# THALES

# MOBILE AIR DEFENCE GUN SYSTEMS

**u** Based on the 40CTA (40mm Cased Telescoped Ammunition) Gun System, the new reference for medium calibre, RAPIDFire provides a compact, mobile and multi-role solution for today's and future Air Defence missions, whether for mobile troops support or for vital asset/ fixed point defence.

**ν** RAPIDFire benefits from 40 years of Thales' background experience in field proven Weapon Systems for French and overseas Armed Forces.



ADVANCED AIR DEFENCE SOLUTIONS

# **RAPIDFire** Highly Mobile Multi-role Air Defence System for mechanized brigade protection





#### ADVANCED AIR DEFENCE SOLUTIONS

# RAPIDFIRE

Highly Mobile Multi-role Air Defence System for mechanized brigade protection

### **KEY FEATURES**

- Thanks to its powerful anti-aircraft gun and optronic fire-control, RAPIDFire is an autonomous system and is optimised to defeat new air threats such as Unmanned Aerial Vehicles, hovering helicopters, Fighters-Ground Attack (FGA), cruise missiles
- Coordinated with a high performance 3D GROUNDMaster radar and a versatile CONTROLView module, RAPIDFire provides unrivaled anticipation capability

### Multi-role:

- 40 mm gun has both air and ground defence capabilities:
- Anti-Aerial Air Burst (AA-AB) ammunition for air defence
- Armour Piercing Fin Stabilized Discarding Sabot (APFSDS) or General Purpose Round- Air Burst (GPR-AB) ammunition against armoured combat vehicles, land troops or other land threats

#### Fast into action:

- Reaction time from target detection to ready to fire mode : 4.5 seconds
- Fire on-the-move with the 40 mm gun for selfdefense purposes
- No specific alignment of the surveillance radar, optronic sight and weapons is required

#### Precision and high firepower

- The power of a 40mm with the compactness of a 25mm gun
- Latest generation 40 mm Cased Telescoped Ammunition
- Firing rate up to 200 rounds/min
- Typical burst against air threats : 1 to 10 AA-AB rounds
- 140 ready-to-fire ammunition in turret (mix of Anti-Aerial, APFSDS and GPR rounds) + 80 stored in the Gun Vehicle

#### Full autonomy:

- Optronic sensors are fitted directly on the turret so gun can operate even when not linked to the surveillance radar
- RAPIDFire is highly automated and man-in-theloop is needed only for weapon assignment and firing orders.
- Manning: Only 2 operators required to operate the system

### Improved Survivability:

- High mobility
- Day and night operation
  Optional additional armour
- Fire-on-the-move 40 mm gun for selfdefence

## **KEY FEATURES**

#### Gun Effective range:

#### • Aerial Target: 4000 m

• Infantry Combat Vehicle: 2500 m

Gun ammunition types:

- APFSDS against armoured vehicle, penetrates 140 mm of Rolled Homogeneous Armour at 1500m
- AA-AB for air targets, more than 200 tungsten pellets of at least 3.3g
- GPR-AB for land targets, programmed to explode and laterally eject fragments after a certain flight time.

### Fire Control System:

- Gyro-stabilized sensor head
  Day and night electro optics: IR + Daylight + Laser
- Range Finder • IR detection range: up to 18km (STANAG)

#### Countermeasures:

• Immune to most known jamming techniques, thanks to the optronics-based fire control

Safety:

- The optronics sight enables:
  - Visual recognition prior to engagement, thus reducing the risk of fratricide firings
  - Real time assessment of interception results

#### CONTROLMaster 60 :

- RAPIDFire systems can be coordinated with CONTROLMaster 200 or CONTROLMaster 60 Command and Control stations. The CONTROLMaster family is based on the GROUNDMaster radars
- CONTROLMaster 60 provides more than 40km coverage of stealth fighters and is instrumented up to 80km
- RAPIDFire systems can be Coordinated On The Move
- Up to 6 Combat Vehicles can be coordinated with one CONTROLMaster 60



**THALES –** Parc tertiaire Silic 3, avenue Charles Lindbergh BP 20351 94628 Rungis Cedex - FRANCE – Tel: +33 (0)1 79 61 40 00 FAX: +33 (0)1 79 61 11 78