

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

### **Main features**

MICA has a totally 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 2 guidance systems with its 2 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.

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

In SR combat situations, combination of Lock On After Launch mode and

excellent acquisition and tracking performance authorize 360° launch envelope with first shoot / first kill capability even in case of a threat in backward sector.

### **Operational benefits**

Lightweight and compact, MICA was originally designed as a «multi-aircraft» missile that could be easily integrated onto any modern fighter aircraft. Medium to lightweight modern fighters carry at least 6 MICA missiles, together with other stores (eg. air-to-ground missiles) without any compromise on short range performance.

### Dual use

MICA missile provides a dual use (air and surface launch)

- Increased BVR & SR effectiveness
- More fire power for lightweight fighters
- Tactical flexibility with RF & IR
- In service with the French Air Force and Navy
- and several foreign Forces

# MICA

MULTI-MISSION AIR-TO-AIR MISSILE SYSTEM





## AIR

### 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 own IRST scans

### Aerodynamics and control

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

### Propulsion

- High impulse
- Low-smoke
- Solid propellant

### Fuzing and warhead

- RF proximity fuze
- Impact fuze
- Focused splinters

### Aircraft integration

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

### **Programme references**

- More than 3,500 MICA sold to 10 countries
- Integrated with Mirage 2000-5 series and Rafale
- Full scale production
- In service









MBDA Contacts

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**Missile characteristics** 

• Diameter: 160 mm

• Thrust Vector Control system

• Rail and ejection launch

• RF or IR guidance

• Weight: 112 kg

• Length: 3.1 m

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