

Protect your airspace from drone attacks

Military-grade counter-drone system

ctrl+sky

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www.ctrlsky.tech



• **Gatwick Airport** – Tens of thousands of passengers at one of the UK's busiest airports are experiencing flight disruption after drones were seen over the airfield. (BBC, 20.12.2018)

• **Venezuelan President** – Two drones packed with explosives reportedly flew toward Venezuelan President Nicolas Maduro on Saturday night in what the government has described as a failed assassination attempt. (USA TODAY, 07.08.2018)

• **French Nuclear Power Facility** – Greenpeace activists flew drones over the Orano La Hague plant and dropped smoke bombs onto the roof of a building containing irradiated fuel. (The Weekly Times, 25.01.2019)

Aerial threats

Threats associated with UAV technology are constantly increasing.

Every day, drones around the world are able to steal sensitive information for economic espionage purposes. Drones facilitate the delivery of illegal mail to prisons and present a real threat to air traffic when they appear in protected airspace. They can compromise security and privacy and uncontrolled hostile drones present the biggest threat.



flight disruption



smuggling



terrorism



unauthorized surveillance



espionage



hacking



breach of privacy

how to prevent the threat posed by UAV?

The Ctrl+Sky system can be used wherever the possibility of intrusive drones is present. However, there are institutions and areas that require special protection against the unwanted presence of UAS.

Ctrl+Sky is a fully customizable system, able to be tailored to the customer's needs and situation and provides total protection from potential threats from drones used by hostile actors.



airports



prisons



critical infrastructure



government and military



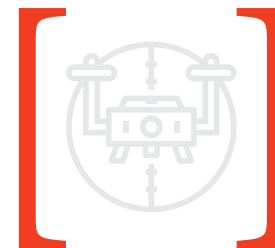
stadiums and arenas



public events



private property

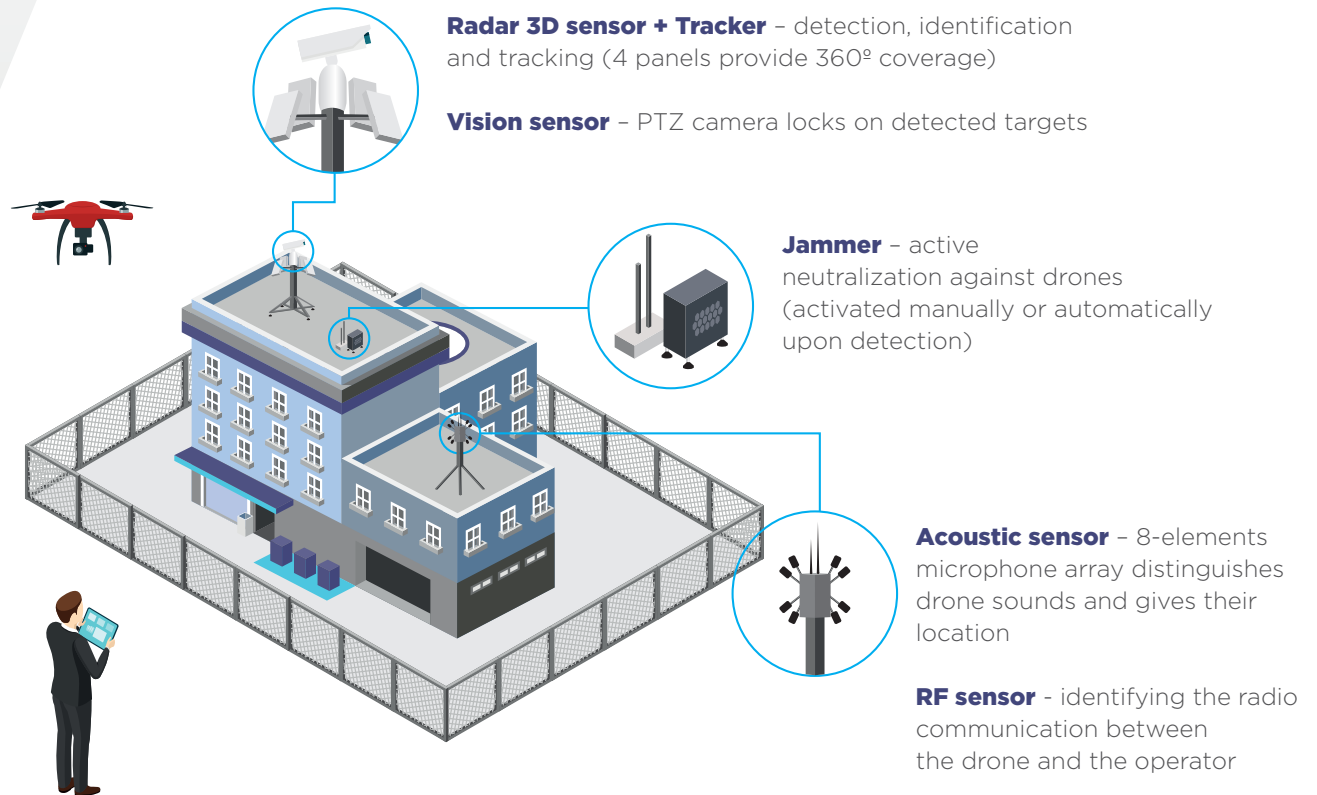


how **Ctrl+Sky** works?

