

# FUSION

SENTINEL



MAGNUS  
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## WHAT IS FUSION SENTINEL?

With a maximum take-off mass of 600 kilograms, Magnus Fusion Sentinel is a carbon fibre reinforced composite aircraft equipped with a surveillance camera system. Thanks to its specific instruments, this aircraft is capable of aerial surveillance and monitoring widespread territories at a fraction of operating costs of vehicles and aircraft commonly used for this purpose in many countries at proportionately much lower emissions.



## AERIAL SURVEILLANCE

The special features and its camera system allows it to perform additional tasks such as night surveillance, surveillance using thermographic camera, target tracking, mapping of the biodiversity of a specific territory, or surveillance of magnetic fields.





With the help of the special surveillance system, Fusion Sentinel is a reliable tool for the forestry industry, offering possibilities to monitor biodiversity, biomass ratio, and quantity.

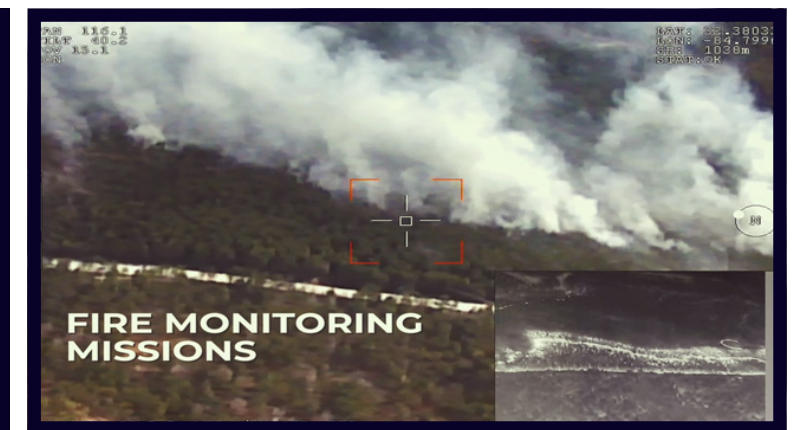
This aircraft can offer great help for agricultural areas in monitoring the vegetation, nutrient and moisture level, wild animal damage and weed ratio, among many more features.

There are many more features of the Fusion Sentinel, for example magnetic field monitoring, and multispectral recording used in geology.



## MAIN FEATURES

- Tracking of vehicles in motion
- Searching/tracking moving targets and animals
- Map search and displaying of the target
- PIP - picture in picture function
- Laser rangefinder
- Switching between moving targets
- Thermographic camera





## STRUCTURAL OVERVIEW

With its reinforced airframe and aerofoil design the aircraft is at the same time highly resistant and easily manoeuvrable. The composite airframe structure and the symmetrical aerofoil allows the aircraft to manoeuvre safely.



As a result of technology and design of the airframe structure its fuel consumption is extremely low, the aircraft consumes only 16 to 21 liters of 95 octane unleaded petrol per one hour flight.





## TECHNICAL SPECIFICATIONS

DIMENSIONS		WEIGHT	
Wingspan:	8,44 m / 27.69 ft	Max Take-off Weight:	600 kg / 1323 lb
Length:	6,62 m / 21.7 ft		
Height:	2,40 m / 7.87 ft		
Cabin Width:	1,17 m / 3.84 ft		

PERFORMANCE		ENGINE	
Take-off Distance:	150 m / 490 ft	Manufacturers:	Rotax
Climb rate:	6 m/s – 1080 feet/min	Models:	914
Never Exceed Speed (VNe):	280 km/h / 151 kt	Horsepower:	115 hp
Cruising Speed (Vcr):	212 km/h / 115 kts – 231 km/h / 125 kts		
Fuel Consumption:	16-21 l/hr / 4.2-5.4 gal/hr		



