



ASTER 30-SAMP/T

MEDIUM RANGE SURFACE-TO-AIR MISSILE

ASTER 30 SAMP/T is the 21st century's main, mobile anti-aircraft defence weapon for theatre protection. It protects sensitive sites and deployed forces against missile threats (TBM, stand off and cruise missiles, ARM) and aircraft, replacing all existing medium range ground-to-air systems.

The ASTER 30 SAMP/T system is designed to meet medium and long range air defence needs (force projection, protection of high-value areas and area protection). It can operate in standalone mode or can be integrated in a co-ordinated network.

The system comprises:

- A fire control system based on a Command and Control system (an engagement module connected to a multi-function Arabel radar)
- Up to six vertical launchers each fitted with eight, ready-to-fire ASTER 30 missiles

In addition to its 360° defence capabilities, the ASTER 30 SAMP/T system is highly automated and features extremely quick response times, a high rate of fire (eight missiles in about 10 seconds from each launcher), high built-in test capability and a streamlined crew requirement (only two people are needed to operate the system). It also meets demanding strategic and tactical mobility requirements with all vehicles being off-road capable and air-transportable in C130-class aircraft.

Operational advantages

- ATBM capability
- Extremely quick response time
- High rate of fire
- Streamlined crew requirement



Operating principle

ASTER is a two-stage missile, a concept which leads to maximum effectiveness of the interceptor stage.

The solid propellant booster ensures the optimum shaping of the missile's trajectory in the direction of the target and separates a few seconds after the vertical launch. Up to its mid-course, the weapon is inertially guided, using refreshed target data transmitted by the engagement module through the multi-function radar. During the homing phase, guidance is achieved by an electromagnetic active seeker providing a highly accurate capability in all weathers.

ASTER combines a powerful aerodynamic control «PAF» with a direct force control «PIF», using lateral thrusters right at the centre of gravity of the kill vehicle. This innovative control concept provides the weapon with unequalled agility and manoeuvrability within its whole intercept domain, especially at high altitude.

The missile combines a proximity fuze and a blast fragmentation warhead that is effective against even the most hardened of targets including Tactical Ballistic Missiles (TBMs).

ASTER 30 SAMP/T is in service with the French and Italian armed forces. Both nations are now looking towards Aster 30 Block 1 NT (New Technologies) for even greater ATBM capabilities.

Missile characteristics

- **Weight:** 450kg
- **Length:** 4.9m
- **Diameter:** 180mm
- **Propulsion:** solid propellant, two-stage motor
- **Range:** > 100km
- **Speed:** Mach 4.5
- **Altitude:** 20km

