

ALIS SYSTEM

EXAMPLES OF USE



ALIS Tech s.r.o.

FIRST CLASS IN SAFETY

ABOUT ALIS TECH

ALIS Tech s.r.o. is a company looking at the safety of an operation of medium to large companies from a whole different perspective. We aim to create and ensure a safe working environment avoiding any possible accidents. We base our solutions on the latest technologies defining the direction of Industry 4.0 and implement digitalization trends into so-called blind spots to eliminate operational blindness.

ALIS Tech is founded on years of experience of mother company **Aledo s.r.o.**, which focuses on selling conventional technologies of HSE systems and industrial identifications. Neverending costly renewal of safety marking made with paint or stickers made us arrive at a new thought - the use of LED technology for illumination of safety symbols. We improved the vision of an autonomously safe operation by implementing an anti-collision system securing the safety of pedestrians, material handling technology, and company property. **ALIS Tech's** third division are systems for optimization and revealing critical spots in the operation, enabling the organization of work in real-time.

SELECTED REFERENCES

„We initiated a co-operation with ALIS Tech s.r.o. with a project aiming to increase the safety of transporting suspended loads. We equipped all cranes with LED projectors which alert anyone nearby by illuminating a safety symbol on the floor saying „Attention, moving suspended load“. We hold services and products of ALIS Tech in high regard which is why our cooperation has grown since its beginning. We decided to implement intelligent parabolic mirrors switching using microwave sensors, which lead to even more increased safety of our indoor transport. Our cooperation now spans over several years and we are looking forward towards the next extension of our anti-collision system.“

Petr Mráz, head of dept. occupational safety and health
Continental Barum s.r.o., Czechia



„We started to cooperate with ALIS Tech s.r.o. intending to improve safety in our operation. Thanks to their smart solutions - specifically built-in LED projectors in a parabolic mirror and safety LED marking for cranes we managed to eliminate operational blindness and increase the clarity of crossroads and space near suspended loads.“



Pavel Šmída, Head of HSE department
Hyundai Motor Manufacturing Czech s.r.o., Czechia

„ALIS Tech s.r.o. got us interested due to its unique solution for safety in near to suspended loads. We initiated a co-operation that has been growing continuously. Their innovative solutions in HSE systems are what defines ALIS Tech and why we follow their work.“

Čeněk Šlachta, Health, Safety & Environment Manager
Metso Czech Republic, s.r.o., Czechia



ALIS Shield

EXAMPLES OF USE

PROTECTED SUBJECT AND TYPES OF NOTIFICATION

**employee/visitor**
vibration, visual, acoustic, optoacoustic

**material handling equipment (MHE)**
visual, acoustic, optoacoustic, speed adjustment

FUNCTIONALITY OPTIONS

- autonomous deceleration of MHE against other MHE or in zones
- autonomous deceleration of MHE against pedestrians
- presetting of maximum speed in different zones
- turning on LED projectors triggered by movement of MHE
- controlling of electric devices (e.g. gates, doors) by MHE movement

