# Autonomous Drones & Robots in security







## Table of **Contents**

The intelligent drone solution  Discover the Lorenz Hive <sup>®</sup> and the Lorenz Al-Link <sup>®</sup>	3
How it works  A visual representation of the intelligent drone & ground robot solution	4
Cloud platform the Lorenz Hive®  Beneficial features of the Lorenz Hive®	5
The perfect solution for security  How our solution will improve your core business	6
Specific use in police and defense Implementing drones & robots in high risk situations	7



#### Our intelligent drone solution

At Lorenz Technology, we develop intelligent, versatile, and user-friendly drone software solutions, which are easy to implement and provide data for making optimal decisions. Drone technology enables cost-efficient and time-reducing work processes, better working conditions, and higher safety.

Our mission is to make all drones autonomous, and we have therefore developed a control room solution in which multiple drones, robots, sites and functionalities are operated simultaneously by one edge-computer (the Lorenz Al-Link®) in one software platform; the Lorenz Hive®.

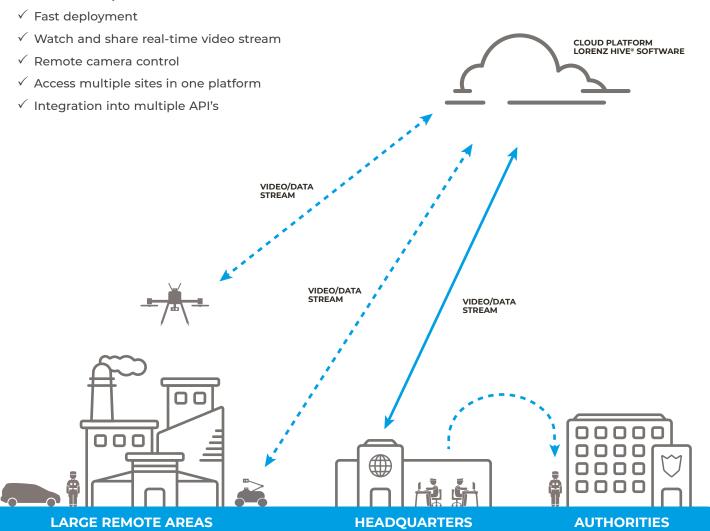
The Al-Link® is an edge-computer which can be mounted on a drone or mobile robot of your choice. It enables on-board data processing, streaming its data directly to the Lorenz Hive® with a latency of less than

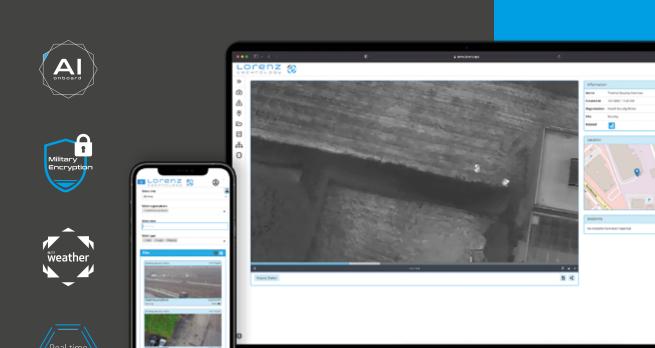
half a second. The real-time streaming feature is a must-have when performing professional autonomous flights. The livestream can be shared with external stakeholders directly through the software platform e.g. in case of emergencies.

The solution allows for fast deployment and pre-planned autonomous flights. The Lorenz Hive® additionally provides a data archive in which all data from the operations is stored. Creating incident reports, measuring specific areas and sharing information directly with authorities or designated staff are made easy. Implementing drones through the Lorenz drone solution helps create a better flow of information as well as creates opportunities for adding additional services to traditional security inspections and perimeter controls.

### **How it works**

#### Feature examples





## Cloud platform the Lorenz Hive®

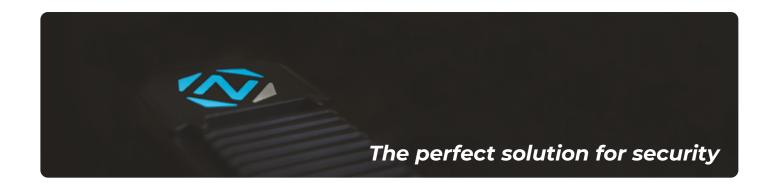
Our user-friendly web interface provides the ideal platform to improve the quality of your core business and creates opportunities for additional services in the portfolio. The real-time streaming can be used to take informed decisions on your missions, while the full documentation in the archive allows you to use relevant data as evidence as well as debrief your team, learn and improve your skills.

#### **Core benefits**

Live streaming with sub-second latency Remote control from SOC Easy access to gathered data

## **Key features**

- ✓ Perimeter management
- √ Task- and route planning
- ✓ Multiple video formats
- ✓ Incident markings
- ✓ Point of interest
- ✓ Archive function
- ✓ Logbook



## **Drone security surveillance**

Implementing drones in security operations is a great way to heighten the quality of your core services and increase the safety level of your employees.

When visibility is limited, either by low light or obstacles, drones with thermographic cameras can detect heat and motion and assist security guards by providing an extra eye in the sky. Different angles and close-ups can be documented by using drones, which can be viewed and shared with relevant stakeholders in real-time. Valuable data is collected in an archive which can be used to improve your future missions.

#### Additional services

Drone technology can help expand the portfolio. Areas such as facility management are made accessible through our technology. Create updated maps of a site and use it to plan your operations, to inspect the perimeter and offer additional services to your clients.



Complete tasks with the press of a button

## Specific use in police and defense

Besides improving the quality perimeter control services, our solution can be used in high-risk operations. Our drone solution is quick to employ and is therefore a great asset for first responders, police and defense. The solution enables to get a complete overview of an area, defining entry points, maps and measuring distances. It can therefore be used for tactical planning in operations.

After each mission, all data is available in the Lorenz Hive® which can be used as a starting point for debriefing the team. Reviewing videos and marking incidents are some of the key features which help mark specific POIs and create a valuable learning experience for your team.



#### **Remote control drones**

Remote operation of drones contributes to higher safety on missions

#### **Multiple drone operation**

Operate multiple drones and ground robots in one platform

#### **4G connectivity**

Operate drones beyond radio line of sight via on-board edge computing with 4G connectivity



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