# AI-DRIVEN SAFETY SOLUTIONS



### CATALOGUE

### Our expertise lies in...

... Al 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

### CATALOGUE

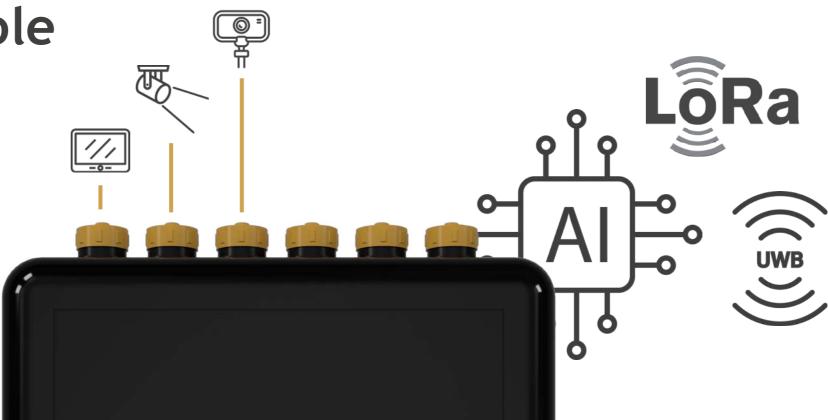
February 2024



### Smart Personalisable **Anti-collision Recognision 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.



## 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.

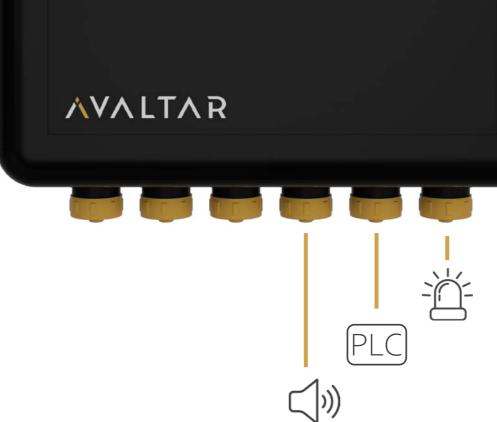
Choose your desired:

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 possilibity 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 equiped 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

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

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 equipement (forklifts, cranes, etc.).

#### 3 Assistance

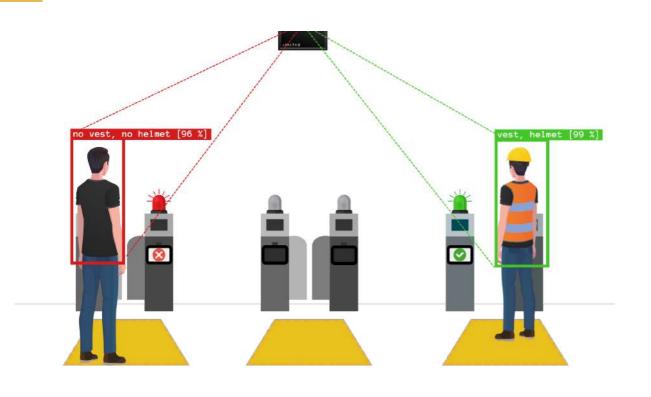
Detection of accidents, injuries, faints or collisions of a pedestrian followed by calling help through alarm, SMS or e-mail to emergency sevices, HSE managers, etc.).

### USAGE EXAMPLES



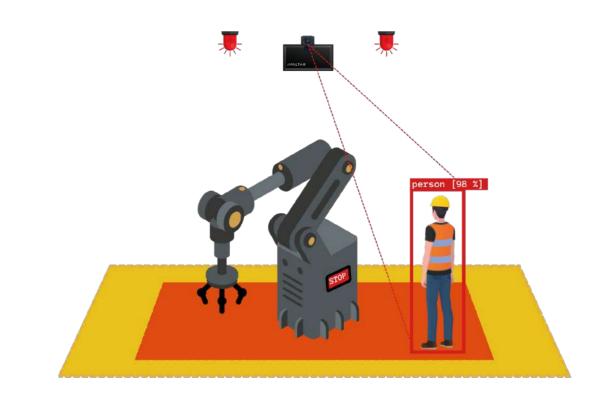
### ACCESS CONTROL

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



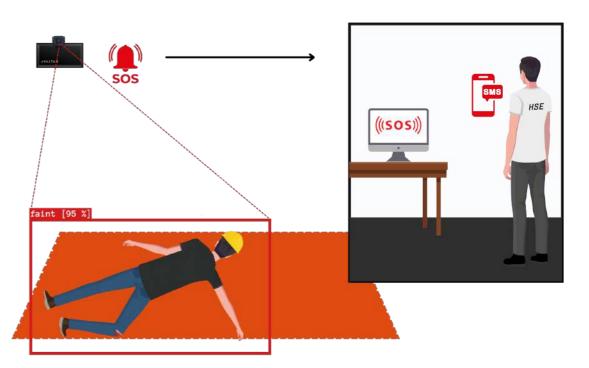








**ISOLATED WORKPLACE CONTROL** detection of no movement, fall of a pedestrian and call for help



### **CUSTOMIZATIONS**

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



## FORKLIFT ANTI-COLLISION SYSTEM

### What is it about?



fully autonomous

zones monitoring

accurate detection

5



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



#### 👼 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

#### 

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

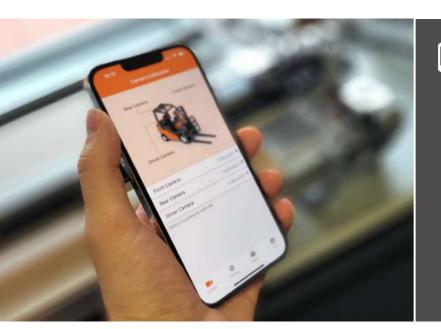
### HW DETAILS







### 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

#### AVA-F1-DB rear view









AVA-F2-DB-DR1 front and rear view



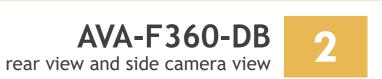
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### **AVALTAR SOLUTIONS**









### 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:



"We are extremely pleased with the partnership established with AVALTAR. Their products and services have consistently demonstrated quality and professionalism, effectively solving problems and creating safer work environments. We look forward to continuing our collaboration and exploring new opportunities together."



- Sergio Cardoso, Portugal, Fox Solutions

"Even though AVALTAR Tech is a newly started company they are very innovative and produces the best products within anti-collision systems, for the benefit of us as a distributor and our customers. AVALTAR Tech always delivers an excellent service and, most important, high-quality products, which increases the work safety at the end users.

- Thomas Vestergaard, Denmark, ECK



"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

### Get in touch. Talk to our sales team.



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



DANIELA M: +420 735 947 598 E: hoffman@avaltar.com

# 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