AM.COM

Automatic traffic light management – signal priority for emergency vehicles

VERAUT

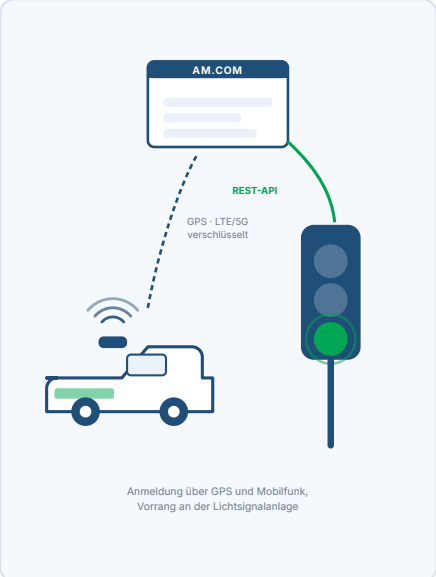
GREEN PRIORITY · GPS POSITIONING · LTE · 5G ENCRYPTED · REST API TO THE CONTROLLER · GREEN CORRIDOR · CONVOY CAPABLE · AUDIT-PROOF ARCHIVING · GDPR COMPLIANT

Green along the response route – automatically

AM.COM gives traffic lights along the response route priority automatically. The on-board unit registers with the server via GPS and the mobile network, the server predicts the route and requests green at the junctions concerned – with no action by the driver.

The installation keeps its own safety logic: interlocks, minimum red times and conflict groups remain in force. Instead of permanent green, a traffic and safety logic decides according to defined rules. If the mobile connection fails, the lights continue in normal operation.

The system is connected to the existing signal equipment – by project or by section, without replacing it. All switching events, response routes and system states are archived in an audit-proof way.



Green corridor

Coordinated priority across several junctions along the route.

Convoys

Several vehicles at the same time, including in formation and on special runs.

REST API

Connection to the existing traffic light controller, project specific.

Audit trail

Audit-proof archiving; export as CSV, PDF or through the API.

Product features

- Automatic priority request with no action by the driver
- Vehicle registers via GPS and the mobile network
- Triggered by the blue-light signal in the vehicle
- Green corridor logic across several junctions
- Convoys and several vehicles at the same time
- Traffic and safety logic by defined rules instead of permanent green
- Interlocks, minimum red times and conflict groups remain in force
- Fallback: normal operation of the traffic lights if the connection fails
- Encrypted transmission over LTE or 5G
- Audit-proof archiving of all switching events
- Reporting as CSV, PDF or through the API
- Role-based and logged access to sensitive data

Typical applications

- **Fire service** – pumping, ladder and tanker appliances en route
- **Ambulance service** – emergency and patient transport vehicles
- **Police** and other emergency vehicles
- **Convoys and special runs** with several vehicles
- **Control rooms** – monitoring, archive and reporting in one place
- **Traffic management centres** – integration into city-wide control
- **Smart city** – a building block of municipal traffic strategies
- **Retrofit** – existing junctions without a full rebuild

WORKS WITH Existing traffic light installations – connected through a REST API · Control room and traffic management centre – monitoring, archive and reporting · Vehicle fleet – on-board unit with GPS and mobile network · Rollout by project along the response routes

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Subject to technical change. The information describes the product status at the time of preparation and does not constitute warranted characteristics in a legal sense. Scope, interfaces and control logic are defined per project with the operator of the traffic light installation; binding delivery characteristics follow from the order confirmation.

01 On-board unit

Positioning	GPS/GNSS with direction detection
Communication	Mobile module for LTE or 5G; sub-GHz where a project requires it
Trigger	Blue-light trigger in the vehicle
Feedback	Signal status shown in the vehicle
Power supply	From the vehicle battery
Dimensions	approx. 150 × 100 × 50 mm, variable
Weight	approx. 350 g
Operating temperature	−25 °C to +60 °C

02 Interfaces

Traffic light controllers	REST API; several installations along one corridor
Further connection	Digital I/O, serial and Ethernet, project specific
Control room	API for monitoring, reporting and audit
Rollout	By project or by section, suitable for retrofitting

03 Server and control logic

Tasks	Route prediction, priority logic and safety rules
Green corridor	Coordinated priority across several junctions
Convoys	Several vehicles at the same time, including in formation
Installation logic	Interlocks, minimum red times and conflict groups remain in force
Operation	24/7 with redundancy
Fallback	The installation stays in normal operation if the connection fails

04 Communication and security

Vehicle → server	Mobile network over LTE or 5G, encrypted
Secure channel	TLS and VPN
Data	Position and status messages, priority requests
Access	Role based and logged

05 Logging and reporting

Archiving	Audit-proof: switching events, response routes and system states
Export	CSV, PDF or through the API
Analysis	Statistics and audit trail in the control room dashboard

06 Compliance and data protection

Signal control	Designed to be EU compliant and in line with road traffic rules, per the manufacturer
Data protection	GDPR-compliant processing; role-based and logged access
Evidence	Complete documentation for audits and official records

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