

RAFAEL'S Suite for Future Armored Vehicles

A Quantum Leap in Armored Vehicle Transformation



RAFAEL ADVANCED DEFENSE SYSTEMS LTD.

Lethality

Maneuverability

Survivability

RAFAEL 
ADVANCED DEFENSE SYSTEMS LTD.

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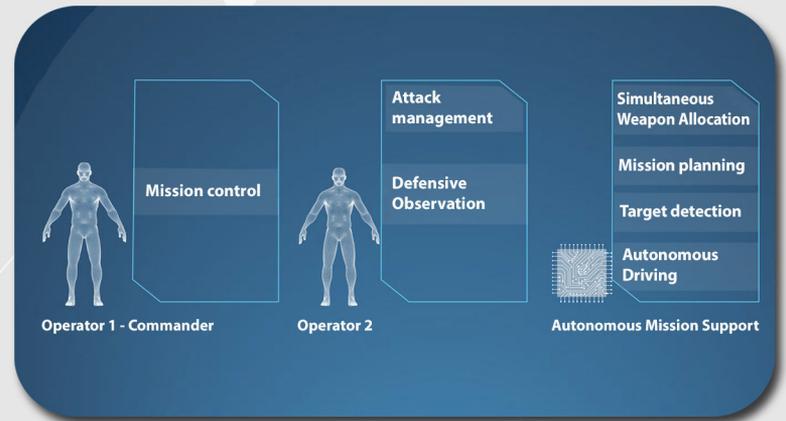
Turns a Combat Vehicle into an Optionally-Manned, Connected, Protected and Lethal Defense System

Integrating the most advanced subsystems and optionally-manned capabilities, RAFAEL's array of technologies transforms any armored vehicle – including AFVs, APCs and tanks – into an ultra-modern combat system. This system simultaneously acquires and neutralizes multiple targets with pinpoint accuracy and unmatched speed – optionally manned and controlled by only two fighters with hatches closed. The system also functions as an embedded trainer, enabling cost-effective training even during mission preparation.

Leveraging the most advanced research in human engineering, RAFAEL's Suite offers an exceptional user experience with an intuitive HMI, reducing the training period and significantly increasing the crew's effectiveness.



Transparent Cockpit - 360° Panoramic View



Task Allocation (illustration)

Two Elements Enable a Bold New Concept

RAFAEL's Suite includes a modular set of sensors, computational elements, and displays. In order to execute all battlefield missions with only two crew members in closed-hatch operational mode, the Suite includes the following:

Situational Awareness

A Transparent Cockpit touchscreen display provides a real-time, day-and-night, 360° realistic panoramic view, including Augmented Reality (AR) symbols of relevant battlefield data layers such as targets, Blue Forces, and other POIs. The Cockpit concept allows optimal communication between the crew members without helmets or glasses.

RAFAEL's **Match Guide™** technology provides a common visual language shared by all battlefield participants over the tactical network and allows GPS-independent targeting with pinpoint accuracy. A voice interface enables vocal alerts and messages.

Autonomous Mission Support

Utilizing the most advanced AI algorithms and data fusion, this element enables support for the ongoing decision-making process of the optionally-manned vehicle. The system chooses the optimal route for the vehicle; drives the vehicle autonomously along the route; compiles mission plans; detects, identifies and simultaneously manages multiple targets; and enslaves weapons to targets using the Cockpit's touchscreen. The crew members determine which actions will be performed manually and which will be performed autonomously under their control.

RAFAEL's Suite can be adapted to any existing or future weapon and protection systems, including RAFAEL's TROPHY APS, SPIKE missiles, and weapons from other vendors. It can be integrated with RAFAEL's FIRE WEAVER as a smart sensor/shooter system.

**Enabling Greater Lethality, Survivability, and Maneuverability,
RAFAEL's Suite Empowers all Future Armored Vehicles.**

