

AVALTAR

AI-DRIVEN SAFETY SOLUTIONS



CATALOGUE

CATALOGUE

October 2023

Our expertise lies in...

...AI image processing, neural networks, and machine learning, along with broad knowledge and background in workplace safety. We are always up-to-date with the latest cameras and sensors suitable for safety purposes and we stay a few steps ahead in innovative technologies.

We are dynamic, innovative and customer-oriented enthusiasts based in the Czech Republic, focused on the development of revolutionary workplace safety solutions for both industrial and public sector.

With years of experience in safety innovation, we understand the customer needs and that every industry has its own set of safety rules and regulations. Therefore, our team creates custom-made solutions utilizing the most suitable technologies and equipment.

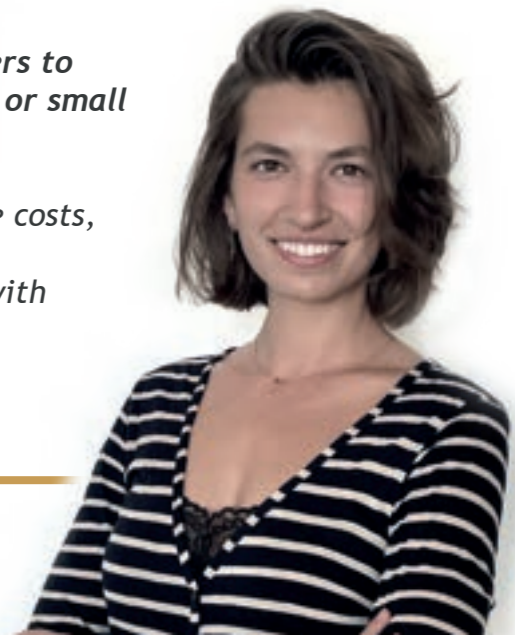
Whether you require anti-collision systems for forklifts, static camera monitoring for entryways or solutions for challenging places where accidents are more likely to occur, we are here for you.

Enhance safety. Reduce costs. Optimize processes.

„We are here to assist HSE managers, directors, and owners to keep an eye on their workplace safety, no matter how big or small their organization is.

We've developed systems that will improve efficiency, reduce costs, and increase safety, all at once. You can come to us with any of your safety concerns and trust that we will handle them with care and expertise.“