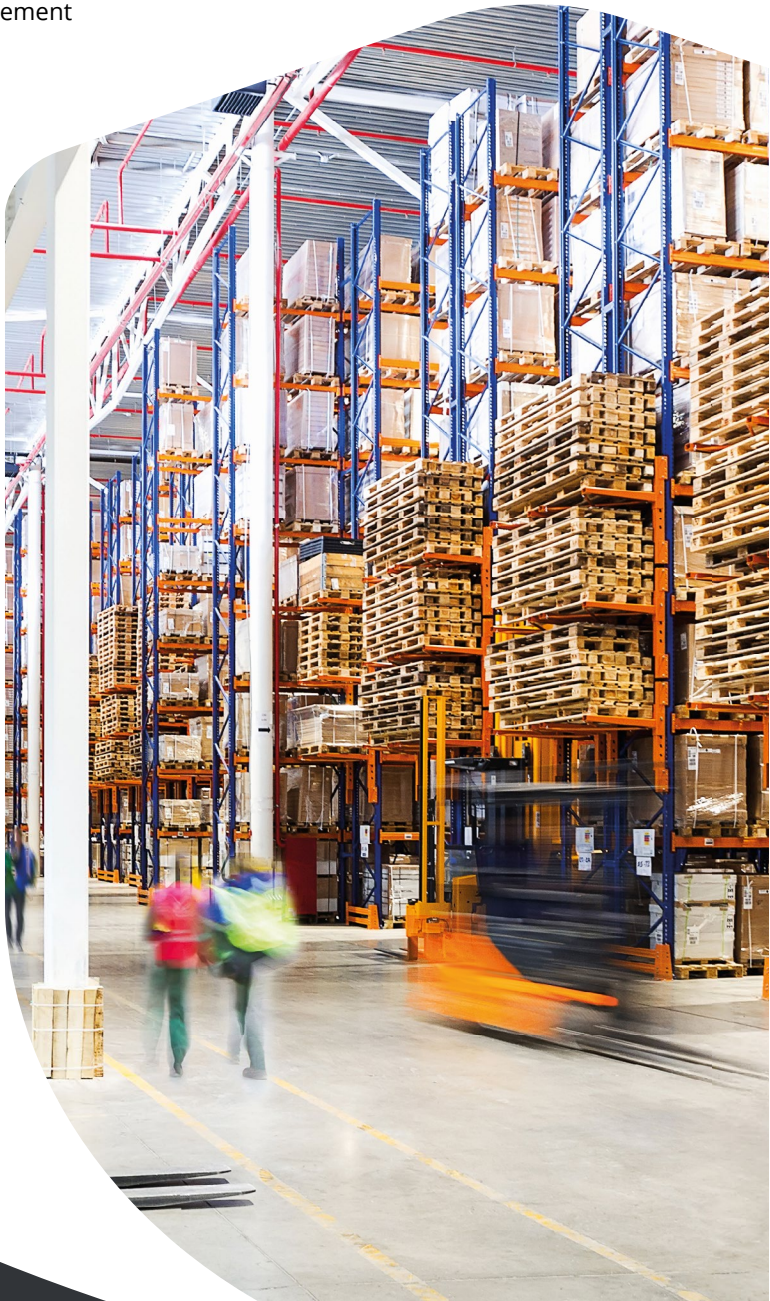
USED TECHNOLOGIES

- UWB, WiFi, BLE, active RFID
- image processing technology using neural networks

USE OF THE SYSTEM

**indoor**
use

**outdoor**
use



COMBINATION & COMPATIBILITY

VEHICLE TAG

Vehicle tag features 2 possible variants (AWL-V-1, AWL-V-3 see table A for more), based on the degree of compatibility with other system features. The selection of the suitable tag depends on the size of the fleet and required degree of safety.

