



C-UAS · MODULAR · AI

COUNTER-DRONE DEFENSE SYSTEM

ARES SHIELD

DETECTION · IDENTIFICATION · ENGAGEMENT

Layered airspace protection against drones — from a single autonomous turret to the protection of critical infrastructure and a network of turrets controlled by a command-and-control vehicle equipped with its own artificial intelligence.

2 000 m

Camera-based detection and identification of flying objects and vehicles

1 000 m

Minigun X-Band radar with up to 1,000m range in all weather conditions.

360°

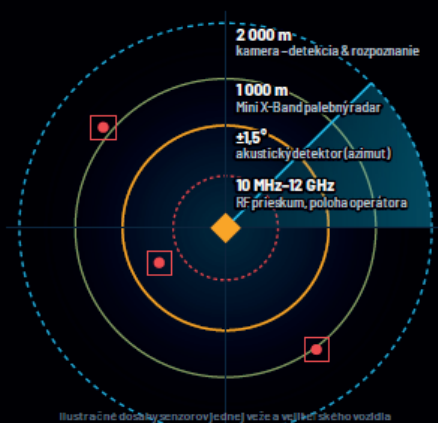
Radar, RGB and thermal imaging coverage from all sides around the vehicle

0,2–6 GHz

Directional and omnidirectional high-performance UAV jamming equipment

VIZUALIZÁCIA

VRSTEVNÁ DETEKCIA



SINGLE TURRET

TURRET EQUIPMENT

- ◆ Camera recognition and tracking system – detection and identification up to 2,000 m, primarily for flying objects and vehicles
- ◆ Acoustic drone detector – ideal for drones on fiber-optic cables or outside radar coverage; azimuth accuracy up to 1.5°, with GPS position accuracy up to 11 m
- ◆ Mini X-Band fire-control radar – target acquisition in adverse weather conditions, range up to 1,000 m, power up to 200 mW
- ◆ Ballistic computer system with meteorological sensors and weapon rotation and elevation sensors; AI decision support and safety mode – “I see / I don’t see the target”
- ◆ Interceptor drones – guidance for direct impact
- ◆ Optional directional jamming: 200–6,000 MHz
- ◆ Remote control unit – color-coded target designation, touch/keyboard confirmation, manual weapon aiming via joystick
- ◆ Communication with the command vehicle – data cable / fiber optics

STANDALONE TURRET

Deployment without a command vehicle – e.g. protection of critical infrastructure. The turret monitors the protected sector, detects threats acoustically, via RF and camera, and responds autonomously.

TURRET NETWORK + VEHICLE

A group of turrets controlled by a command vehicle – protection of a command post or buildings of strategic importance. AI distributes targets among the turrets based on speed and distance.

3 LEVELS OF AUTONOMY

Fully automatic – AI decides and acts

Semi-automatic – system waits for operator confirmation

Manual – joystick-controlled targeting

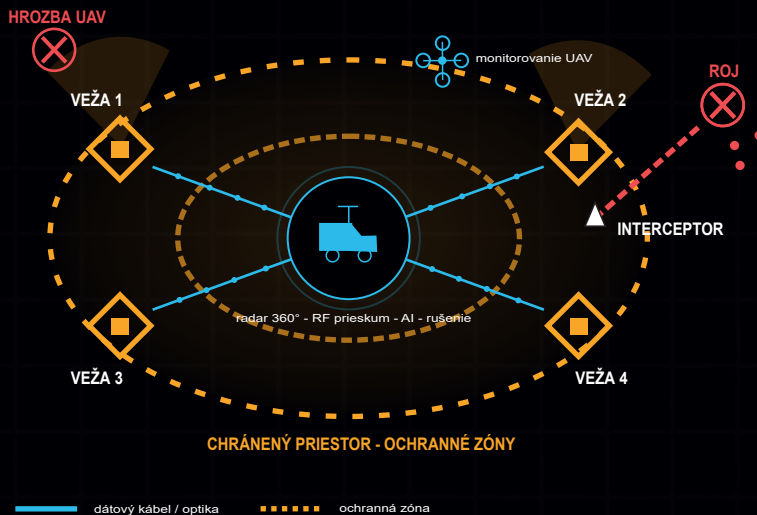
COMMAND VEHICLE

The mobile operations center collects data from all sensors, evaluates it using AI, and controls the turrets, jamming systems and interceptor drones – in fully automatic or semi-automatic mode.

- ◆ **360° surveillance radar** with low power output up to 400 mW
- ◆ **Acoustic detector** with GPS drone positioning
- ◆ **RGB and thermal cameras** with 360° coverage
- ◆ **Detection and identification** of flying objects and vehicles up to 2,000 m
- ◆ **Radio-frequency reconnaissance** 10 MHz – 12 GHz
- ◆ **Commercial drone detection** with positioning of both the drone and its operator
- ◆ **High-power omnidirectional jamming** 200 – 6,000 MHz
- ◆ **Control of individual turrets** and deployment of interceptor drones
- ◆ **AI-based threat prioritization** for multiple simultaneous threats
- ◆ **Map-based protection zones** with multiple defense levels
- ◆ **Surveillance UAV control**



SYSTEM ARCHITECTURE



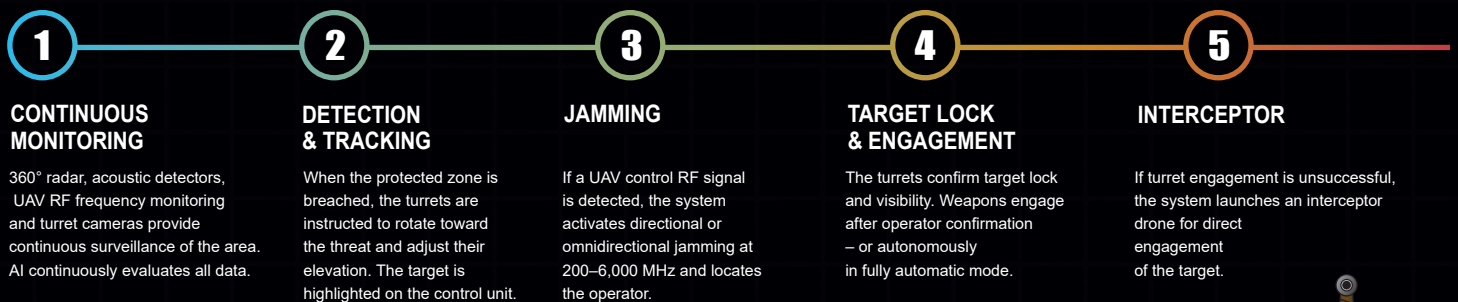
TARGET ALLOCATION

In the event of a mass threat, the system automatically assigns individual targets to the turrets based on their speed and distance from the protected area. A turret without direct line of sight ("blind") tracks the target using data from the vehicle or another turret and engages only what is within its firing sector.

The sequence of defense actions is determined by protection zones shown on the map – each zone has its own level of defense.



ENGAGEMENT LOGIC



SINGLE THREAT

All turrets with line of sight focus on a single target; a "blind" turret tracks the target using data from other sensors and continues the defensive response if required.

MASS THREAT

The system assigns multiple threats to turrets based on speed and distance, then follows the same response procedure.



Defense procedures and individual steps can be customized according to customer requirements. The system can be expanded with directional jamming, interceptor drones and surveillance UAVs.