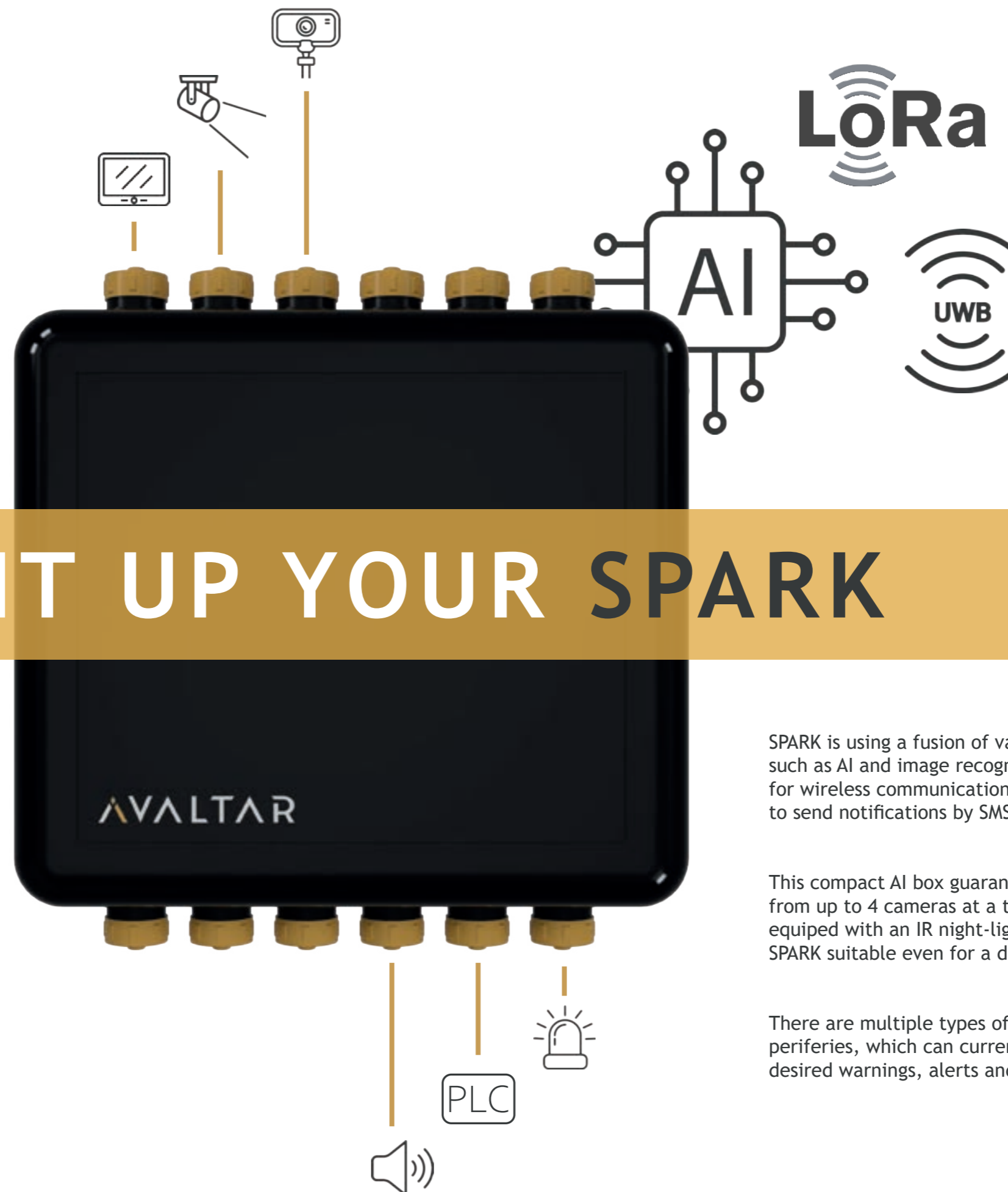
- Barbora Valtarová, founder & CEO



Smart Pedestrian Anti-collision Recognition Kit

SPARK, the revolutionizing safety system from AVALTAR, is a fully customizable solution which keeps you safe anywhere where it is needed.

Due to a possibility of simple on spot reconfiguration, SPARK can be tailored to detect any object in any area with multiple options of customizable alerts and actions.



S
P
A
R
K

LIGHT UP YOUR SPARK

„Discover the power of customized safety“

The beauty of SPARK lies in the possibility to easily build any type of a neural model suitable for a specific industrial environment.

Choose your desired:

Zones

Detection objects

Specific safety actions

and boost your safety to another level.

SPARK is using a fusion of various technologies, such as AI and image recognition, LoRa, UWB for wireless communication, and has a possibility to send notifications by SMS or e-mail.

This compact AI box guarantees reliable detection from up to 4 cameras at a time. The cameras are equipped with an IR night-light vision, which makes SPARK suitable even for a dark environment.

There are multiple types of predefined output periferies, which can currently cover most of the desired warnings, alerts and action.

One product, hundreds of options.

SPARK was created to meet a variety of customer needs and can be applied across different industrial sites. The possible usage can be categorized into three main areas:

1 Prevention

A prevention of accidents by taking necessary precautions and safety measurements monitoring (an access control, a safety PPE monitoring, reporting a density of people in areas. etc.).

2 On-site safety

An avoidance of accidents in case a person gets too close to a dangerous area, or nearby a dangerous machine/object/situation or around a material handling equipment (forklifts, cranes, etc.).

