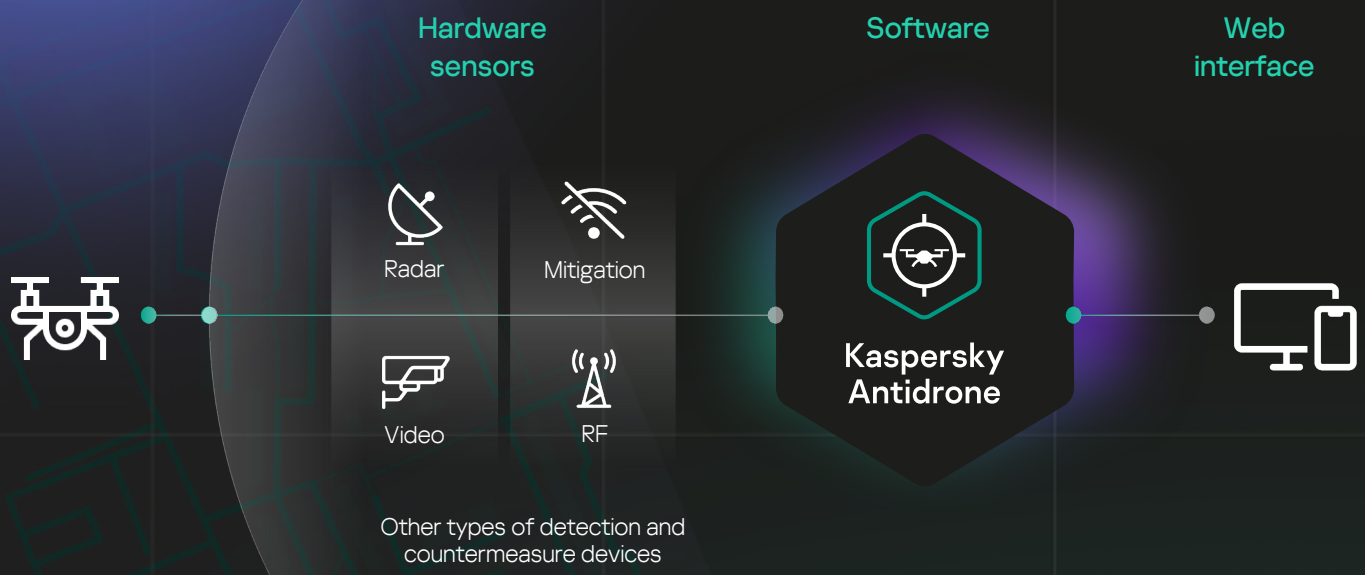
Kaspersky Antidrone
an agile system for monitoring and countering drones

kaspersky bring on the future

The Kaspersky Antidrone system

Kaspersky's solution enables the detection, monitoring, classification and counteraction of drones at a single site or across a region. The software at the heart of Kaspersky Antidrone synchronizes the operation of detection and countermeasure devices, increasing the efficiency of the entire system.



- Scalable system
- Software from a leader in cybersecurity
- Software platform
- Equipment developed in-house
- Innovative graphical interface
- Integration of external detection and countermeasure devices
- AI and neural networks

Examples of system configurations

The configuration of the system is unique to each customer and depends on the selected threat model. Our specialists, together with our integrator partners, provide the optimal solution for each site.

Kaspersky Antidrone permits the use of a wide range of devices to scan airspace and detect and counter airborne objects. For information about the availability of integration with a specific device, please contact antidrone@kaspersky.com.

