



MISTRAL ATAM

AIR-TO-AIR SYSTEM FOR HELICOPTERS
BASED ON THE MISTRAL MISSILE



MISTRAL ATAM is based on the MISTRAL missile with its fire-and-forget engagement mode, ease of operation and unrivalled kill probability.

The system is based on two, twin launchers, each fitted either side of the helicopter and deploying a total of four ready-to-fire Mistral missiles.

The weapon can be connected to the helicopter's combat system when integrated onto a combat helicopter, or through simplified control equipment if installed on a multi-purpose helicopter. In both cases, it is characterised by simplicity of operation, a very low crew workload and a high level of performance. The system can be operated within the whole flight envelope of the launch helicopter, at speeds of up to 200 knots and at altitudes exceeding 15,000 feet.

MISTRAL ATAM ensures a large off-boresight capability, together with the ability to aim the missile seeker very precisely at a given target. The missile has a shaped trajectory in order to intercept targets top-down or at long range, the crew can also select the proximity fuze mode.

MISTRAL ATAM is operated by the French Army Aviation on the Tiger attack helicopter.

MISTRAL ATAM is already integrated onto India's HAL helicopters (DHRUV & LCH) and the integration is underway on KMAH helicopter from KAI.

Operational advantages

- Four ready-to-fire MISTRAL missiles
- Unlimited flight envelope
- Adaptable to:
 - Helicopters
 - Light aircrafts
 - UAV
- Wide range of missions:
 - Self-protection in hostile environment
 - Protection of other platforms engagement
 - Ensuring dropping areas safety during air-mobile operations
 - Complementary surface to air projection force
 - Temporary defence of ground forces facing air threat (mobile air defence)
 - Mobile escort of convoys
 - Anti UAV/ISTAR warfare
 - Non-conventional air attack
- In full operational service

BATTLEFIELD

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Ease of operation

- The lowest possible constraints for crew
- User friendly interface, no pitch-up manoeuvre before firing
- Automated engagement sequence
- Easy reload

Operational effectiveness

- Firing possible within the whole flight envelope (from NOE to 15,000 ft, from hovering to 200 knots)
- Very short reaction time lock-on and interception, even in dense clutter
- Large off-boresight capability

Modularity

MISTRAL ATAM can be mounted either on attack helicopters fitted with an integrated combat system (Tigre, Rooivalk) or on lightweight helicopters (Gazelle, Fennec) and utility helicopters (Cougar) as a standalone weapon system.

Technical characteristics

- Fire-and-forget
- First VSHORAD missile with IR matrix imager
- 20 years lifetime without maintenance
- Over 96% kill probability – demonstrated on operations
- Immune to all known IR countermeasures



Length:	1.88m (incl. launch motor)
Weight:	less than 20kg
Maximum diameter:	~92mm
High manoevrability:	up to 30gs
Interception range:	up to 8,000m
Interception altitude:	up to 6,000m
Min. interception range:	500m

- High supersonic speed – short interception time
- 3kg warhead coupled with laser proximity and impact fuze
- Qualified for use in extreme conditions – -40C° to +71C°

