



MICA NG

NEW GENERATION MULTI-MISSION AIR-TO-AIR MISSILE SYSTEM



MICA NG is the latest generation of the multi-mission air-to-air missile system for the Rafale.

It provides an unsurpassed tactical flexibility in order to meet the most demanding operational requirements:

- Enhanced Beyond Visual Range (BVR) performance
- Enhanced Short Range (SR) performance
- Multi-target/multi shoot
- Maximum flexibility for multi-role/swing-role aircraft

Operational features

Like its predecessor MICA, the MICA NG missile has a dual role. It operates in both BVR and SR combat situations with very high performances. MICA NG offers two guidance systems with two interoperable seekers:

- Active RF AESA seeker providing all weather shoot-up/shoot-down capability
- Passive Imaging IR seeker surpassing latest generation AAM missiles

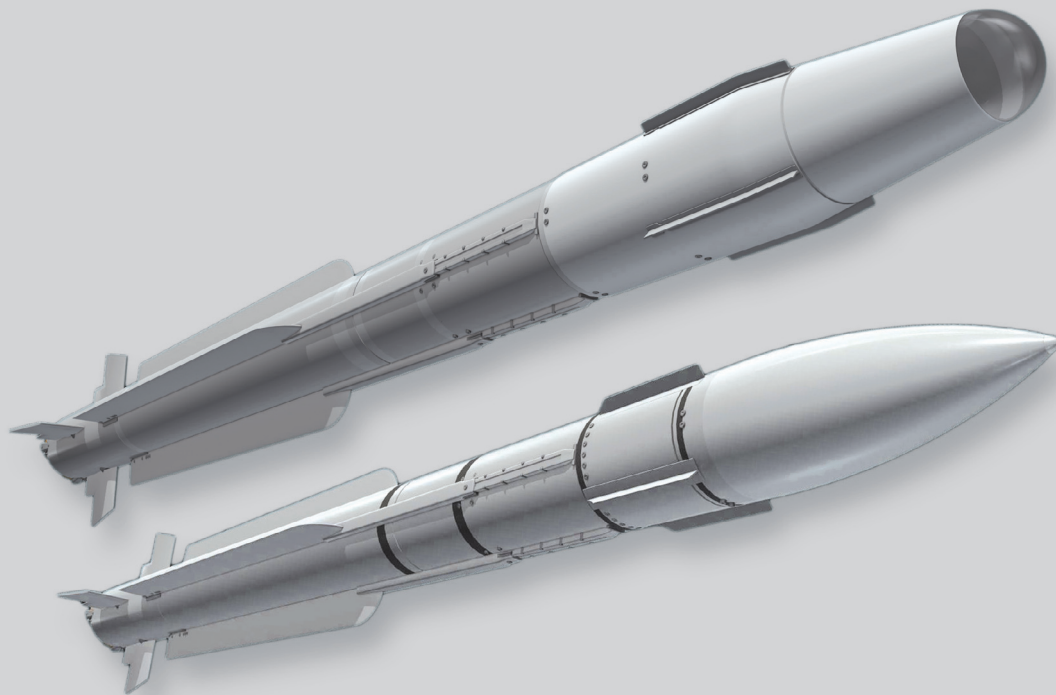
Whatever the tactical situation, MICA NG always provides the optimum firing solution.

Operational advantages

- Long range capability (up to +40% with MICA NG compared to MICA)
- High manoeuvrability, even at end game, with dual pulse motor
- Reduced maintenance
- Interoperability MICA/MICA NG
- MICA NG missile provides a dual use (air and surface launch)
- IR seeker providingIRSTS capability to pilot
- Very high probability of kill
- Extensive release domain

IR MICA NG outperforms other BVR missiles with its unique stealthy interception capability, provided by its silent IR seeker.

In SR combat situations, with the combination of Lock-On-Before-Launch and Lock-On-After-Launch modes, together with excellent acquisition and tracking performance, authorise a 360° launch envelope. This ensures with first shoot/first kill capability, even if the in case of a threat is in the rear sector (over the shoulder capability).



Missile guidance

- Active RF AESA seeker or passive imaging IR seeker
- Two way Data link
- Lock-On-After-Launch
- Lock-On-Before-Launch

Lethal chain

- Multi-mode RF / Laser Proximity fuze
- Impact fuze
- High explosive focused fragmentation warhead

Aerodynamics and control

- Dual pulse motor
- Long chord wings for high maneuverability
- Tail control surfaces
- Thrust Vector Control (TVC) for initial control, very short interception time and Helmet Mounted Sight (HMS) target designation

Propulsion

- High impulse
- Low-smoke
- Solid propellant

Operational flexibility

- Rail or eject launchers
- Firing up to platform max g and max angle of attack

Programme references

- More than 6,000 missiles from MICA family sold worldwide

Physical characteristics

Weight: 112kg
Length: 3.1m
Diameter: 160mm