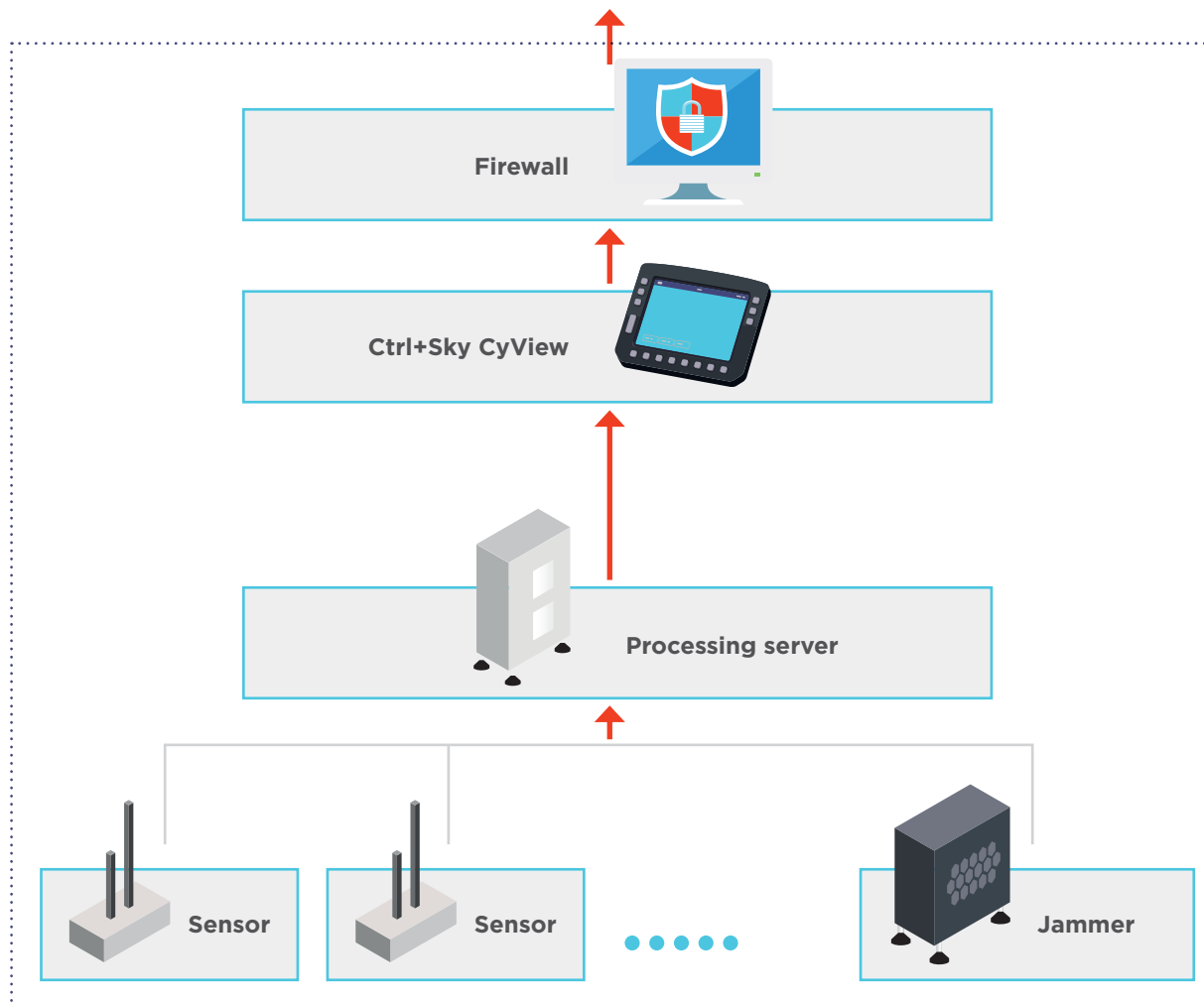
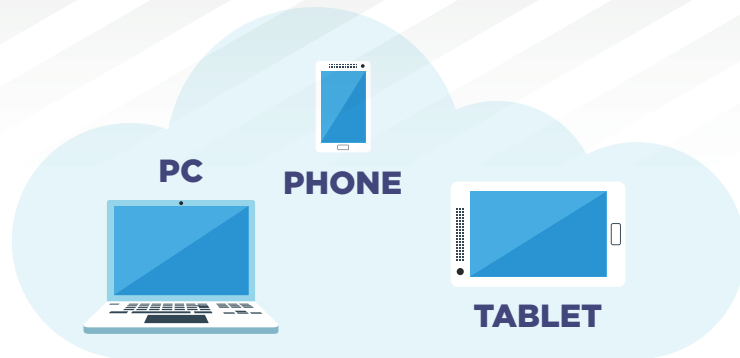
multi-sensor counter drone system

