safety and traffic flow at intersections.

REAL-TIME SAFETY AND ADAPTATION

Detection of specific traffic situations and immediate adaptation of intersection operation according to observed traffic conditions.

MACRO-REGULATION

For macro-regulation, data collected by radars and detectors provide a network-wide view of traffic conditions, enabling mobility to be optimized across a route, corridor or urban area.

NETWORK-WIDE TRAFFIC MONITORING AND FLOW MANAGEMENT

- Traffic flow and congestion level analysis
- Coordination across zones and routes
- Green-wave coordination
- Dynamic adaptation of traffic management strategies according to traffic conditions
- Improved overall network traffic flow

USE OF FIELD DATA

CAPSYS solutions provide reliable, actionable real-time data:

- Presence
- Passage
- Vehicle counting
- Speed
- Direction of travel
- Lane occupancy
- Classification, depending on the application

Capsys
Parc technologique des Fontaines - F 38190 Bernin - FRANCE
Tél : +33 (0)4 76 08 90 75 - Fax : +33 (0)4 76 08 89 85 contact.capsys@capsys.eu - www.capsys.eu

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RADARS AND DETECTORS FOR MICRO-AND MACRO-REGULATION





RFZS RADAR

The RFZS radar, featuring **24 GHz FMCW** technology, provides reliable detection of **vehicles, cyclists and pedestrians,** together with advanced detection-zone management.
It measures **distance, speed and direction of travel**. By adding a second detection zone, multiple use cases can be combined.

The RFZS radar adapts to a wide range of site configurations and supports multiple traffic regulation applications.

MAGNETIC DETECTORS

MAG-FLEX magnetic detectors provide highly responsive **presence and passage detection for all types of road users.**

Combined with inductive loops, they provide a robust and accurate solution particularly well suited to signalized intersections and dedicated lanes.

CAP'MOBILE by Capsys
A configuration and installation support app offering ease of use, intuitive operation and real-time configuration.



BENEFITS OF CAPSYS SOLUTIONS

- Consistent and stable detection for fine-tuned traffic regulation strategies
- Optimized intersection and traffic flow management
- Improved traffic flow
- Reduced waiting times
- Improved safety for multimodal road users
- Quick and easy installation
- Built-in installer assistance
- Real-time visualization
- Flexible configuration according to the application

Expertise since 1991
French SME

+ 390,000 DETECTORS INSTALLED

For over 30 years, our multi-technology expertise has covered the full range of detection applications for vehicles, active mobility users, road-based public transport and rail transport.

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