

Saab's Counter-UAS solution

A modular family of counter unmanned aerial systems (UAS) solutions – proven and available



Photo credit: Alexander Gustavsson/Försvarmakten



SAAB

Saab's Counter-UAS (C-UAS) solution is engineered to detect and neutralise small-to-medium-sized UASs that fly low with minimal signatures, often evading detection from traditional air defence solutions.

Bringing together field-tested, reliable components trusted by armed forces worldwide, like Saab's Giraffe 1X radar, Trackfire Remote Weapon Station (RWS), and Short-Range Air Defence (SHORAD) C2 modules, this highly adaptable system-of-systems solution delivers swift and efficient defence against one of today's fastest-growing threats.

A complete solution – from sensor to effector

- Built on proven products and technologies
- Developed and manufactured in Sweden and the EU
- Cost-effective, open-architecture design
- Easy and rapid integration into different platforms
- Complete product life-cycle support

Photo credit: Alexander Gustavsson/Försvarsmakten

Adapting to real-world threats – faster than ever

As demonstrated by the "Loke" project – an example of a C-UAS system that went from concept to live demo in just 84 days by repurposing field-tested products – Saab can bypass the traditional development cycle, usually spanning years, to provide a solution capable of countering the UAS threat today.

Enabling comprehensive protection for military units, airfields and critical infrastructure, Saab's offering is designed to strengthen your current capabilities and complement your existing solutions, rather than replace or compete with them. Leveraging established products but engineered with the capability to continuously evolve as new innovations emerge, it efficiently solves problems by connecting what Saab already does best: delivering an interoperable defence solution ready for immediate operational use.

Scalable, modular and customisable

Inspired by the modular and scalable design of Saab's world-class Mobile Short-Range Air Defence (MSHORAD) system, the C-UAS solution allows for streamlined integration into defence structures and platforms. NATO-compatible, easy to use and train on, and adaptable to various mission requirements and threat levels, this highly customisable offering can be comprised entirely of Saab sensors and effectors, incorporate a customer's existing systems, or feature components from other suppliers.

Ensuring C-UAS readiness

Saab provides comprehensive life-cycle support to keep C-UAS systems operational and adaptable to evolving threats. From initial deployment to ongoing maintenance and upgrades, our services include integrated logistics, in-service support and sustainment, ensuring mission-ready capabilities.

Examples of Saab components that can be integrated into the C-UAS solution

Sensors

Giraffe 1X

The Giraffe 1X 3D multi-mission radar, with its combination of small size, multi-role capabilities, range performance and flexibility, is in a class of its own. Its state-of-the-art Drone Tracker capability allows it to detect, classify and track small UAS targets, distinguishing them from birds with exceptional accuracy.

- Extensive range performance
- All-target capability
- High mobility and rapid deployment
- Supports "search on the move"
- Fast track initiation and high target-update rate



Command and Control (C2) systems

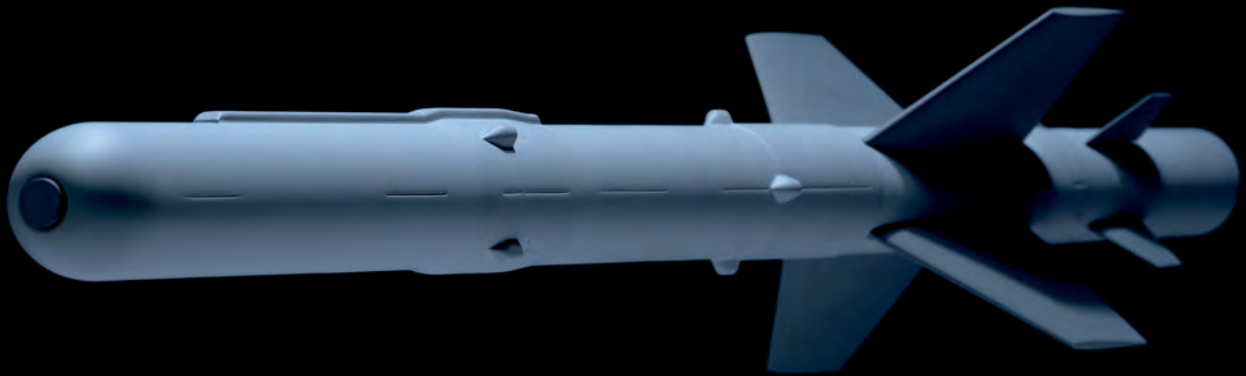
SHORAD C2

Comprised of Ground Based Air Defence (GBAD) C2 and weapon terminals, the SHORAD C2 system optimises the use of sensors and effectors to provide enhanced decision support, reduced time to act, and interoperability through tactical data links. The system supports all battle phases, from preparation and deployment to engagement and battle damage assessment.

