

Bird of Prey

Drone-mounted remote weapon system





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The Bird of Prey is an agile, compact and fully stabilized weapon system for drone platforms, designed to enhance infantry squad lethality beyond its detection and engagement range with stand-off warfare capabilities. Bird of Prey enables fast and accurate engagement against a low-signature enemy in various non-line-of-sight combat activities including urban and force protection scenarios. The lightweight and foldable system is designed to be carried, deployed and operated by a single soldier, fitting into an infantry backpack.

System Overview

The Bird of Prey drone-mounted system interfaces directly with the gunner, designed for integration with the Battle Management System (BMS) and supports swarm attacks in the future dynamic battlefield. The system supports a range of modular multi-role and multi-caliber armaments while maximizing flight time and mission length.



System Highlights

Bird of Prey features advanced algorithms and autonomous capabilities including integrated autonomous target recognition (ATR) to detect, classify and track targets within the field of view (FOV) day and night. Major subsystems include:

- **Weapon gimbal and sight:** Two-axis pedestal with advanced inertial stabilization provides high accurate lethality for all mounted armaments. An optical sight independently stabilized is equipped with day and night thermal cameras, enabling the operator to detect, aim and track the target with high accuracy. The weapon system supports several types of armaments in a variety of calibers (5.56/7.62/40mm), designed for easy and quick replacement of the weapons in the field.
- **Carrier drone platform:** The weapon system is agnostic to the drone and can be mounted on various standard drones.
- **Ground Control Station (GCS):** Allows for safe and easy operation of the system and drone, including manual or automated takeoff/landing, flight and surveillance mode, auto flight path planning and weapon operation. The GCS supports manual control and autonomous flight modes, enabling the operator to focus on the target engagement.
- **Fire control system:** AI-based algorithms support remote automated takeoff and landing, as well as flight path planning to accommodate for border security missions. Easy to operate Ground Control Station, advanced touch operation interface and integrated autonomous capabilities allow easy engagement and high mission success rate. Built-in target tracking capabilities process raw-high quality video in real-time.
- **Modular armament support:** The dedicated weapon mount interface interacts with the fire control module, updating the relevant ballistic calculation automatically without the need for further input from the operator.

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Key Features

- Unmanned small arms aerial solution
- Supports several types of weapons
- Fully stabilized fire control system for drone platforms
- Stabilized optical sights: Visible day HD camera, thermal camera
- Advanced Auto Target Tracker and Auto Target Recognition
- Lightweight - total weight less than 23kg
- High mission duration > 45min
- Hit probability > 90% (SSH)

Key Benefits

- Fast reaction and engagement against a low signature enemy
- Versatile engagement ranges
- Complete robust solution



Elbit Systems Land

E-mail: land@elbitsystems.com www.elbitsystems.com

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