



MISTRAL
... Partners in Real Time

MISTRAL FALCON
RAAD

Rapid Action Armed Drones

OVERVIEW

Drones are considered the future of warfare. Drones, are increasingly finding applications in sophisticated defence scenarios like military research, intelligence gathering at borders and on battlefields to carry out combat missions beyond enemy lines. Drones are proving to be immensely effective for ISTAR (Intelligence, Surveillance, Target Acquisition, and Reconnaissance) and are widely used by defence forces worldwide.

Mistral Falcon RAAD is among the most powerful and efficient military drones in the world that provides superior war-field intelligence and air dominance. Developed in collaboration with a world leader in Armed Drones, the Falcon RAAD is a series of high-performance, super-efficient armed drones that can be used in any kind of military and special operations.



The Falcon RAAD is a force multiplier in small arms conflict and extends the troops' lethal range by up to seven times. Mistral Falcon RAAD is available in two payload configuration - Assault Rifle and Grenade Launcher.

HIGHLIGHTS



Easily transportable in small SUV or trucks



Operational picture of enemy positions



Ideal for harsh terrain conflict zones



Quick swappable payload / magazine



Provides an elevation advantage over enemy



Adds enormous tactical advantage to the fighting force on the front



Can engage in conflict without soldiers being put at risk

FALCON RAAD with Assault Rifle

The Mistral Falcon RAAD can be integrated with an Assault Rifle with recoil absorption and target calibration. Falcon RAAD features an advanced gun stabilization system, and is designed to trigger firing in single and burst modes. The armed drone allows quick magazine swap or reload along with a wide angle gun movement on elevation axis.

FALCON RAAD with Grenade Launcher

The Mistral Falcon RAAD can be integrated with a Grenade Launcher, which has an effective launch range of 400-450 meters. The Grenade Launcher supports various ammunitions such as Thermobaric, Smoke and Lightning, among others. The system supports wide angle launcher movement on elevation axis with high precision, making it one of the most lethal platforms in small arm conflicts.

Superior Operational Capabilities

Mistral Falcon RAAD can conduct fully autonomous missions with multi-layer safety, requiring final consent from the user for firing. The drone has two integrated cameras with real-time video streaming capability - a pilot camera for birds-eye view and a gun-mounted barrel camera for target viewing. An in-built electronic sight and ballistic calculation module aids precision firing during operations. Users can also opt for night vision sensors that allow the drone to operate during the night or low-light conditions.



Features

- ▶ Rugged Drone with Advanced Recoil Stabilization System (ARSS)
- ▶ Day/Night operational modes
- ▶ Operational range: 3 km radius
- ▶ Max Take-off Weight (MTOW): 45 kg
- ▶ 20-25 minutes of operation on single charge
- ▶ Quick swap of payload
- ▶ Max Operating altitude of up to 1000 feet AGL & up to 9800 feet above MSL
- ▶ Manual, Autonomous flight according to planned route/mission (GPS/GLONASS)
- ▶ Independent cameras for target and flight operations
- ▶ Firing only on operator consent
- ▶ Auto Return Home in case of link-loss or critical battery level
- ▶ Complies with the IP67 standard
- ▶ Real-time video and flight telemetry data transfer and recording
- ▶ Dimensions: Width: 145 cm; Height: 70cms

FALCON RAAD - Ground Control Station



The Ground Control Station (GCS) of Mistral Falcon RAAD is ergonomically designed to ensure easy portability and provide maximum usability on field. The GCS records and displays video stream, flight telemetry data and drone flight position on the moving map. The highly user-friendly GCS UI aids the user to

start/stop video recording and selection & playback of recorded videos for post-mission analysis. The GCS allows the users to define the operational mode, configure missions on moving map, plan autonomous flight, etc.

Mistral Falcon RAAD comes with two Ground Control Stations. One can be used for piloting the drone and the other for operating the gun efficiently. Operators can select the respective camera input in the GCS; while the pilot can select the video streamed from the 360° birds-eye-view camera, the gun operator can view the visuals from the optical camera mounted on the gun for precise targeting and firing.

ABOUT MISTRAL

Mistral is a technology design and systems engineering company catering to customers in domains of Defense, Homeland Security and Product Engineering all over the world. **Mistral is a House of Special Purpose Drones.** Our Homeland Security division offers a variety of security and surveillance solutions for Command and Control, Mobile C4ISR, Drone Detection and Neutralizing, Video Analytics, Tactical Communication; designed for Special Forces, Police and Para-military for Emergency Response Management, Disaster Management and Border Surveillance.

Since 1997, Mistral has been aiding governments to upgrade and modernize Homeland Security systems with the latest technologies and equipment. Our Homeland Security solutions provide information in real-time, enabling quick decision making.



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