



6 REASONS TO USE FLYTNOW TO **AUTOMATE PERIMETER SECURITY**



The threat from physical intrusion still remains one of the top concerns in both commercial and non-commercial contexts. According to a report from Markets and Markets, the video surveillance market, which includes both hardware and software, is presently at USD 45.5 billion and expected to reach USD 74.6 billion by 2025.

Over the years, there have been many advancements in optics and detection systems but limitations still exist in the conventional ways of using them. To overcome these limitations, security stakeholders are now incorporating drone technology in their operations.

In this blog, we will talk about drones and the FlytNow solution for perimeter security.

What is perimeter security?



Perimeter security is an active barrier or fortification around a defined area to prevent all forms of intrusion. Modern security systems are an amalgamation of sophisticated hardware and software that generally include cameras, motion sensors, electric fencing, high-intensity lights, and a command center to manage them all.

Challenges with conventional security systems (without drones) for perimeter security

Below are some of the drawbacks and limitations that are inherent in a conventional security system:

- CCTV cameras and motion detectors are stationary, thus leaving plenty of room for blind spots.
- Patrolling requires human guards – for larger areas, this is the least efficient way of securing a premise.
- Response to an intrusion is delayed since a human responder has to reach the location.

Benefits of using drones for perimeter security

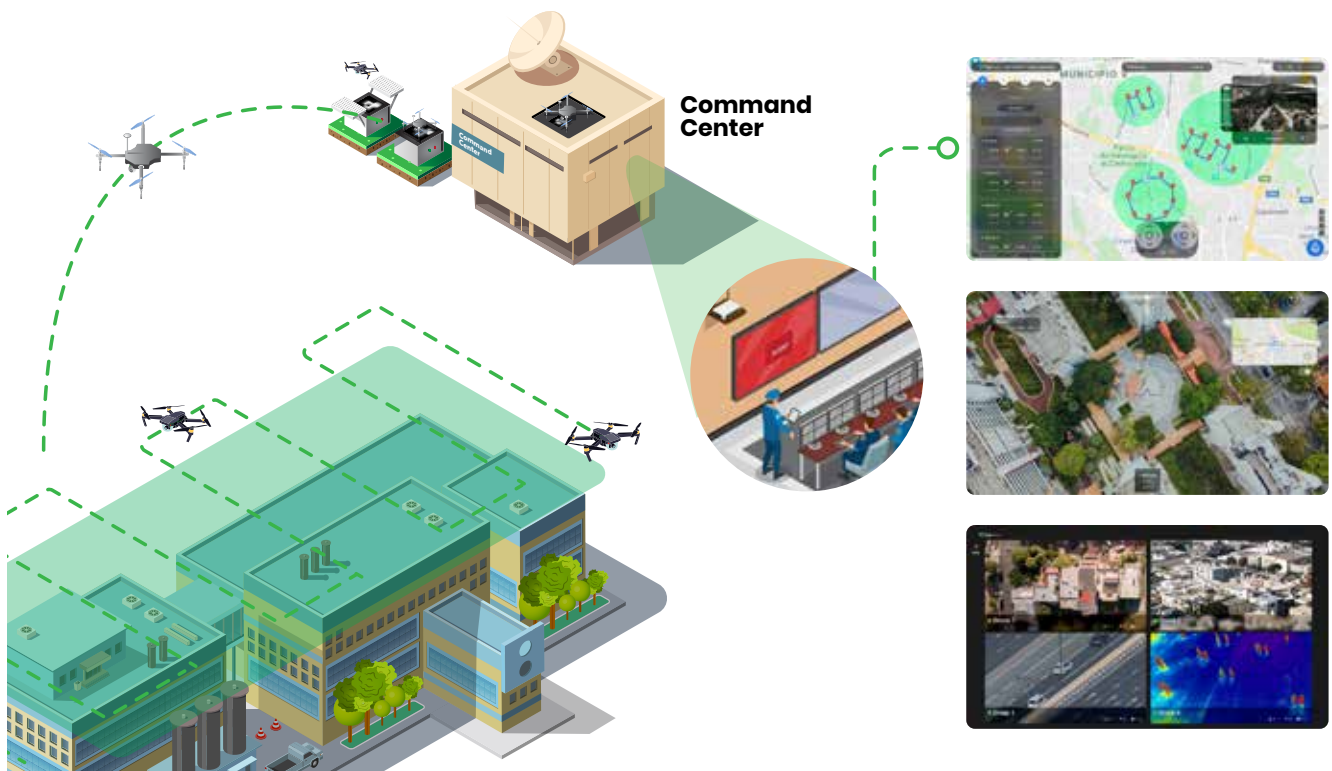
Drones have the following advantages over a conventional security system:

- Drones are mobile flying machines that can go to any location quickly, with HD camera(s), thus eliminating blind spots.
- Drones can also be equipped with a thermal camera(s) which are useful during nighttime surveillance.
- Drones can be automated for patrolling using the FlytNow cloud-connected solution and commercially available DiaB (Drone in a Box) hardware.

Note: A DiaB is box-like hardware that houses one or more drones. The hardware keeps the drone flight-ready (24×7) and also automates the launching and docking processes of a drone.

Drones automation for security

For perimeter security, drones are generally used in conjunction with Drone-in-a-Box hardware and a fleet management system that powers the command center. Other security system hardware, including CCTV cameras, motion sensors, etc. can complement the drones and can be connected to the command center, thus integrating into a complete system. In a real-life scenario, such a system might work in the following way:



- An intrusion is detected by one of the CCTV cameras in an area under surveillance.
- The command center receives the alert and initiates a drone launch.
- A connected DiaB receives the launch request and releases a drone.
- The drone flies to the location where the intrusion was detected and begins streaming a live video feed.
- An operator maneuvers the drone to cover all blind spots.
- On finding the intruder, the operator has the option to warn him/her about the transgression using the drone's onboard payload such as a beacon, spotlight, speaker, etc.