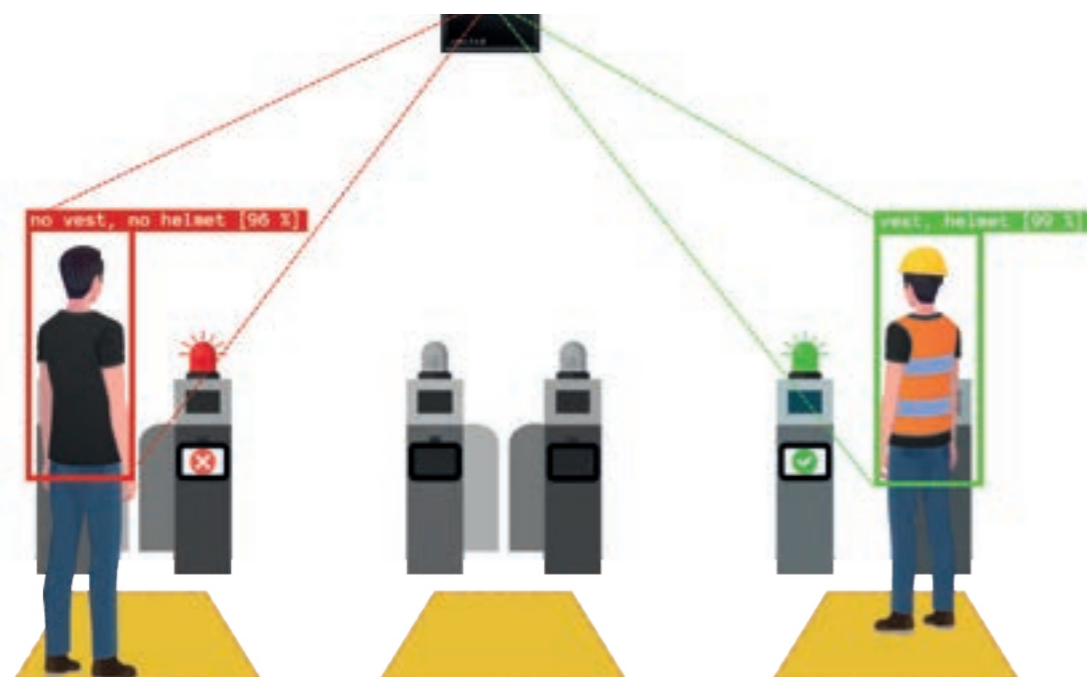
3 Assistance

A detection of accidents, injuries, faint or collisions of a pedestrian followed by calling help through alarm, SMS or e-mail to emergency services, HES managers, etc.).

USAGE EXAMPLES

1 ACCESS CONTROL

PPE monitoring (opening gates, turnstiles, limited entrances etc.)

