



# All solutions are divided into 4 large blocks



#### Manufacturing efficiency

- Counting bags, boxes or similar objects on a conveyor
- ArUco marker detector
- Monitoring warehouse operations in a finished goods warehouse
- Tracking and monitoring staff working hours
   Tracking and monitoring the presence of
- staff in the work area

#### 2 Protection from external factors

- Licence plate recognition
- Employee face recognition
- Access control system in conjunction with face and licence plate recognition
- Access control system based on card and employee face recognition (two - factor authentication)
- Detecting intrusion into a restricted area by an unauthorised person, vehicle or bicycle

Video surveillance of large areas

'Smart Checkpoint' solution

#### 3 Internal security

- Monitoring wearing of helmets
- Monitoring wearing of protective clothing
- Monitoring mask wearing
- Detecting employee recumbent posture
- Preventing people from being in the wrong or dangerous area
- Preventing theft in collusion with a security guard

## 4 Performance of technical departments

- Smoke detection
- Fire detection



### **1 Manufacturing Efficiency**

Solution	Technology	Your benefits
Counting bags, boxes or similar objects on a conveyor	Bag Counter - an analytics module that enables counting similar items moving along a conveyor	Accurate product counting
		Theft prevention
		<ul> <li>Preventing errors when shipping goods</li> </ul>
ArUco marker detector	<b>ArUco Detector</b> - a module for recognising augmented reality markers (ArUco codes) applied on items	Accurate product counting
		<ul> <li>Quick search for the desired product</li> </ul>
		<ul> <li>Preventing supply errors</li> </ul>
Monitoring warehouse operations	ActiveStock - a module for event-based video monitoring of warehouse operations	Quick dispute resolution at the warehouse
		<ul> <li>Quick search for incidents by events</li> </ul>
		<ul> <li>Easy determination of accountability for a product</li> </ul>
Tracking and monitoring staff working hours	Workplace Detector - a module that enables monitoring the presence of staff at the workplace	Monitoring schedule compliance
		<ul> <li>Monitoring compliance with man-hours at the manufacturing site</li> </ul>
		Notification when tolerance is exceeded
Tracking and monitoring the presence of staff in the work area	<b>Neuro Detector</b> - a neural network module that enables detecting intrusion and presence of a person in a certain area	Monitoring presence in a critical area
		<ul> <li>Monitoring the crossing of a given line</li> </ul>
		<ul> <li>Monitoring dangerous machinery operators</li> </ul>



### **2 Protection from External Factors**

Solution	Technology	Your benefits
Licence plate recognition	AutoTRASSIR - a module designed for automatic recognition of vehicle licence plates in the field of view of the video camera	<ul> <li>Increasing, monitoring and forecasting checkpoint capacity</li> </ul>
		<ul> <li>Automatic recording of the time of entry and exit of vehicles</li> </ul>
Employee face recognition	Face Recognition - a TRASSIR software module for recognising and searching people based on a preconfigured face database	Accurate identification of an employee by their face
zp.o,cc tace recognition		<ul> <li>Automatic checking whether a person is white-or black- listed</li> </ul>
Access control system in conjunction with face and licence plate recognition		Fewer manual labour errors
	TRASSIR ACS- an access control and management system based on the TRASSIR platform	Fewer guards
Access control system based on card and employee face recognition (two - factors authentication)		Preventing theft in collusion with a security guard
Detecting intrusion into a restricted area by an unauthorised person, vehicle or bicycle	<b>Neuro Detector</b> - a neural network module that enables detecting intrusion and presence of a person in a certain area	Automatic intrusion detection
Video surveillance on large areas	ActiveDome - a TRASSIR PTZ camera manual control module (SpeedDome)	Fewer cameras
90 0.000		Precise selection of the video surveillance focal area
		Flexible solution with a customisation feature
'Smart Checkpoint' solution	Smart Checkpoint - ready-made solution for comprehensive checkpoint automation	Full checkpoint and parking automation
Smart eneckpoint solution		A ready-made set of products for solving the task



### **3 Internal Security**

Solution	Technology	Your benefits
Monitoring wearing of helmets	HardHat Detector - a module that enables determining whether a person is wearing a helmet	<ul> <li>Accurate monitoring of compliance with safety regulations</li> <li>Fewer occupational injuries</li> <li>Lower risk of fines and compensation</li> </ul>
Monitoring wearing of protective clothing	<b>Wear Detector</b> - a module that enables determining whether a person is wearing protective clothing or a uniform (by color)	<ul> <li>Accurate monitoring of compliance with safety regulations</li> <li>Fewer occupational injuries</li> <li>Lower risk of fines and compensation</li> </ul>
Monitoring mask wearing	Face Mask Detector - a module that monitors the wearing of protective masks in public places	<ul> <li>Accurate monitoring of compliance with safety regulations</li> <li>Fewer occupational injuries</li> <li>Lower risk of fines and compensation</li> </ul>
Detecting employee recumbent posture	<b>Pose Detector</b> - a neural network-based module for analysing a person's posture	<ul> <li>Rapid detection of a person in case of an emergency</li> <li>Capacity to promptly provide first aid</li> <li>Reducing the severity of the consequences of the injury</li> </ul>
Preventing people from being in the wrong or dangerous area	<b>Neuro Detector</b> - a neural network module that enables detecting intrusion and presence of a person in a certain area	<ul> <li>Automatic intrusion detection</li> <li>Faster response</li> </ul>
Preventing theft in collusion with a security guard	AutoTRASSIR - a module designed for automatic recognition of vehicle licence plates in the field of view of the video camera	<ul> <li>Preventing departure without check weighing and inspection</li> <li>Automatic recording of the time of entry and exit of vehicle</li> </ul>



### **4 Performance of Technical Departments**

Solution	Technology	Your benefits
Smoke detection	<b>TRASSIR Smoke</b> - a smoke detector in the field of view of the video camera	<ul> <li>An additional way of ensuring fire safety</li> <li>Additional opportunity to take preventive measures</li> </ul>
Fire detection	TRASSIR Fire - a fire detector in the field of view of the video camera	<ul> <li>An additional way of ensuring fire safety</li> <li>Additional opportunity to take preventive measures</li> </ul>





### **Our partners**















