detection → tracking → identification → mitigation

Ctrl+Sky is a multi-sensor system that allows you to effectively control a secured area on several levels.



OPTIONAL



CyView

Software Platform

secure access | real-time work | data analysis |

- Secure communication between devices
- Access from any device equipped with a web browser and Internet connection
- Secure connection with Virtual Private Network (VPN)
- Real-time event preview on maps
- Detection from all sensors presented on one screen
- Monitoring the status of all sensors
- Changing the operation mode of neutralization
- SMS and e-mail notifications; system alerts (visual and sound)
- User management and permission levels
- Defining protected zones and configuration of sensors inside the application
- Dynamic system positioning based on GPS (in the mobile version)
- Open API for integration

Architecture

Unmatched system performance with multi-sensor approach

jammer

- blocking the communication link and navigation
- full coverage of the drone detection range
- equipped with directional, sectorial or omnidirectional antennas

Acoustic sensor

- based on 8-element microphone array
- direction-finding capability
- machine learning based classification algorithms

RF sensor

- Early warning of nearby drones
- Operates robustly also in urban environment
- Captures drone's and operator's radio transmission

Vision sensor

- Visual confirmation of detected drones
- Slew To Cue (radar-camera auto tracking)
- Distinguishes drones from other objects
- PTZ camera with optical zoom up to 30x

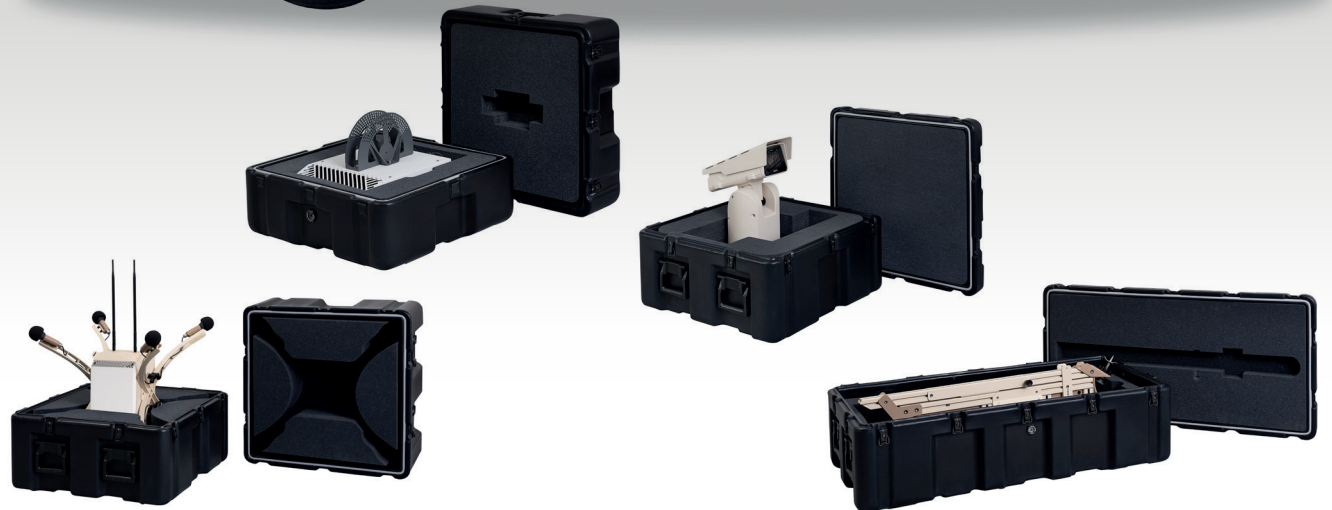
integrated software Ctrl+Sky CyView

- web application
- customizable and user-friendly interface
- secure access
- independent platform accessible from PC, laptop or mobile device



3D radar sensor

- FMCW radar operating in the X band
- AESA and MIMO technology
- MHT algorithm





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