- Common situational awareness with sensor fusion
- Flexible sensor integration using SAPIENT and ASTERIX
- External provision of situational awareness through TAK and MIL-STD-6090 Cursor on Target (CoT)
- Engagement support



Effectors



Nimbrix

A low-cost and compact short-range C-UAS missile, purpose built to neutralise drone threats with precision and efficiency. It is easily integrated into existing systems, providing a cost-efficient option in the missile segment countering drones. With a range of up to 5 km and an active target seeker, Nimbrix offers air protection even against saturation attacks. Modular and mobile, the missile can be operated as a standalone solution, easy to deploy and intuitive to use.

- 3D-printed airframe
- Use of commercial-off-the-shelf (COTS) parts for cost efficiency
- Flexible integration
- Seeker guided with hard-kill warhead

Effectors

Trackfire ARES RWS

With its fully stabilised, remotely operated dual-weapon and sensor system, the Trackfire RWS delivers top-tier performance in any environment. The Trackfire ARES (Aerial Response) RWS is specifically engineered to counter the evolving drone threat, enhancing airspace security while minimising ammunition usage without compromising effectiveness. The Trackfire RWS can accommodate a wide array of effectors; the ARES variant is equipped with a 30×113 mm Bushmaster chain gun as its primary weapon and a 7.62 mm general-purpose machine gun as its secondary weapon.

- Moving-to-moving capability with exceptional accuracy
- Integrated fire control computer with direct ballistic calculations
- Stabilised independent line of sight
- Compact and intuitive HMI
- Protected gunner

Photo credit: Alexander Gustavsson/Försvarmakten

RBS 70 NG

The RBS 70 NG is a 24/7 combat-proven GBAD system that delivers high precision at a range up to 9 km. The all-target capability, from aircraft to UAS, protects even the outer perimeter in your short-range layered air defence. Used standalone or integrated in a system-of-systems, with the possibility of remote control, it gives you the ultimate advantage. Highly modular and flexible, this state-of-the-art system can be integrated into various vehicles as a MSHORAD solution and can also quickly transform into a man-portable solution. With its unjammable laser guidance, the system gives the operator full control of the missile, including the possibility to abort the mission.

- Unjammable laser guidance
- High-precision range
- Auto-tracking technology
- Deployment time – approx. 45 seconds
- Highly scalable, long-term solution



User-centric training

Saab's C-UAS solution is designed for user-centric training, facilitating a rapid learning curve with minimal complexity. Its intuitive design directly translates into highly effective training, allowing operators to quickly master its many capabilities and deploy it with confidence. To further enhance the realism of these training sessions, Saab offers a comprehensive suite of C-UAS training solutions.



UAV training service

Saab's unmanned aerial vehicle (UAV) training service provides a plug-and-play drone as a player in live training scenarios or can be offered as a standalone product or leasing service. This includes all UAV equipment and a qualified pilot ready to act as a role player for either friendly or opposing forces. Customers using Saab's world-leading live training system, GAMER, can add this capability without any special upgrades or investments.

Target Systems

Saab's target systems provide a deployable, threat representative target drone system for C-UAS training and assurance. With a sub-mass design, they minimise flight clearance requirements and operational risks, all while prioritising the end user in dynamic training environments. This allows for seamless integration of C-UAS training into broader exercises, empowering customers across diverse training scenarios.

Partnership

Creating value through integration

The C-UAS solution's open-architecture design fosters true collaboration, inviting partners to integrate their advanced technologies into a complete C-UAS offering. This collaborative approach ensures faster deployment times, enhanced credibility, and greater market reach through Saab's ecosystem. By sharing specialised knowledge and combining individual strengths, we can offer more than just the sum of our parts.