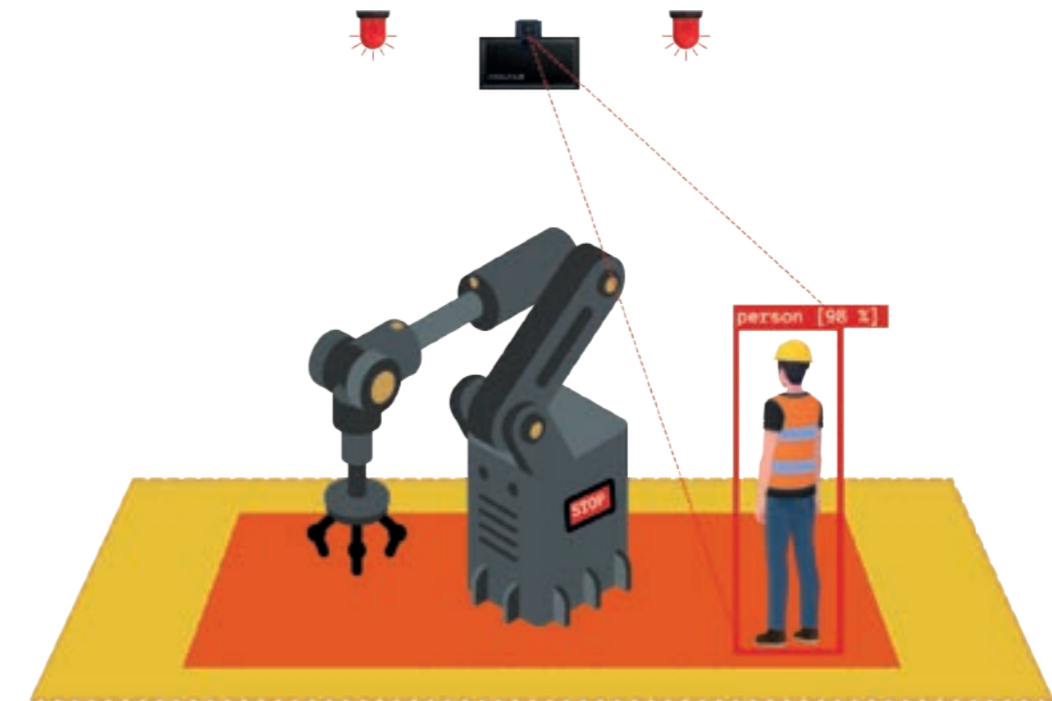


CUSTOMIZATIONS

2

MACHINE CONTROL

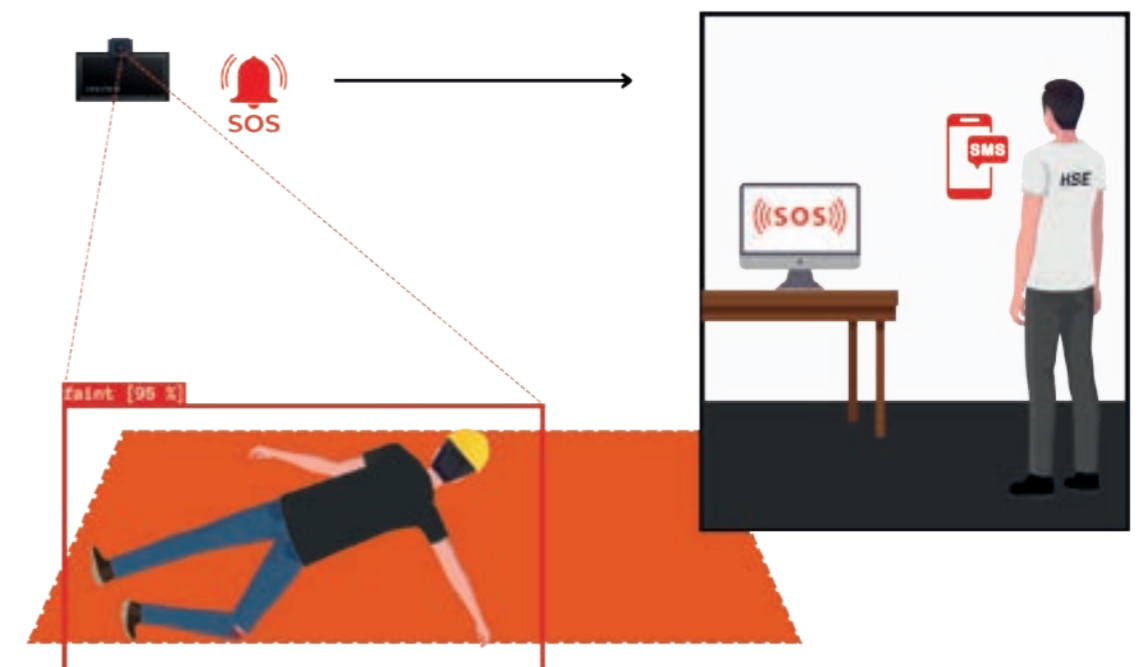
automatic STOP of a robots/machines/handling equipments/cranes



3

ISOLATED WORKPLACE CONTROL

detection of no movement, fall of a pedestrian and call for a help





FORKLIFT ANTI-COLLISION SYSTEM

What is it about?



fully
autonomous



zones
monitoring



accurate
detection



easily
customizable

AVALTAR anti-collision system efficiently prevents accidents in your workplace, safeguards employees while extending material handling equipment lifespan.

**„In simple terms:
advanced software & robust hardware.“**

In AVALTAR, we are constantly striving to make the best use of advanced AI technologies to keep you secure and prevent any injuries.

Our AI camera solutions are configured to precisely monitor 2 zones (warning and danger zone) around the forklift. These zones are set up during installation and can be adjusted anytime through our mobile app.

Thanks to an advanced neural network the system accurately detects pedestrian movement within the warning and danger zones and notifies the driver in real-time to prevent possible collisions. Such notifications include visual and audio warnings which can be customized based on the client's preference and needs.

Moreover, the system is ready to slow down or stop the forklift completely, if necessary.



automatic
deceleration



real-time
response



waterproof
dustproof



maintaining
driver's attention

COMPONENTS



indoor & outdoor usage



optional Cloud platform



audio notification



easy attachment via magnets

HW DETAILS

CAMERA

IP67

Suitable for an industrial environment and outdoor usage

LED lights

Creates more reliable recognition in a dark environment

120° field of view

Provides sufficient coverage of warning zones and surroundings



CONTROL UNIT

Micro SD Card

Data storage (e.g. footage of collision, alerts)