PERSONAL TAG

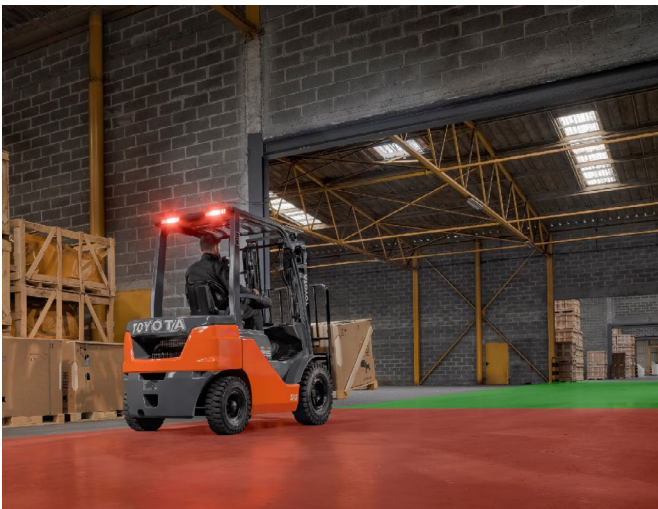
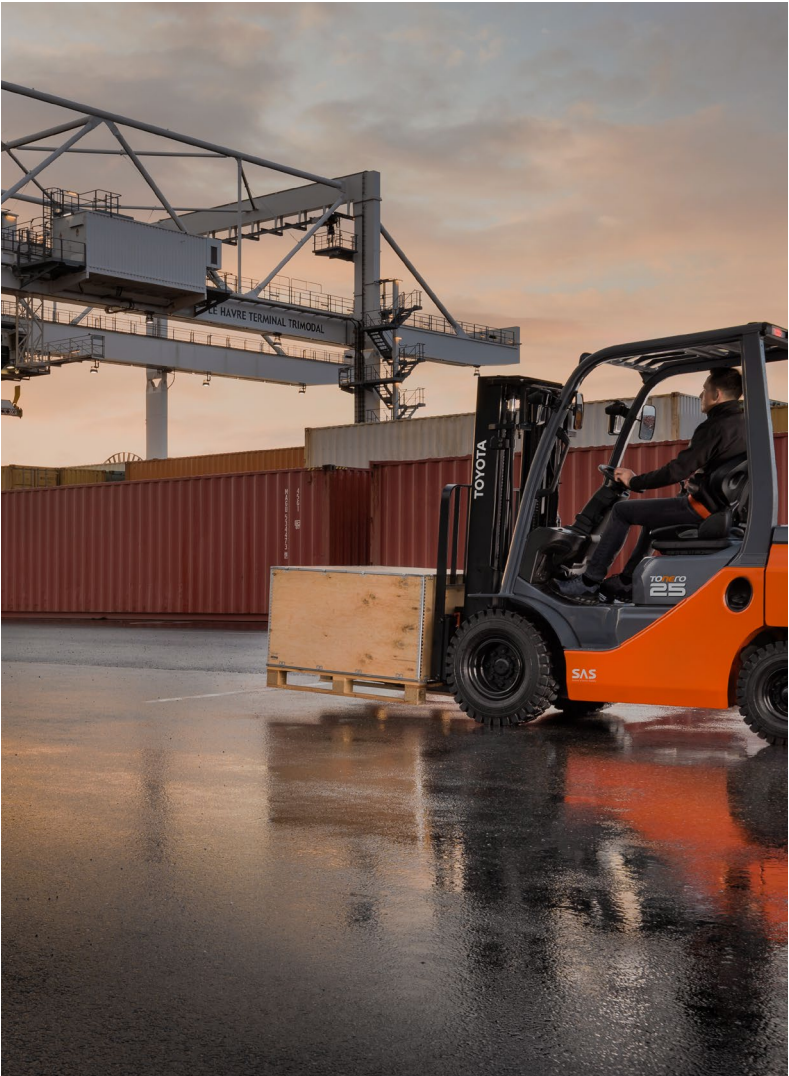
Personal tag is available as a card, bracelet or a tag that can be placed on a safety helmet or belt. The bracelet version is also available in **ATEX certified** variant - suitable for explosive environments.

READER

The selection of the reading device (READER) variant depends on the type of forklift tag and required functionalities. READERS come in single-antenna and double-antenna versions.

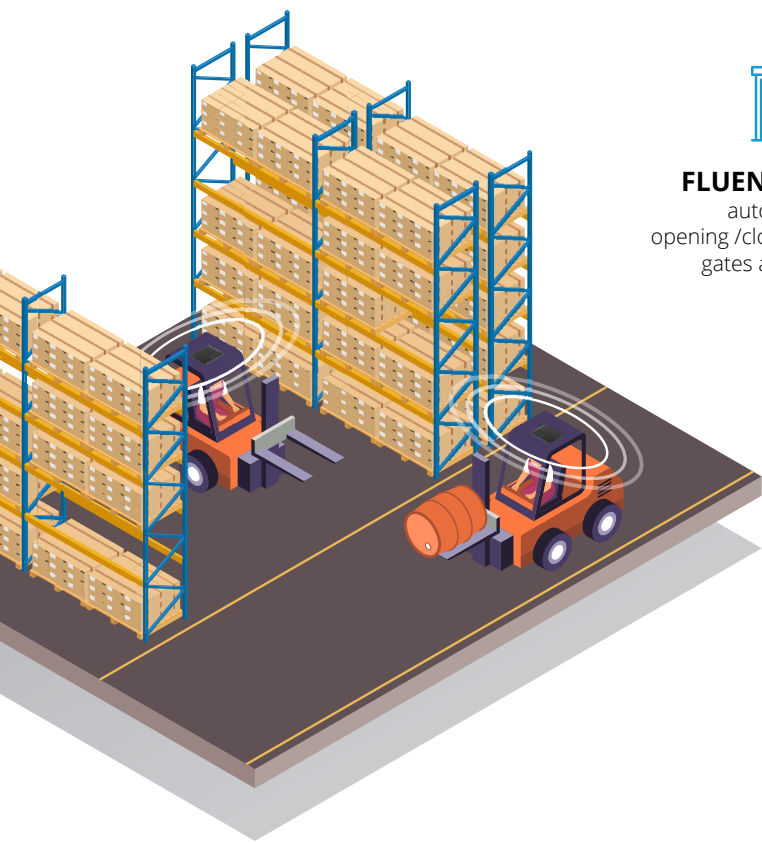
FUNCTIONALITY	VEHICLE TAG	
	AWL-V-1	AWL-V-3
activation of electric devices	●	●
deceleration in zones	●	●
deceleration against pedestrians	●	●


