



**SAAB**

# **GIRAFFE 1X**

## 3D SHORT-RANGE RADAR

# GIRAFFE 1X

## AGILE FORCE PROTECTION

When agility and presence close to the combat area are essential, the GIRAFFE 1X short-range 3D radar surveillance system is there to protect mobile forces and assets against airborne threats. The GIRAFFE 1X is an ideal air surveillance component in the VSHORAD domain and can be used as a gap-filler that provides airspace commanders with the capabilities needed for maintaining continuous and accurate air situational awareness.

### HIGHLY CAPABLE WITH SMALL FOOTPRINT

GIRAFFE 1X is a small and lightweight yet high-performing 3D radar that is easily integrated in almost any type of mobile platform, fixed structure or C2 system. The system is designed to deliver key capabilities as part of short-range surveillance and Ground Based Air Defence (GBAD).

### ACCESSING THE BIGGER PICTURE

The compact concept makes GIRAFFE 1X the perfect choice when flexible and agile GBAD is desired.

It provides swift understanding of the air situation, enabling immediate and effective response to changing threats, new tactics and shifting operational conditions. The system monitors the air volume 360 degrees for air targets and simultaneously locates and warns against incoming rocket, artillery and mortar rounds.

## A WORLD-CLASS LINE-UP

All Saab radars combine battle-proven designs from the renowned ERIEYE (AEW), ARTHUR and GIRAFFE AMB product families. Saab offers a full range of high-performing radar systems for a multitude of applications and mission types.

	GIRAFFE 1X	ARTHUR	GIRAFFE AMB	GIRAFFE 4A	GIRAFFE 8A	RADAR UPGRADES
<b>Air Surveillance</b>			•	•	•	•
<b>Ground Based Air Defence</b>	•		•	•	•	•
<b>Weapon Locating</b>		•		•		
<b>Sense and Warn</b>	•	•	•	•		
<b>Multi Role</b>			•	•	•	



# LOOK INTO THE FUTURE

Saab has been active in defence and security for more than 75 years. Solutions for air, sea and land operations, civil security and commercial aeronautics make us a complete business partner. Working with Saab means you will benefit from the ultimate synthesis of experience, efficiency and excellence in engineering.

In radar technology we are at the very forefront and offer outstanding capabilities to demanding customers all over the world. In a way you could say that our mission in this field is to help your forces to virtually look into the future. To see before you are seen and to maintain superior situational awareness.

A line of ground-breaking innovations form a track record that proves our ability to sharpen the **thinking edge**. Making it sharp enough to cut through the barrier of the impossible, strengthening your ability to protect your troops and keep people safe.





# THE ADVANTAGE OF BEING AWARE

GIRAFFE 1X is a mobile, deployable or fixed asset for short-range surveillance and Ground Based Air Defence (GBAD) that provides forces with early warning and the ability to detect and track hundreds of targets – simultaneously. Even in high-clutter environments. The system can be delivered with surface surveillance as well as sense & warn add-ons and can be operated remotely or locally.

## **FIXED, MOBILE OR DEPLOYABLE**

GIRAFFE 1X is very lightweight with an exceptionally small integration footprint. In fact, the complete radar can be transported on a pickup truck-sized vehicle by helicopter or towed on a trailer. It can be permanently installed on a building or a mast, or integrated into a suitable vehicle.

## **SUPERIOR DETECTION**

GIRAFFE 1X covers the entire search volume every second and will detect any air threat, including low, slow and small targets. The system provides exceptional air picture awareness with all-weather performance and accurate 3D data for all targets in the search volume.

The system offers Sense & Warn functionality with 360° detection and tracking of RAM threats. This means it provides your forces with automatic warning of incoming threats, giving them the time needed to react.

## **MULTI-ROLE FOR MULTIPURPOSE**

GIRAFFE 1X provides simultaneous air surveillance, GBAD target acquisition and RAM sense and warn

capabilities without performance degradation. It can detect fixed and rotary wing targets, fast missiles and RAM targets as well as small UAVs even in severe clutter. It also offers flexible integration of weapon systems and tactical data links, and can be configured fully self-contained with C3 capabilities.

GIRAFFE 1X allows for standard or customised data link integration for sharing and distribution of target data.

## **GIRAFFE 1X KEY ADVANTAGES:**

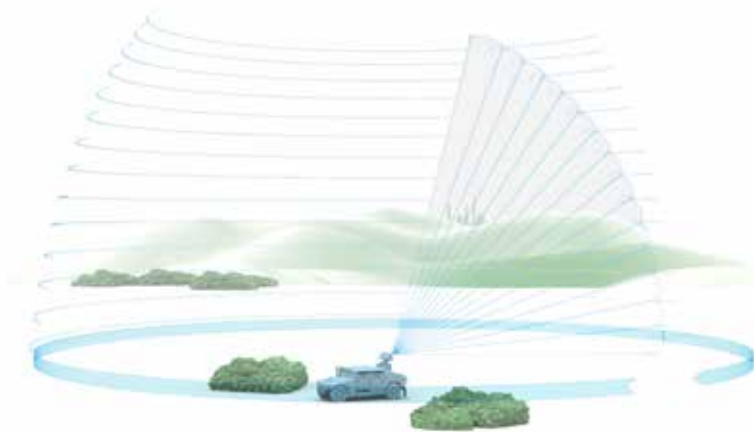
- A small lightweight yet high performing 3D radar
- Covers the entire search volume every second
- Enables unique flexibility and redundancy in GBAD solutions

## **ILS - INTEGRATED LOGISTICS SUPPORT**

ILS is an important part of the system delivery and will form the basis for future maintenance.

Saab ILS experts have solid experience in tailoring ILS deliveries together with customers worldwide.





**VOLUME SEARCH**

- 12 stacked beams
- Elevation coverage: 0°-70°
- Scanning rate 60 rpm

**TECHNICAL DATA**

Radar type	Stacked beam 3D radar
Antenna type	AESA, digital beam forming
Frequency	X (I) band
Elevation coverage	> 70 degrees
Rotation rate	60 rpm
Search volume	360° or in a sector
Instrumented range	75 km
Capacity	
- Air:	> 100 tracks
- Surface	> 200 tracks
Radar Weight	< 300 kg
Power consumption	2.3 kW
Climate zones	All climate zones; in-land, costal, desert and arctic



Specification subject to change without notice.





**SAAB**

[www.saabgroup.com](http://www.saabgroup.com)