



## Brief description of AMS technology:

The system in its current form is dedicated to be used in Critical Infrastructures and constitutes a base module for the Smart City and Smart Port concept implemented worldwide



## AMS Technology Aerial Monitoring System

### AVAILABLE SOLUTIONS:



#### **ASM** Aerial Surveillance Monitoring

\* drone prevention and intervention patrols (area, location and property)



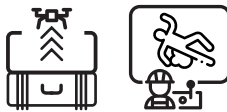
#### **AEM** Aerial Environment Monitoring

\* drone measurements of pollution and contamination (air, water and soil)



#### **ATM** Aerial Technical Monitoring

\* drone technical inspections (of facilities, equipment and machinery)



AMS technology can be extended to include Aircraft Hangar automation and technical integration with the entity's security cell command center.

## CURRENT STATUS OF AMS DEPLOYMENTS BY PELIXAR:

- 01-06.2020 Pilot implementation of ASM in Port of Gdansk
- 06-11.2020 Commercial R&D Implementation of the ASM and a component of the AEM in Port of Gdynia
- 07-12.2020 Pilot implementation of AEM in Port of Gdansk

### For more detailed information, please contact us::

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# aAMS Technology automatic Aerial Monitoring System

## aAMS TECHNOLOGY SHORT DESCRIPTION:

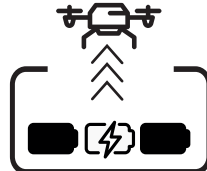
The purpose of the solution is to enable permanent remote aerial safety monitoring and technical supervision, which can be operated from any location.

## MODULES OF THE SYSTEM:



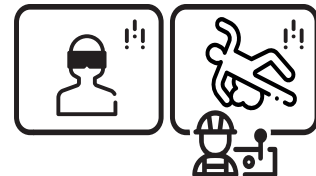
### module AERIAL PLATFORM

- drone
- sensorics
- functional equipment
- transmission



### module AIRCRAFT HANGAR

- covered helipad
- auto take-off/landing
- auto battery charging



### module CONTROL PANEL

- control panel
- image monitor
- transmission
- AI Algorithms

System modules and their technical integration is prepared based on a specification dedicated to the operating conditions and according to the customer requirements.

The system is open for further development, technical upgrades and updates in accordance with progress in the current state of unmanned aviation technology.

## RESEARCH AND DEVELOPMENT

If You cannot see any solution between our examples that would work for You do not worry. We can conduct R&D project of Your idea and help You with implementation in Your infrastructure. Our interdisciplinary team has a lot of experience in carrying out research and development projects either for internal or B2B purposes.

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## how it works?