Tab. A




DECELERATION FORKLIFT VS. FORKLIFT

Autonomous deceleration of MHE to the minimum possible speed in order to prevent a collision. Notification of drivers inside the cabin by opto-acoustic signalization.




FLUENT TRAFFIC
autonomous opening /closing of industrial gates and barriers


SPEED REDUCTION
autonomous deceleration against other MHE


SIGNS
interconnectable with LED visualization




DECELERATION AGAINST PEDESTRIAN

Autonomous reduction of speed of MHE when dangerously close to pedestrians. Active notification of pedestrians using personal tag and drivers by using opto-acoustic signalization inside the cabine.




SAFETY ZONES
up to 2 safety zones between pedestrian and MHE

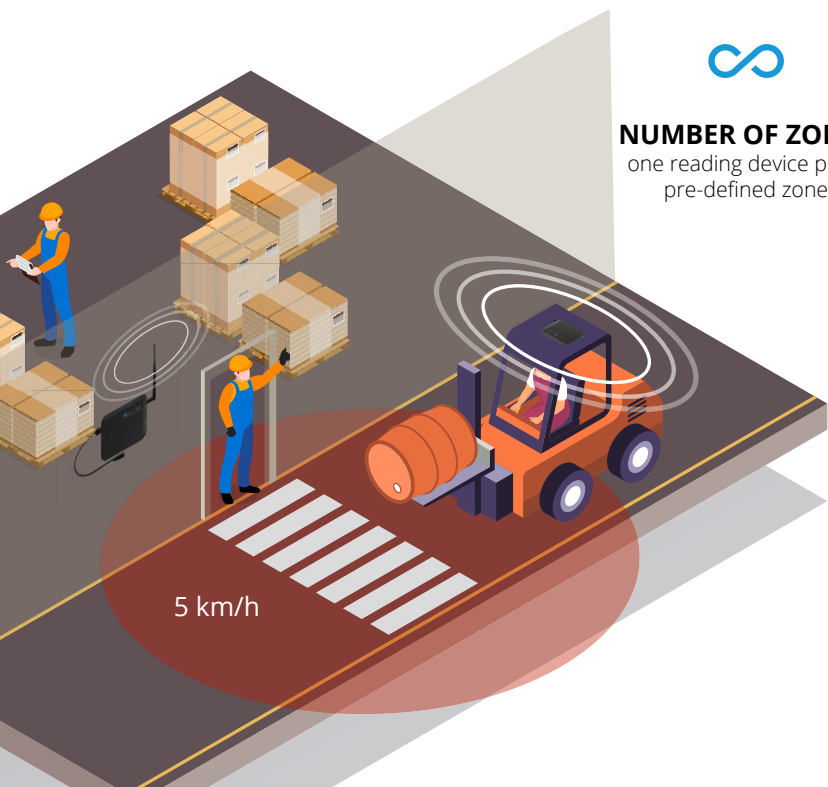

SPEED REDUCTION
autonomous deceleration down to the minimum safe speed against pedestrian



PEDESTRIAN NOTIFICATION
early notification of pedestrians on possible collision with MHE using vibrations or sound





DECELERATION IN CRITICAL ZONE

Autonomous deceleration to required speed upon entering a critical zone with subsequent acceleration to the original speed.




