

# NASAMS

NATIONAL ADVANCED SURFACE-TO-AIR MISSILE SYSTEM



KONGSBERG



## NASAMS

### National Advanced Surface-to-Air Missile System

#### High Precision Strike Capability

The National Advanced Surface-to-Air Missile System (NASAMS) is a multi-missile, short-to-medium range, ground-based air defence weapon system with proven capabilities against a vast number of air-breathing threats, including cruise missiles, drones, fighter aircraft, and helicopters. It is designed to protect a wide range of defended assets, including military facilities, critical infrastructures, airbases, and populated areas.

#### Combat-Proven Capabilities

NASAMS has a multi-missile capability, employing AIM-9X for short-range engagements, AMRAAM for medium range, and AMRAAM-ER for extended range. The flexible missile options pose dilemmas for adversaries and enhance overall effectiveness through a layered system.

With over 1,000 live firings, NASAMS has demonstrated exceptional reliability and availability. It has proven its exceptional performance in a wide range of operational scenarios, including the war in Ukraine. The system is built for use in diverse environments, from arctic to subtropic and desert conditions.



#### NASAMS features

##### Capacity Against

- Aircraft, helicopters, UAVs, and cruise missiles

##### Passive Sensors

- Electro-optical sensors

##### Active Sensors

- 3D radar (AN/MPQ-64F1 Sentinel)

##### Effectors

- AMRAAM
- AMRAAM ER missiles
- AIM-9X

##### C2 & Communication

- Advanced Fire Distribution Center (FDC) with multi-domain command & control capabilities
- Integration with Higher Echelon Units, lateral and subordinate systems
- Flexible communication with land link/field wire, VHF, UHF, and SHF capabilities
- IFF NATO Mode 5, Level 2
- Fully netted and distributed air and missile defence operations

## Network System and Modularity

NASAMS features a network-centric architecture that allows for multiple simultaneous engagements and Beyond Visual Range (BVR) capabilities.

The system's modular design includes a Fire Distribution Center (FDC), 3D radar, missile canister launchers and electro-optical sensor. This modularity provides the opportunity to incorporate more of every component, making the system highly flexible. The integrated network of these components ensures minimal latency over large distances, optimizing system performance with sensor and weapon fusion tailored to every mission.

## Continuous Evolution into Full Spectrum Air Defense

Over the past three decades, NASAMS has continuously evolved to counter current and future threats. Its open architecture allows for the integration of new technologies and capabilities, such as active/passive radars, Sense & Warn capabilities, and various effectors.

The ambition of Anti-Tactical Ballistic Missile (A-TBM) defence and the integration of air defence systems with shorter-range capabilities, including Counter-Unmanned Aerial Systems (CUAS), are advancing towards a Full Spectrum Air Defence (FSAD) system. The system's advanced command and control backbone enables users to tailor a NASAMS solution for every mission.

NASAMS is globally adopted, ensuring proven interoperability with higher echelon units and allied NATO/EU forces.

## Key Elements

- **Multi-Missile Capability:** AIM-9X, AMRAAM, and AMRAAM-ER for short-, medium- and extended range engagements.
- **Network-Centric Architecture:** Dispersed units enable simultaneous BVR engagements while greatly complicating enemy detection, targeting and disruption.
- **Modular Design:** Configurable system including FDC, 3D radar, missile launchers and EO sensors.
- **Proven Reliability:** Operational 24/7 in Ukraine since 2022, protecting population, infrastructure and armed forces.
- **Operational Flexibility:** Defends air bases, ports, urban areas and mobile land forces; interoperable with other air defence systems.
- **Continuous Evolution:** Open architecture supports integration of new technologies and emerging capabilities.
- **Full Spectrum Air Defence:** NASAMS C2 enables future A-TBM, SHORAD and C-UAS integration for Full Spectrum Air Defence.

