

## RAFAEL ADVANCED DEFENSE SYSTEMS LTD.

### TROPHY HV Situational Awareness and Active Protection Systems



The world's only combat-proven, operational Active Protection System for armored vehicles.

The Trophy is a situational awareness and active protection hard-kill system that operates in three major stages: Threat detection and threat tracking followed by hard-kill countermeasure (Multiple Explosive Formed Penetrators – MEFP), activation and threat neutralization. The neutralization process takes place only if the threat is about to hit the platform.

Merkava 4 tanks integrated with Trophy active protection systems are presently being deployed in combat areas along Israel's borders.

### SPIKE FAMILY



Multi-Purpose, Tactical, Guided-Missile Systems (including Helicopter Simulator)

The Spike Family consists of missiles suited for several platforms, multiple ranges and a variety of targets. The missiles in this family have sophisticated electro-optic CCD or IR sensors for operation day and night and in adverse weather conditions and a tandem

warhead.

### SPYDER SR/MR



Family of Short and Medium Range Air Defense systems using the i-Derby and Python-5 missiles. designed to engage and destroy a wide spectrum of threats, such as attack aircraft bombers, cruise missiles, UAVs, UCAVs' stand-off weapons and precision guided munitions.



## **PYTHON-5- Full sphere air-to-air IR missile and air defense missile.**



Python-5 is a fifth generation air-to-air missile and the latest member of the Python family. The missile provides the pilot engaging an enemy aircraft with a revolutionary full sphere launch capability. Python-5 can be launched from a very short range to beyond visual range with greater probability of kill and excellent resistance to countermeasures.

## **I-DERBY Beyond-Visual-Range, SDR seeker, air-to-air and air defense missile**



Rafael's Derby is a fully developed Beyond Visual Range (BVR) air-to-air missile. The missile offers excellent performance and maneuverability in both medium and short range engagements. The missile is also offered in an air defense configuration.

## **I-DERBY ER**

New generation of Innovative active radar air-to-air extended range missile. The missile incorporates the innovative I-Derby software-defined RF seeker, combined with a unique increase of kinematic performance, with ranges of up to 100 km.

## **LITENING 5**



New generation navigation and targeting pod featuring advanced high-resolution sensors for effective stand-off identification and targeting, fully operational day and night and in adverse weather conditions.

## SPICE 250



Air-to-ground guidance kit, transforming existing general purpose and penetration warheads into autonomous, stand-off weapons. Using sophisticated proprietary scene-marching algorithms, SPICE overcomes target location errors and GPS Jamming. The SPICE is based on Rafael's technology for precise hits at ranges of up to 100 km in all operational scenarios.

## C-DOME



A naval point defense system, extending the Iron Dome Counter-Rocket, Artillery and Mortar defense system to the maritime domain, to protect surface vessels from a wide range of threats, including ballistic trajectory and direct attack weapons.

## SEA SPOTTER - E/O Naval Staring, Detection and Tracking System

The sea spotter enables situational awareness and the automatic, passive detection of sea skimming missiles, air-to-surface smart bombs, fast strike aircraft, helicopters, marine vessels and rubber boats.

The sea spotter has a low false alarm rate due to staring detector structure (3-5 $\mu$ ) and unique image processing algorithms such as: "track before detect" and "multiple target tracking".

## WISDOM STONE

An extendable, adaptable and scalable intelligence analysis support system for automatic analysis of enormous amounts of data.

## CYBER DOME

An advanced suite of Cyber protection technologies designed to deal with current and future cyber-space threats against critical infrastructure systems, communication network.