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SilentUAV

by gradiant 

Captive drone system





Silent UAV by Gradient is a perimeter surveillance system consisting of a tethered drone based on a COTS platform, with the ability to observe, track and locate targets in sensitive areas with an **endurance of more than 5 hours since the drone is powered by the tether.**

Our system allows to release the drone **up to 100 metres**, offering the possibility of increasing the range of vision of ground units, due to the higher operating altitude of the on-board camera, allowing the operator to set the operating altitude and focus the camera on any point of interest.

Being tethered to the ground via a cable, Silent UAV by Gradient provides a **fixed observation camera at high altitude** (or with a privileged viewpoint) for a relatively long time and with quick and easy deployment.

Typical and widespread applications include security applications such as **border control, traffic surveillance** in high-density areas or **search and rescue** tasks.

Tethered drone solution

Silent UAV by Gradient facilitates management and situational awareness tasks at control and command posts.

The tethered drone architecture has **two main segments**: ground and air, interconnected by the tether (or umbilical), which provides power from the ground segment to the air segment, offering a two-way communication and power interfaces between the control centre and the drone.

- ✓ **Ground module:** the base and operations centre of Silent UAV by Gradient, which can be deployed anywhere that has electrical power.
- ✓ **Air module:** formed by the UAV platform and additional devices to perform all observation, tracking and localisation operations.

The UAV can carry a payload of up to 2kg.

The system is controlled locally or remotely from a Graphical User Interface running in a computer or laptop connected to the Ground module.

With Silent UAV by Gradient the authorities have a much clearer picture of the conflicts that are occurring, allowing them to act earlier to ensure the prevention and safety of people.

Silent UAV can be complemented with Video Analytics by Gradient allowing to detect and identify targets in an automatic way.



Unlimited hours of use, thanks to the power supply through the tether



Does not transmit RF signal so it is undetectable from the RF point of view



Data transmission more reliable and secure



Immune to jamming attacks