To know about the kind of drones and sensors that can be used for security and surveillance operations please refer to our **Drone Surveillance System: The Complete Setup Guide**.

Drones automation for security

FlytNow is a cloud-based application that helps in managing and controlling a fleet of drones from a unified dashboard through automation, live data streaming and integration. In the context of perimeter security, this translates into a command center that connects drones with the traditional

components of a perimeter security system.

6 Reasons to use FlytNow for perimeter security

#1 Easy Setup: FlytNow is cloud-hosted i.e. a user can access the application from any standard web browser, without any complicated server setup. Connecting the drones with the system is also easy and is done using FlytOS.

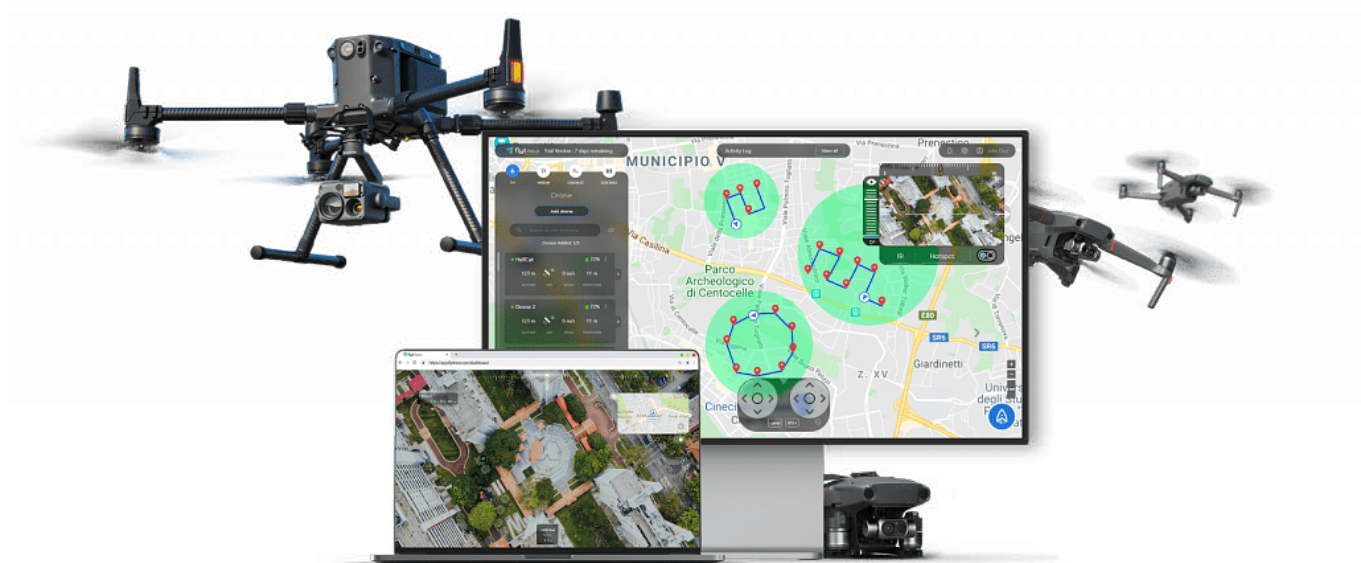
#2 Unified Dashboard: FlytNow features an advanced dashboard that shows the following:

- A live map showing the real-time location of all the drones. The map can be customized to show points of interest, and virtual geofence, and CCTV zones.
- On-screen GUI controllers and keyboard & mouse support to control a drone. This allows an operator to easily maneuver a drone to a point of interest from the command center.
- Multicam support that allows streaming video feeds from more than one drone.
- Different view modes that allow an operator to switch between RGB and thermal mode. In the thermal mode, there is the option to switch between different color pallets, allowing a user to identify warm objects against different backdrops.
- Pre-flight checklist which is a list of checks the system prompts an operator to perform before initiating a drone launch.



#3 Live Data Sharing: An operator can share the live video feed from a drone directly from the dashboard. The feature can be used to share video with the police or other remote stakeholders.

#4 Advanced Automation: Operating drones through manual control is quite an inefficient way to use drones. Instead, automation should be employed to perform activities like security patrols. FlytNow comes with an advanced mission planner that allows a user to define a path for a drone to follow and save it as a mission. The mission can be executed periodically, thus making a fleet of drones perform automated patrolling.



#5 Add-on Modules: FlytNow provides add-ons to make a drone intelligent; this includes precision landing over a computer-generated tag, obstacle detection, and object identification. These add-ons enable a drone to autonomously fly to a location, identify a threat, and return to the DiaB hardware.

#6 Drone-in-a-Box Hardware Support: The functions of DiaB hardware, in the context of perimeter security, can be broadly classified into four

- Securely house a drone.
- Keeping the drone fully charged all the time.
- Initiate a drone launch.
- Successfully dock a returning drone.

Summary

In this blog, we discussed the concept of perimeter security, the limitations of conventional security set up, and how these limitations can be overcome using drones. Then we covered how drones are actually used for aerial patrols and 6 reasons why FlytNow is an ideal solution for automating drones for perimeter security.

There are plenty more reasons to use FlytNow for perimeter security that you can find out by signing for our 7 days free trial.

Try for free