

Unleashing the Power of Networked Warfare

Today's multi-dimensional warfare - whether high-intensity conflicts against technologically equivalent forces or asymmetric urban scenarios - demands the shortening of mission duration by increasing the engagement rate, effective handling of Time Critical Targets, the closing of multiple sensor-to-shooter loops, the sharing with all participants of vast amounts of critical data in real time, force integration, and uninterrupted connectivity.

Addressing these needs, RAFAEL has developed FIRE WEAVER - a highly-sophisticated, ultra-fast Sensor-to-Shooter network that ensures accuracy, efficiency, and safety. Connecting all sensors and shooters, it enables comprehensive situational awareness, creates a common visual language on the weapon sights of all participants, and instantly selects the optimal shooter for each target – while calculating the rules of engagement in real time.

Benefits

- Connects all battlefield elements in real time
- Accurate Situational Awareness for the tactical level
- Assists commanders with handling information overload and decision-making
- Minimal collateral damage and friendly fire incidents
- Based on combat-proven technologies
- Open architecture integration with all types of BMS, radios and weapon systems
- The only system of its kind that complies with safety standard MIL-STD-882
- Common visual language and targeting on weapon sights







Fire Management Terminal

Sensor display

Sensor display

Instantly and Simultaneously Closes Unlimited Sensor-to-Shooter Loops

Designed for combined missions ranging from special forces to joint forces, FIRE WEAVER provides advanced management features including target and effector selection, enables multiple precision strikes, delivers comprehensive information, and supports decisionsmaking.

Creates a Common Visual Language

The system generates a high-precision, GPS - independent common visual language - based on a highly-nuanced 3D model (with details down to a specific window in a targeted building) - between all sensors and shooters in the battlefield. Live data - such as targets, enemy location, blue forces, and POIs - are marked and shared immediately on all weapon sights. This unique capability enables all battle participants to see the same targets, regardless of their specific position, and to more effectively manage the battle

Fighter-Centered

and utilize munitions.

While BMS systems are designed for the command and control levels, FIRE WEAVER is designed for the fighters, with the commanders able to empower them with critical real-time details that enable them to become the decisive factor on the battlefield.

The Brain That Controls It All

The FIRE WEAVER Core is a distributed brain that manages the entire system. Leveraging technologies such as Artificial Intelligence, Cognitive Dissemination, and real-time parameter calculation for optimal Fire Selection, it enhances human analysis and decision-making, instantaneously presenting the operator with the most appropriate shooter for each target.

Main Capabilities

- Ultra-smart Core manages entire network and attack process, including safety of forces
- Collects, filters & disseminates data from unlimited sensors
- RT Fire Selection handles multiple targets simultaneously
- Fire Management Terminal enables human control in RT
- 2D/3D computer vision, GPS-independent, accurate geo-referencing, advanced image processing, AR
- Cognitive dissemination over tactical radio system
- Multi-language: GPS, laser & electro-optical pixels

Open Architecture -Complementary for All C4I/BMS

FIRE WEAVER is designed for integration with all types of BMS, radios and weapon systems. It can be integrated in two ways: via a small box connected to radio/router, C4I system, and electro-optical display of sensor/shooter - or integrated with the system elements of any manufacturer

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