NUMBER OF ZONES
one reading device per 1 pre-defined zone


SPEED REDUCTION
easy definition of the maximum allowed speed





ZONE RADIUS
optional preset of zone radius up to 40 meters



ALIS Visualization

EXAMPLES OF USE

MAIN ADVANTAGES OF LED TECHNOLOGY

-  **safety symbols**
signs in various colours, shapes and sizes
-  **signs around suspended load**
projection of safety zone around suspended load
-  **operational blindness**
elimination of operational blindness




FUNCTIONALITY OPTIONS

- projection of safety signs triggered by motion (employee/material handling equipment) = **elimination of operational blindness**
- activation of LED projectors using sensors
- projection of large signs (e.g. pedestrian crossing)
- interconnectability with ALIS Shield or external PLC

USED TECHNOLOGY

- LED technology

PROJECTION AND ACTIVATION

-  **non-stop**
projection 24/7
-  **motion-activated**
pedestrian / material handling equipment
-  **pulsating/blinking**
pulsating safety sign



INTERCONNECTABILITY WITH SENSORS

COMPATIBLE SENSORS

- optical sensor
- motion sensor
- magnetic sensor
- infrared sensor
- etc.

COLLECTION OF LED PROJECTORS

ACTIVE COOLING



PASIVE COOLING



made in
the Czech Republic



humidity and dust
protection up to IP67



LED chip life up to
40,000 hours

SAFETY GLASS



UV and heat
resistant



multicolored
designs



standard and custom
symbols

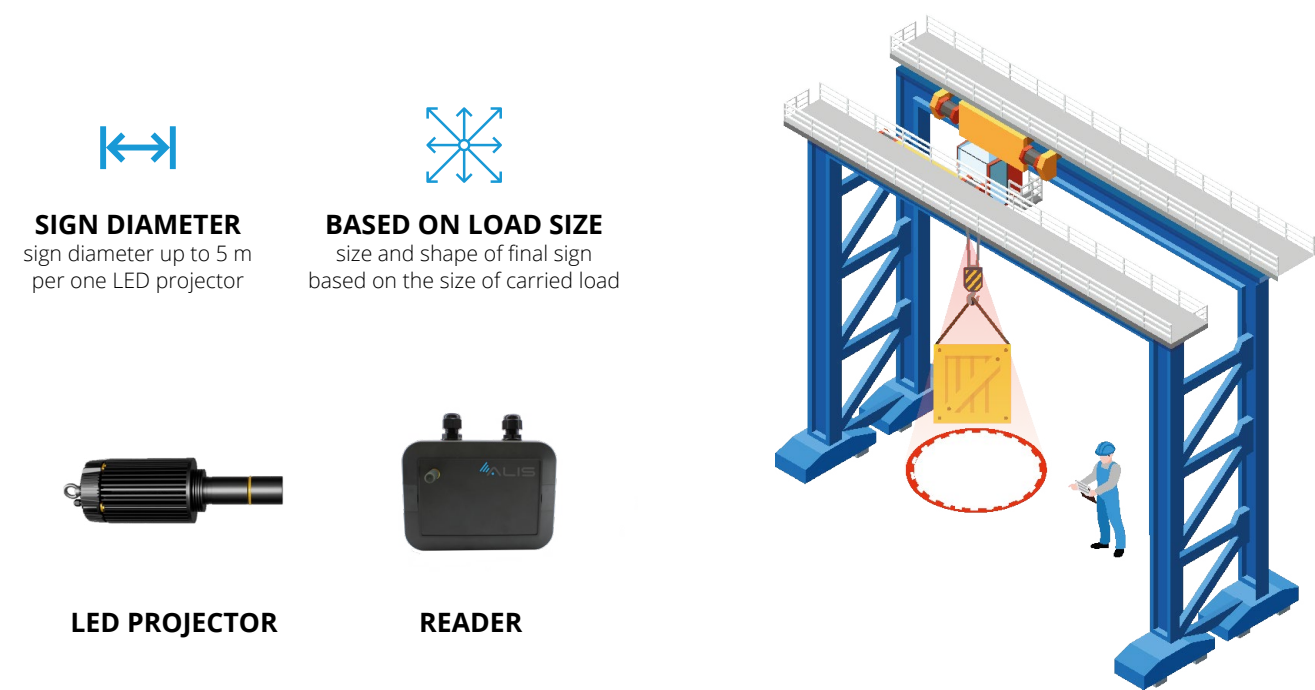


ALIS

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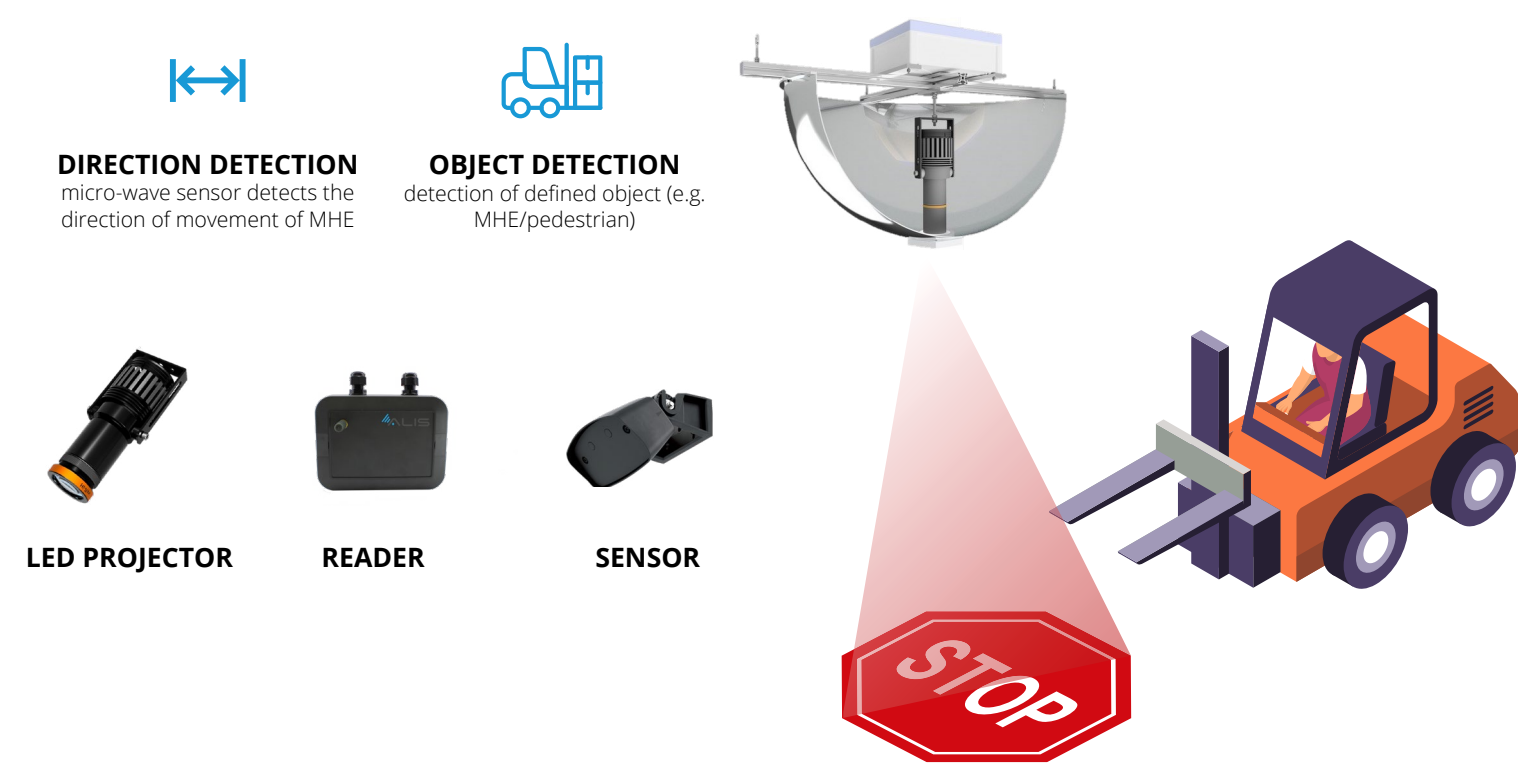
ILLUMINATION OF CARRIED LOADS

Projection of circular, rectangular or lengthwise signs in hazardous zones around carried loads using LED projector on crane.