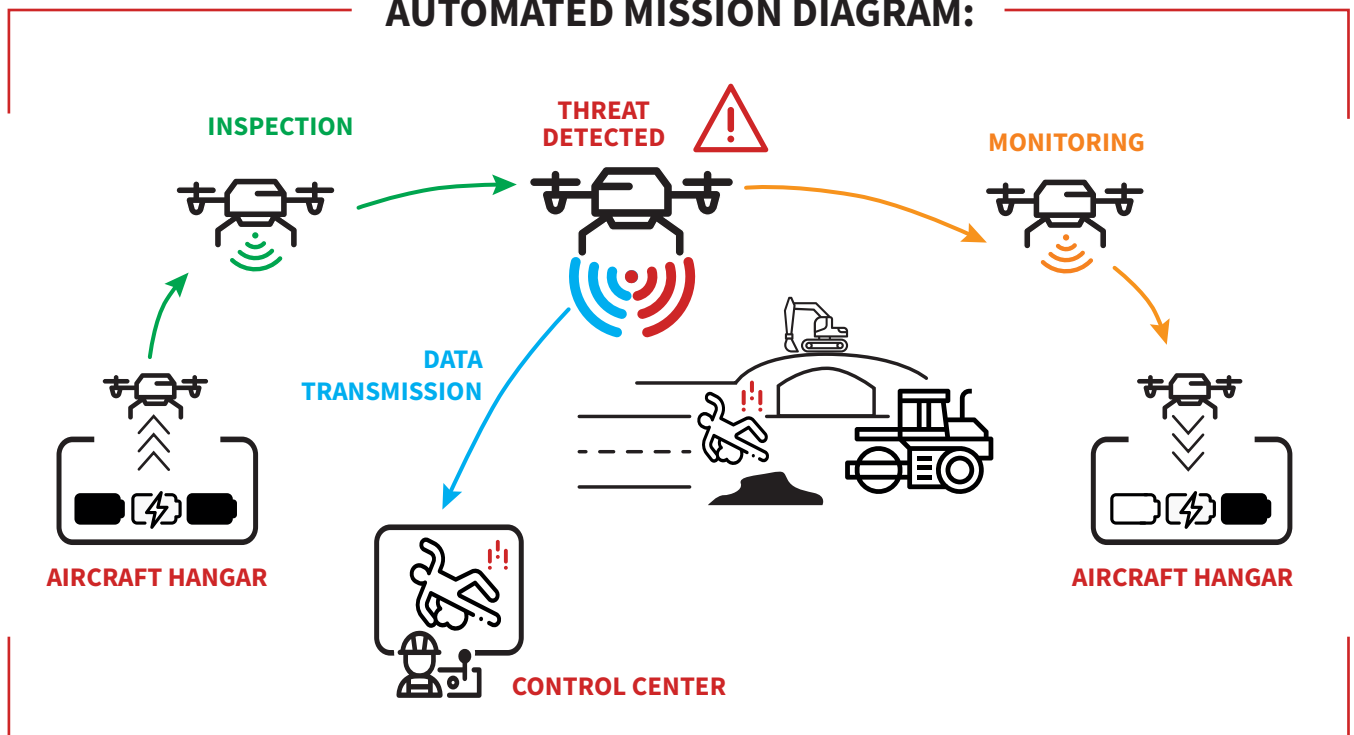


## aAMS for Infrastructure Constructions Automatic Aerial Monitoring System

### aAMS TECHNICAL SHORT DESCRIPTION FOR CONSTRUCTIONS

The system enables automation of the control processes of the infrastructure constructions section

#### AUTOMATED MISSION DIAGRAM:



#### EXAMPLES FEATURES OF THE SYSTEM ARE:

- performing patrol and surveillance monitoring in automatic flight
- automatic take-off, landing and battery charging from the drone hangar
- system management and reception of video and data from the control center

#### BASIC FUNCTIONALITIES OF THE SYSTEM ARE:

- transmission of telemetric data and video from the flight to any selected locations
- manual or automatic photo or video documentation
- current readout of GNSS position from the current flight location
- performing flights according to the automatic, manual or hybrid mission
- the possibility of defining any number of automatic task flight missions
- the possibility of remote supervision of the system



### **ADDITIONAL SYSTEM OPTIONS INCLUDE:**

- automatic patrol flight mission mixing mode
- cyclic flights with a planned schedule or in a random mode
- mini cargo module for transporting technical means or position marker
- LED guided lighting module for night operations
- two-way voice communication module
- drone position tracking via GSM
- passive or active transponder

### **PARAMETERS OF THE DRONE IN THE STANDARD CONFIGURATION ARE:**

- light time up to 30min
- flight altitude up to 2500m
- the length of the flight distance up to 15km
- cruising speed up to 35km/h
- operational flight speed up to 100km/h
- operational wind speed up to 60km/h
- operational mini cargo load capacity up to 1kg
- operational mini cargo capacity up to 3kg

### **BASIC EQUIPMENT OF THE DRONE DEPENDING ON THE CONFIGURATION ARE:**

- communication link range up to 15km
- Picture in Picture system from camera
- 4K RGB camera with 10x optical zoom
- SD thermo camera with 3x digital zoom
- automatic tracking of the selected object
- miniDLM \* mini Drone Lift Module

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