Wi-Fi and UWB

Integration with other wireless technologies for specific requirements

Passive cooling + IP67

An aluminium case ideal for industrial places



DISPLAY

View of surroundings

A 7" LCD with up to 3 simultaneous camera views or a simple rear view

Visual notification

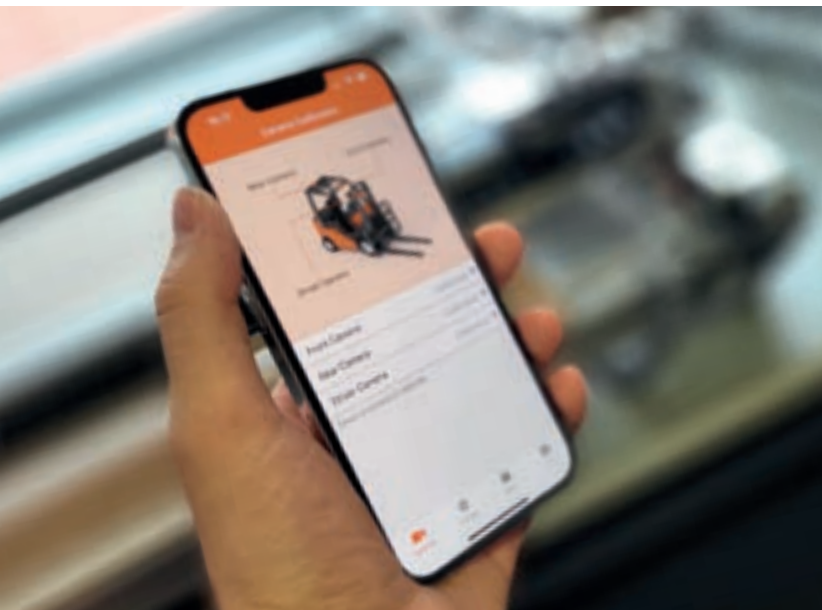
Notifies the driver with an orange or red signalization if there is a person in the warning/danger zone

IP67

Suitable for an industrial environment



SW FEATURES



MOBILE APP

Easy configuration

An immediate adjustment of detection zones and the forklift deceleration

Compatibility

Supported by iOS and Android

System settings

Access to the camera calibration, notification settings, statistics, etc.



AI DETECTION

Accuracy

A reliable, real-time detection to ensure minimum false alarms

Customizable

Adjustable to specific safety needs and concerns

Space monitoring

Detection of pedestrians and forklifts, PPE, accidents, etc.



DSS

included in the solution no. 3

Driver safety system

Enhances driver's awareness

Driver camera

A separate camera for drivers alerts them if they exhibit signs of:

- fatigue
- smoking
- smartphone usage

AVALTAR SOLUTIONS

1

AVA-F1-DB

rear view



AVA-F3-DB

rear view and side camera view

2



3

AVA-F2-DB-DR1

front and rear view

+

← DSS (DRIVER SAFETY SYSTEM)



More than 12 partners...

...are cooperating with us throughout Europe. They can support you locally at your industrial site, assist with the installation of AVALTAR solutions, handle the maintenance or provide any other support you may need.

Do not hesitate to contact us and we will guide you to the appropriate partner.

A few words from our partners:



„Avaltar is a young and dynamic company with a wide experience in electronics, programming, and hardware for safety-tailored solutions by real-time analytics. For us, it is a great partnership making our position in the market stronger and more efficient.“

- Sergi Cadenas, Spain, founder of Nosia SRL



„We are very happy and privileged to have a partnership with AVALTAR Tech. Their commitment to providing tailored solutions, real-time analytics and exceptional support has made them an invaluable ally in our shared mission to deliver top quality safety solutions to our clients.“

- Damian White, United Kingdom, founder of Clarity



„We are pleased to cooperate with AVALTAR Tech and proud to be their partner in Romania. Their sales and technical support are fast and clear, and their product portfolio is well-designed. Working with them has been a positive and rewarding experience as we value their honesty and flexibility.“

- Kardynal Manufacturing, Romania

Interested in becoming one of them?
Talk to our sales team.



DAGMAR
M: +420 739 250 542
E: eckertova@avaltar.com



LUCIE
M: +420 739 250 524
E: skarupova@avaltar.com

AVALTAR

AI-DRIVEN SAFETY SOLUTIONS

Creating stories with happy endings.

AVALTAR Tech s.r.o.

+420 739 250 542
office@avaltar.com
www.avaltar.com

Purkyňova 649/127, Brno 612 00, Czech Republic