Oil refinery

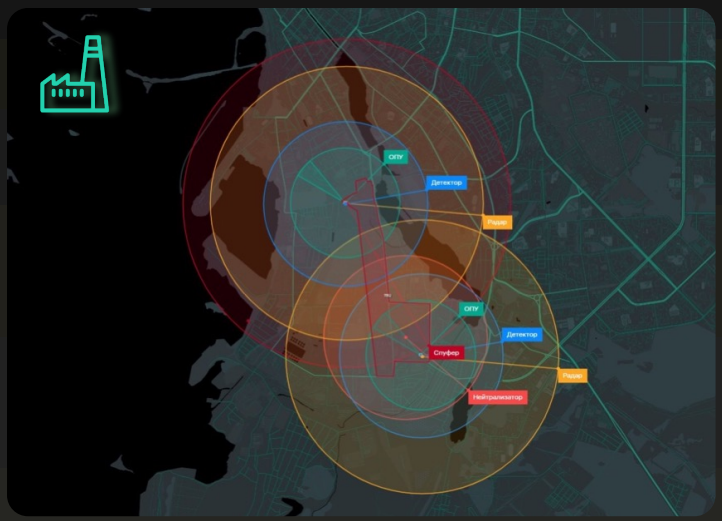
	Range
Radar, 1 pc.	1800m
RF module, 1 pc.	1500m
360 jamming module, 1 pc.	1600m
Spoofer, 1 pc.	3000m

Airport

	Range
PTZ camera, 3 pcs.	1000m
RF module, 2 pcs.	1500m
Radar, 1 pc.	7000m
360 jamming module, 1 pc.	1600m

Power plant

	Range
PTZ camera, 2 pcs.	1000m
Radar, 2 pc.	2500m
RF module, 2 pc.	1500m
360 jamming module, 1 pc.	1500m
Spoofer, 1 pc.	3000m



From software to a complete solution

Software plays a key role in the Kaspersky Antidrone system. It allows you to build a customized and effective detection and counteraction system for any site, with the ability to scale and upgrade in the future.

The algorithms used increase the accuracy of drone classification, reduce the number of false alarms, and give the system operator time to analyze the situation and make a decision.

Advantages of the software

AI and neural networks

Allows PTZ cameras to detect, classify, and track drones (including custom-built drones). In 2024, an improved version of the neural network was released: performance and recognition quality increased by an average of 10%.

High integration capabilities

Thanks to its advanced API, Kaspersky Antidrone can integrate detection and countermeasure equipment from different vendors. Integrations with SIEM systems, flight plan submission systems, and other systems have been implemented. The system can be scaled efficiently and quickly not only at the site level, but also at the regional level.

Interface based on our own engine

A set of unique visualization technologies and proprietary frameworks are used to generate maps. The interface clearly displays a large number of graphical elements in real time. This makes working with Kaspersky Antidrone faster and easier. Adapts to different types of screens: computers, tablets, smartphones.

Archive and reporting

The system archive stores information about all events, including false positives (e.g., detection of birds). The system easily generates a PDF flight report for a selected period based on characteristics such as takeoff location, pilot location, flight start and end time, etc.

Event clustering

Kaspersky Antidrone's unique algorithms compare information received from various devices: radars, radio frequency direction finders, detectors, optical and thermal imaging cameras, etc. Data is aggregated and only confirmed events and relevant information are displayed.

Kaspersky Antidrone hardware technologies

The standard configuration includes radar stations, radio frequency direction finders, optical sensors, mitigation devices and a processing module. Their work is synchronized using unique software with artificial intelligence elements developed by the Kaspersky Antidrone team. The system supports a number of advanced technologies: laser detection, acoustic analysis, etc.

Main types of devices

Radar

Provides detection of drones in radio silence mode, when the drone is not controlled remotely, but is flying according to specified coordinates. Using this type of device without other technologies produces a large number of false alarms.

RF scanner

Allows you to detect the drone's radio signal, determine its serial number and the pilot's location. The device ensures the operation of friend-or-foe technology (does not work for all drones). The effectiveness of the device is highly dependent on the radio-electronic environment.

PTZ camera

Provides visual detection of unmanned aerial vehicles (UAVs), neural network classification and directional mitigation.

Processing module

Kaspersky Antidrone processes data received from hardware sensors and provides software for further data aggregation.

Omnidirectional mitigation module

Creates interference on fixed frequencies used by drones for control and navigation.

Project management and commissioning

01
Threat modeling

02
Site survey

(integrator should be selected at this stage)

Hardware delivery, software licenses, deployment, installation and technical support are provided by authorized Kaspersky Antidrone partners.

03
Threat model adjustment

04
Commercial offer

The final equipment specification, module installation points, and list of installation and commissioning tasks are determined after a pre-project survey of the site by the partner-integrator.

