

## **SPIKE FIREFLY™ Miniature Tactical Loitering Weapon**

Behind-Cover Precision Attack Capabilities for the Dismounted Soldier



### **FIREFLY Tactical Weapon System**

#### **Benefits:**

- Portable, durable and rugged airframe for harsh environments
- Single-user operation, designed for the dismounted soldier: Light, small, and agile
- Very intuitive operation; no special skills required
- Enables overmatch to break combat deadlock
- Lethal effect on stationary and moving targets with or without line-of-sight to operator
- Abort/Wave-off capability
- Full, safe returnability to operator up to attack command
- Day/Night operation
- Low visual and acoustic signature

#### **Behind-Cover Tactical Precision**

FIREFLY™ tactical weapon system is a revolutionary, innovative miniature electro-optical tactical loitering munition designed for light maneuvering ground forces such as Infantry, Marines or Special Forces.

The FIREFLY weapon system kit includes 3 LMs (Loitering Munitions) and a CU (Control Unit) based on a ruggedized tablet with a military standard bidirectional data link.

FIREFLY was designed for the dismounted soldier fighting within the urban arena where situation awareness is limited, the enemy is behind cover, and precision is critical. The impact of FIREFLY on the Infantry is revolutionary, fundamentally changing small Infantry tactics.

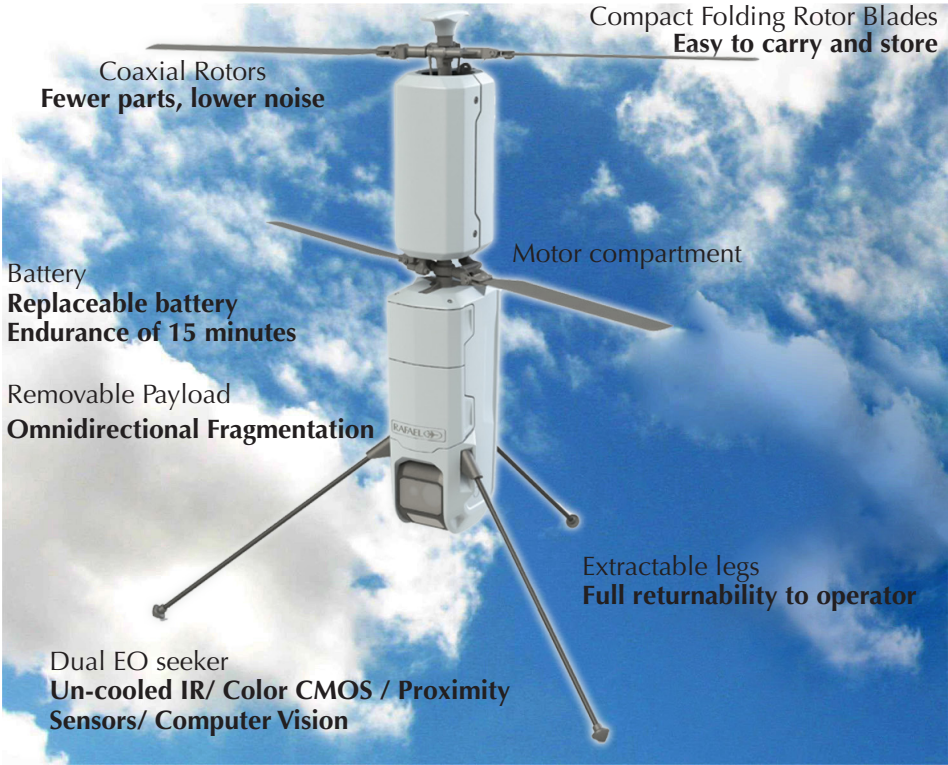
FIREFLY – also known as SPIKE-FIREFLY – is a new variant of Rafael's SPIKE Family Precision Guided Missiles. As such, FIREFLY features a dual seeker, target tracker, homing algorithms, computer vision, Safe & Arm fusing mechanisms, and HMI (Human-Machine Interface). These features served as a basis for the development of FIREFLY and the tailoring of the weapon system to its unique mission profile of urban combat.

FIREFLY weighs only 3kg, is rapidly deployed, and enables the attack of Beyond Line of Sight (BLOS) targets commonly found in urban combat. FIREFLY will essentially eliminate the value of cover and with it, the necessity of long-drawn-out firefights. It will also make obsolete the old infantry tactic of firing and maneuvering to eliminate an enemy hiding behind cover.

# SPIKE FIREFLY

## Features

- Compact, rugged airframe; retracting blades fold along the body when not in flight to form a tight, damage-resistant package which fits into a canister easily stuffed into a backpack.
- Innovative design for operation by the dismounted soldier; extractable payload, extractable battery
- Coaxial twin rotor, twin motor configuration
- Guidance: Electro-optical with man-in-the-loop, enabling attack behind enemy cover
- Dual seeker: Uncooled IR/CMOS + Proximity sensors  
Unique innovative tracker designed for agile targets
- Stand-off engagement range for urban combat
  - Open – 1500m
  - Urban – 500m
- Modes of operation:
  - Autonomous: Fly-by waypoints
  - Man-in-the-loop: Fly-by video
- Agility - Withstands winds of up to 10 m/s



## Technical Specification

Round Dimensions	100mm X 120mm x 460mm (LxDxH)
Weight	FireFly LM – 3kg, Full Kit – 14kg (3 LM + CU+ Backpack)
Range	Urban – 500m Open – 1500m
Velocity	Maneuvering - up to 60km/h Dive speed - 70km/h
Guidance	Electro-optical / Man-in-the-loop
Lethality	400 gram - Omnidirectional fragmentation warhead
Endurance	Single Battery/including Warhead - 15 min Double Battery/no Warhead - 30 min Deployed in STBY - 2 hours
Typical Missions	<ul style="list-style-type: none"><li>• Engage enemy behind cover</li><li>• Immediate situational awareness</li><li>• Front scouting for maneuvering force</li><li>• Tactical reconnaissance (urban battlefield)</li></ul>



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