

# Air Defense Solutions

Multi-layer, integrated and effective low altitude air defense



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Armies and terror organizations worldwide target strategic sites, national borders, urban centers and maneuvering military forces. Airstrikes are the most common attack scenario, specifically carried out by low-level platforms cruising at up to 15,000 ft such as combat aircraft, helicopters, UAVs and drones, which pose a significant challenge for most air defense systems.

Elbit Systems Land's air defense concept is based on detecting, identifying, and defeating the threats, providing a complete defensive umbrella against low-level air attacks. The adaptive solutions are designed to intercept various threats on civilian or military targets using hard kill and soft kill methods.



## Typical Threats







## ➤ Modernized Air Defense Gun Systems

### The most effective low altitude point defense solution

Elbit Systems offers upgrade programs for existing air defense guns such as the Super Vulcan, Oerlikon 35mm, L70, ZU-23 and others, based on Elbit Systems' advanced and modern remote-controlled weapon systems technology. The solutions provide highly effective air defense capabilities against low-level air and ground targets, delivering improved accuracy and hit probability and enhanced operational flexibility.

The fully digital systems feature an electrical drive system, day/night camera, target acquisition and automatic target tracker, fire envelope calculation, anti-drone jamming capabilities, and multi-function display. The modernized systems integrate with GBAD C<sup>2</sup> and air defense radar systems and SIGINT detector, delivering a real-time aerial situational picture with near zero false alarms.

**Birds of Prey:** An armed multi-mission drone for close target monitoring using wireless communication at a range of up to 10km. The system can carry various sniper and assault rifles and a 40mm grenade launcher armed with lethal or non-lethal ammunition, capable of engaging with hostile drones and other targets while minimizing collateral damage.

**Anti-drone RCWS:** Based on an existing standard weapon station, the anti-drone system is remotely operated through a gunner station. The high accuracy tracking system is capable of directional jamming at 3-4km and uses a "smart shooting" method at up to 3km.

#### Main characteristics:

- Electrical drive system with day/night cameras
- Target acquisition and automatic target tracker (ATT)
- Firing envelope calculation
- Improved hit probability
- Gunner electrical handles with multi-function display
- Integrates with GBAD C<sup>2</sup> and air defense radar systems





## Air Defense Products

### ➤ Red Sky - VSHORAD Missile Launcher Integrated hard kill and soft kill capabilities

A combat proven, very short range air defense (VSHORAD) solution, the Red Sky 2 system is highly effective against a wide range of air threats. The solution is designed to detect, identify and intercept threats using hard kill and soft kill effectors.

The Red Sky 2 drone defender system incorporates multiple sensors, radar, E/O day and night cameras and SIGINT detector, delivering a real-time aerial situational picture with near zero false alarms. The missile launcher is compatible with various VSHORAD IR-homing fire-and-forget missiles including the GROM, Stinger, Mistral, and IGLA missile series. The system features a wide band high-power directional RF jammer providing effective blocking of RF communication and GNSS frequencies.

#### Main characteristics:

- IR tracking range: Up to 15km (target and weather dependent)
- Engagement: Up to 7km (missile type dependent)
- Carriage capability: 2/4 missiles ready to fire
- Automatic firing envelope calculations
- Maximized missile range
- Improved hit probability
- Optimized engagement process



Grom Family



Stinger/Mistral Family



IGLA Family





## › TORC30-Advanced Air Defense Turret

### High mobility and multiple aerial defense effectors

Featuring multiple sensors and effectors, the Torc30 advanced air defense turret can integrate with 30mm/35mm guns, VSHORAD IR-homing fire-and-forget missiles and anti-drone devices. The solution provides highly effective air defense capabilities against low-level air and ground targets, delivering improved accuracy, hit probability, and enhanced operational flexibility.

Torc30 can be equipped with ABM ammunition that explodes in mid-air according to target range, sending out multiple sub-projectiles to greatly increase hit and kill probability.

#### **Main characteristics:**

- Multiple sensors - radar, E/O day and night camera, SIGINT detector
- Multiple effectors with hard kill and soft kill capabilities
- Firing envelope calculation
- Integrates with GBAD C<sup>2</sup> and air defense radar systems
- Stabilized system allows high-precision shots on-the-move
- Crew protected in armored vehicle



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## Key Benefits

- Combat proven
- Cost-effective
- All-in-one integrated solution
- Modular, scalable and customizable
- User-friendly system
- Multi-mission/ scenarios
- Operational flexibility
- Rapid deployment
- 24/7, all-weather operation
- Single operator
- Minimal collateral damage

## Key Features

- Soft and hard kill configurations
- Multi-sensor – radar, E/O and SIGINT
- Missile launcher and air defense guns
- Firing envelope calculation
- Optimized engagement process
- Improved hit probability
- Stabilized for high precision
- Integrates with GBAD C<sup>2</sup> and radar system



**Elbit Systems Land**

E-mail: [land@elbitsystems.com](mailto:land@elbitsystems.com) [www.elbitsystems.com](http://www.elbitsystems.com)

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