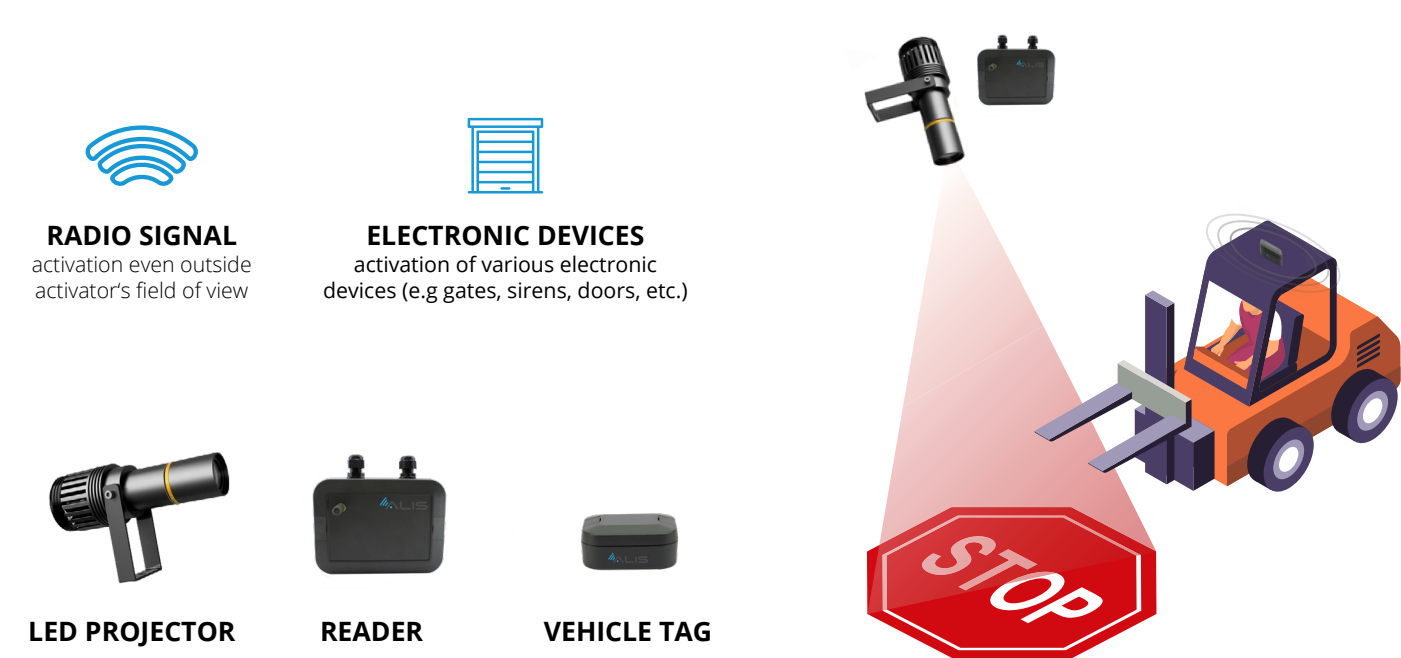
PROJECTOR ACTIVATION USING SENSORS

Activation of LED projector based on a signal from micro-wave sensor detecting direction of movement and size of given object. The solution can also be installed inside a parabolic mirror.



PROJECTOR ACTIVATION USING VEHICAL TAG

Projection of safety signs triggered by motion of MHE based on wireless communication between vehical tag and reading device on LED projector.



PARTNERSHIP NETWORK



„We consider **ALIS Tech** a young, innovative and dynamic company with a very high technological capability and great fresh flexibility to develop tailor suit industrial solutions for our customers. In **NOSIA SRL** we are very happy with our partnership. We assure will grow together in a wide range of industrial areas like Nuclear Power Industries, Petrochemical, Automotion, Paper&Pulp industry, food industries, pharma and power plants.“

Sergio Cadenas, NOSIA SRL, Spain



„Collaborating with the company **ALIS Tech** has enabled **Fitelec Prévention** to enter the 4.0 era of safety and prevention equipment and to offer its customers in the industrial and logistics sector an innovative and complementary offer. **ALIS Tech** is responsive and attentive to each project, to each partner and regularly researches what is new in the prevention and safety market, in order to offer them to us. Their philosophy is similar to ours: the customer is at the center of the relationship and we love our customers.“

Julie Bellanger, Fitelec Prévention, France



„We highly appreciate our co-operation with **ALIS Tech**. **ALIS Tech** supply, without a question, the best products on the market within eg. anti-collision systems and LED visualization. No matter what challenge we face, **ALIS Tech** is always helpful in finding the best solution to this. For the benefit of both us as distributor and our customers.

In short - **ALIS Tech**. always delivers high quality products and services.“
Thomas Vestergaard, ECK, Denmark

FIRST CLASS IN SAFETY BE PART OF IT

SELECTED REFERENCES



ŠKODA

VOLVO



HYUNDAI

SIEMENS

Continental

faurecia



Hydro



Nestlé

Good Food, Good Life

+ 100 ...

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