05
Hardware assembly

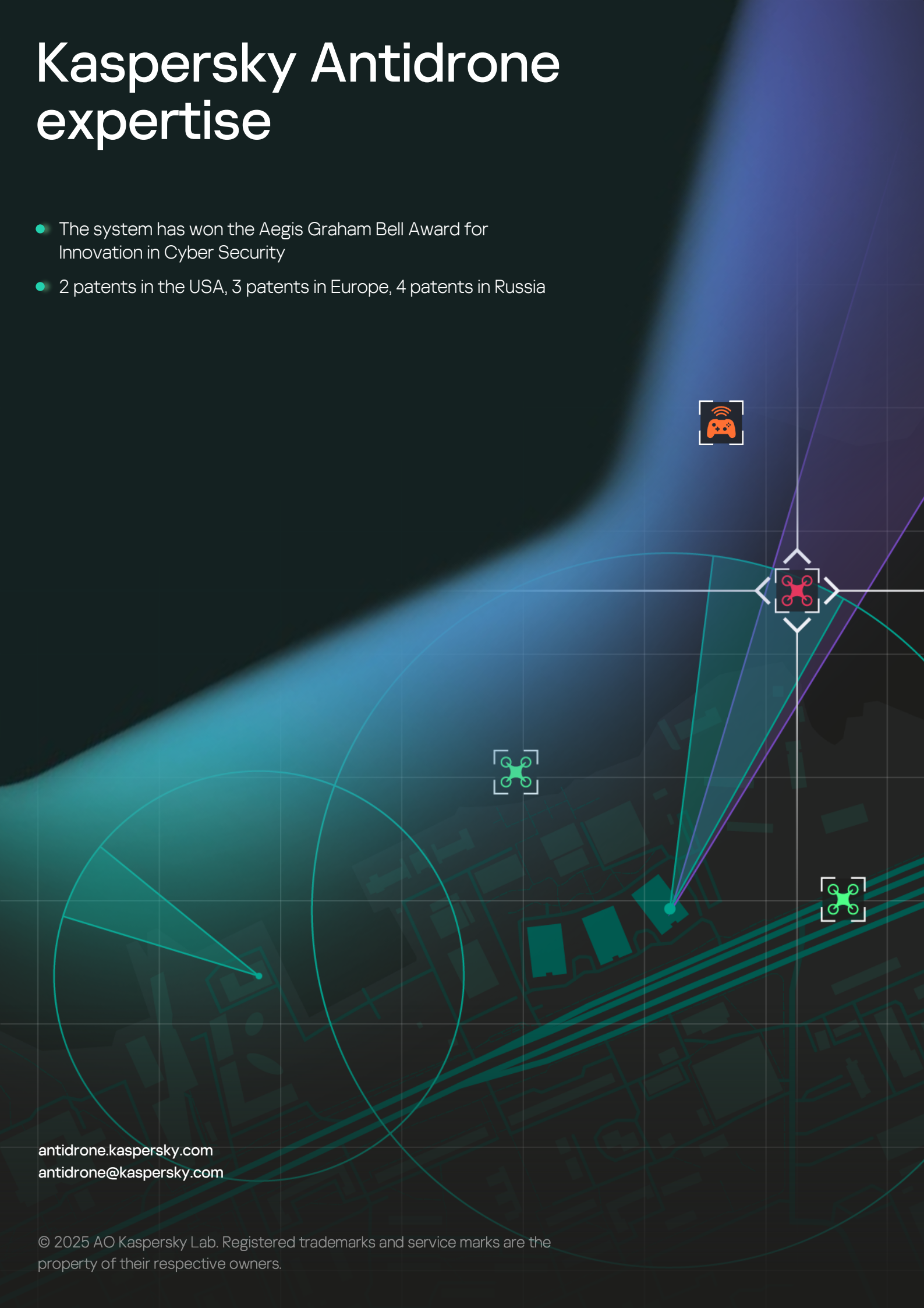
08
Operational commissioning

06
Installation

07
Commissioning tests

Kaspersky Antidrone expertise

- The system has won the Aegis Graham Bell Award for Innovation in Cyber Security
- 2 patents in the USA, 3 patents in Europe, 4 patents in Russia



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