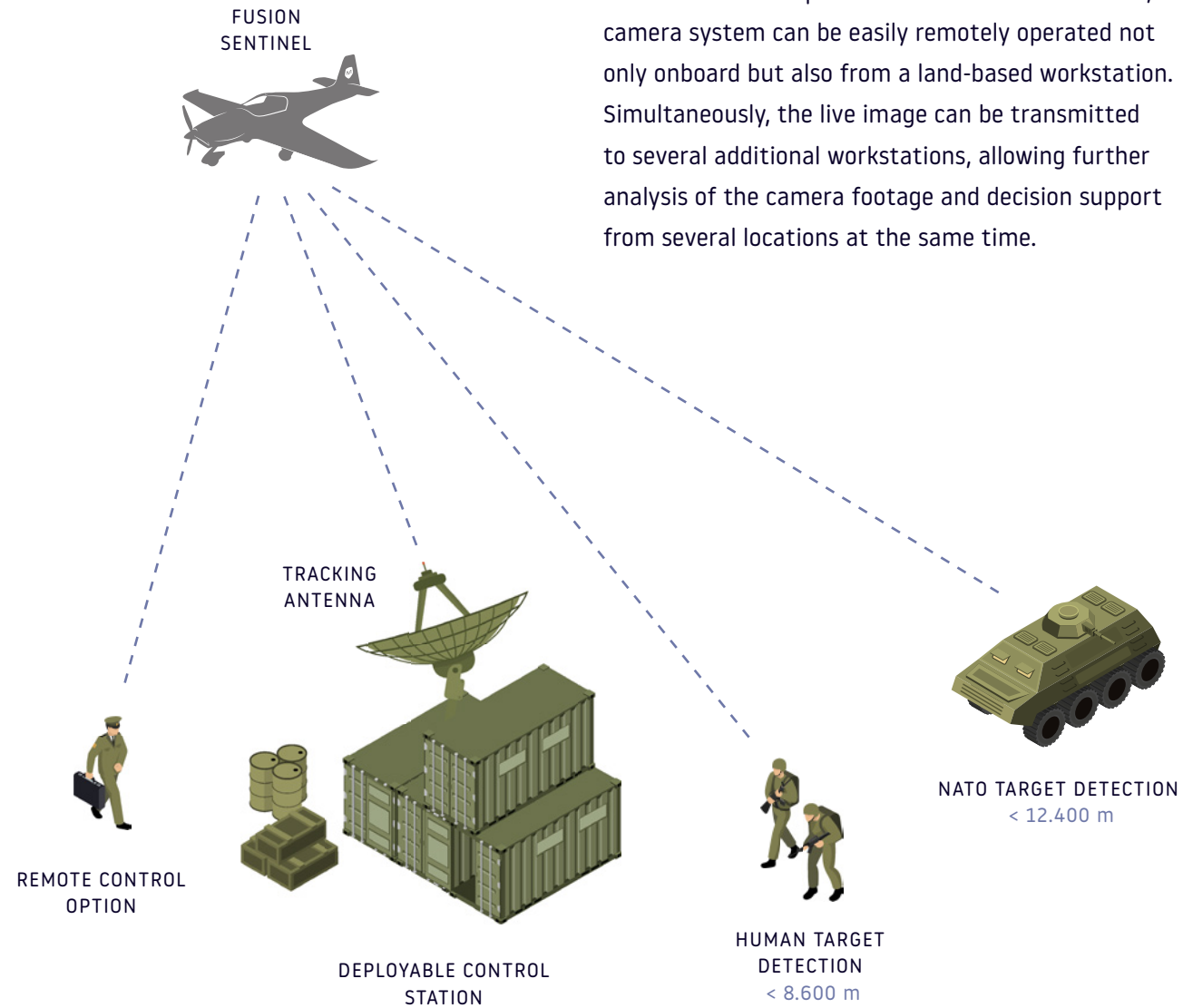
## MULTI AXIS GYROSCOPIC STABILIZING SYSTEM

The surveillance camera system with optional accessories and features is mounted under the wing onto the designated interface.



## LIVE DATA TRANSMISSION

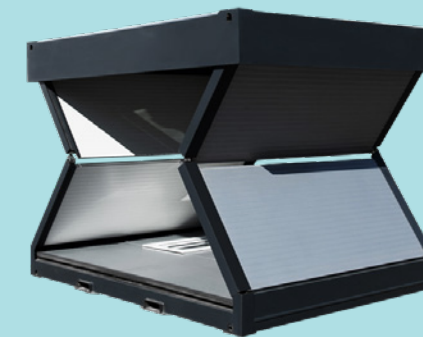
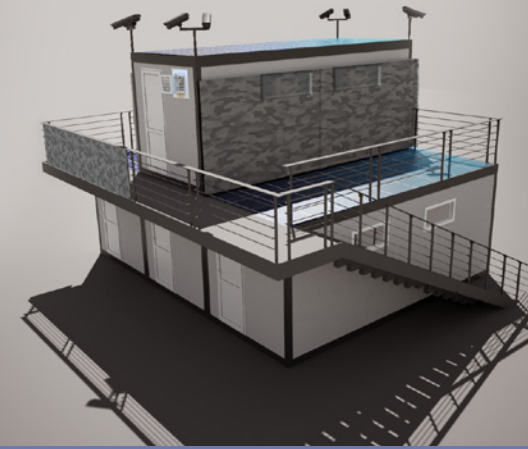
The camera system can transmit high-resolution, HD quality live images (even encrypted ones) without delay over distances of up to 100 kilometres. In this case, the camera system can be easily remotely operated not only onboard but also from a land-based workstation. Simultaneously, the live image can be transmitted to several additional workstations, allowing further analysis of the camera footage and decision support from several locations at the same time.



## LAND-BASED WORKSTATION

It can be easily set up in any climate condition and perilous situation. The system can generate its own energy demand and provide the right security level as a response to different threat levels. The equipment is individually designed and can be supplied with security, medical or emergency equipment in addition to the Sentinel system. The units can be delivered fully equipped with checkpoint surveillance systems and border protection systems.

Fusion Sentinel is available in various kits, even offered together with a land-based workstation.







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