



MICA

MULTI-MISSION AIR-TO-AIR MISSILE SYSTEM



MICA is the multi-mission air-to-air missile system for the Rafale and the latest versions of Mirage 2000-5 combat aircraft.

It has a high level of tactical flexibility in order to meet the most demanding operational requirements:

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

Operational features

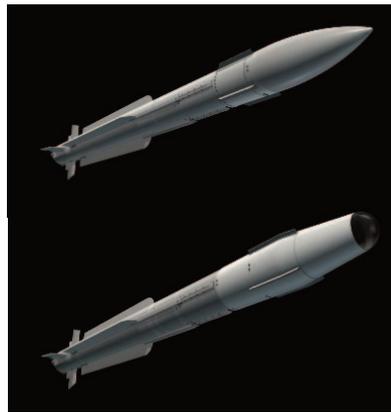
MICA has a dual role. It is able to cope with both BVR and SR combat situations and exhibits very high performance in both roles. The weapon covers Beyond Visual Range situations and in addition offers two guidance systems with its two interoperable seekers:

- RF MICA with radar seeker providing all weather shoot-up/shoot down capability
- IR MICA with dual waveband imaging infrared seeker surpassing latest generation AAM missiles.

Operational advantages

- MICA provides the fighter a unique tactical flexibility to engage any type of target (fighter, cargo, small target, helicopter) in any circumstances thanks to its dual seeker capability at any range (from BVR to short range).
- Medium to lightweight modern fighters carry at least six MICA missiles, together with other stores (eg. air-to-ground missiles) without any compromise on short-range performance.
- MICA missile provides a dual use (air and surface launch).

MICA outperforms other BVR missiles with its unique stealthy interception capability provided by its silent IR seeker. In SR combat situations, combination of Lock On After Launch mode and excellent acquisition and tracking performance authorise 360° launch envelope with first shoot/first kill capability even in case of a threat in rear sector.



Missile guidance

- Strap-down inertial reference unit
- Active RF monopulse doppler seeker
- Passive imaging IR seeker
- Data link
- Lock-On After Launch
- Lock-On Before Launch

Target designation modes

- Onboard aircraft radar
- Electro-optical sensors
- Helmet mounted sight (HMS)
- Autonomous lock-on from the seeker's ownIRST scans

Aerodynamics and control

- Long chord wings
- Tail control surfaces
- Thrust vector control (TVC)

Propulsion

- High impulse
- Low-smoke
- Solid propellant

Fusing and warhead

- RF proximity fuse
- Impact fuse
- Focused splinters

Aircraft integration

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

Programme references

- More than 5,900 missiles sold worldwide
- Integrated with Mirage 2000-5 series and Rafale
- Full scale production
- In service

Technical details:

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

- RF or IR guidance
- Thrust Vector Control system
- Rail and eject launch
- Vertical launch capability (VL MICA)

