

EPIK KIT™

Electro-Optical Precise-strike Integration Kit



EPIK KIT - Turning an un-guided rocket into a missile system.

Benefits:

- simple solution for the many new challenges facing modern artillery.
- Transforms a statistical weapon system into one with pinpoint accuracy.
- Highly cost effective.
- GPS independent
- Simple to install and operate.
- Needs no special equipment or specialists.
- Limits collateral damage to the minimum.
- Increases the range of conventional unguided rockets by up to 50%.

EPIK Kit Features:

EPIK Kit is an electro-optic (EO) guidance kit that easily attaches to existing un-guided artillery ordnance.

The EPIK Kit provides artillery batteries with a cost effective and autonomous guidance solution that is immune to GPS jamming.

Versatile - can be used in many different battlefield scenarios using "Scene Matching" and Laser Guidance" technologies.

EPIK Kit transforms artillery batteries into highly efficient units with pin-point, lethal strike capabilities using pre-selected attack angles.

Upgrade your existing ordnance with the simple and fast addition of economical **EPIK kits**.

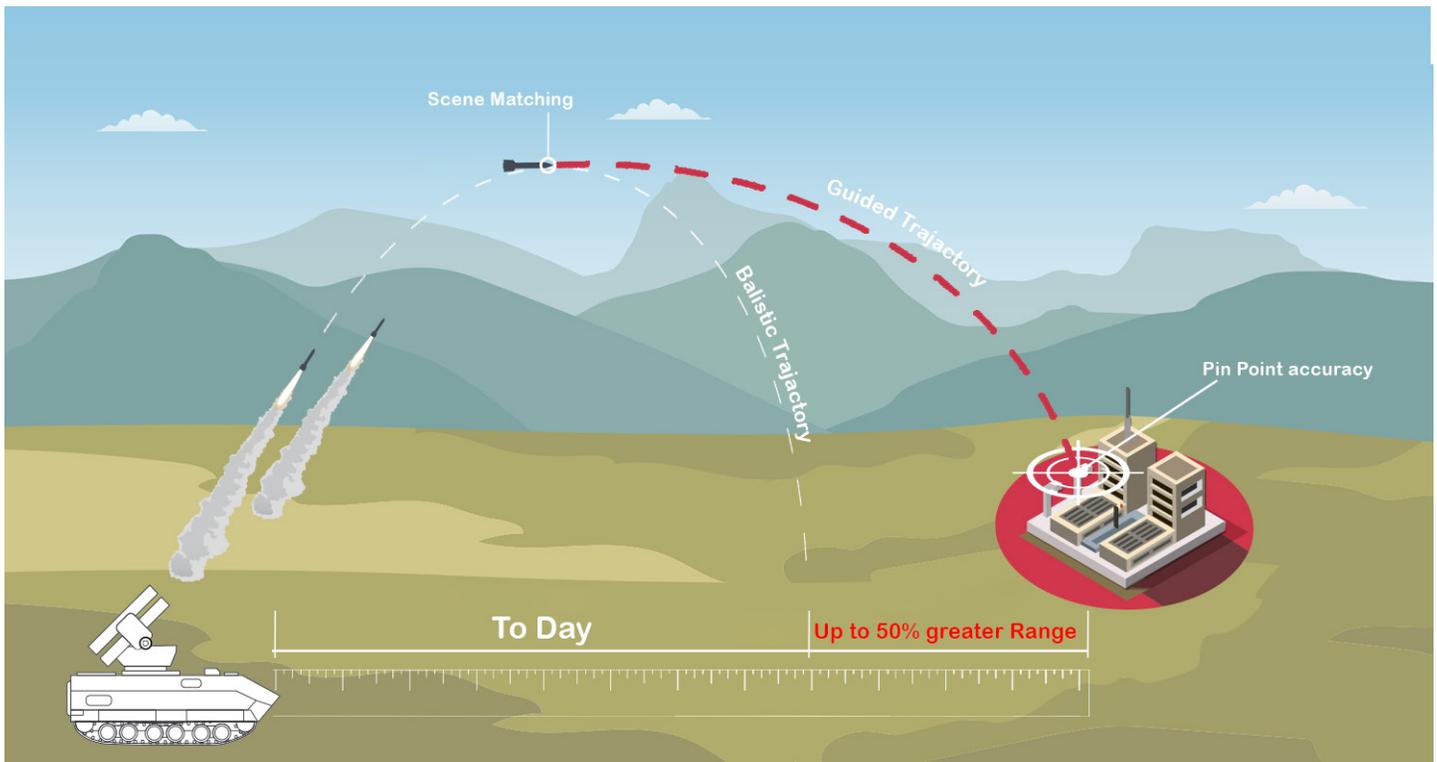
Minor adaptations required to existing, multi barreled rocket launching systems.

The EPIK guidance kit converts 122 mm, 160 mm and 227 mm unguided, multi barreled artillery rockets into precise, stand-off strike ordnance.

The EPIK Kit includes an uncooled (bolometric) seeker, IMU for midcourse navigation and a scene matching algorithm for final guidance to target.

Rocket upgrade process (installing the kit, preparing mission plans and operation) is simple and can be performed by troops operating the battery.

The EPIK Kit's Mission Control Launching UNIT (MCLU) is easily integrated into the artillery battery's Fire Control system.



EPIK Operation

Once launched, the guidance kit guides the rocket on a pre-planned trajectory towards a virtual “acquisition basket”. From this point, the rocket uses a scene matching or laser spot detection process to perform “Autonomous Target Acquisition”. “Scene Matching” is a process where a comparison is made between a pre-stored reference

image and real-time images from the IIR camera. When images are successfully compared and matched, an automatic EO tracker locks onto the target to perform terminal homing maneuvers. “Laser Spot Detection” assists in the “close target” acquisition of targets (moving and stationary) designated by ground forces.



Mission reference image, stored on weapon



Seeker real time image

Features

Pin-Point Accuracy	3m deviation
Diameter	Adaptable to 122mm, 227mm and 160mm
EPIK Kit Weight	6 kg.
Range	Increased the rocket range by 50%
Selectable tilt angles	20° to 80° in elevation and +/- 45° in azimuth – depending on engagement range.
Immune	Immune to EW measures.



Land & Naval Division

Tel: (972)73-335-2002 Fax: (972)73-335-4093

E-mail: lnd-mkt@rafael.co.il

HQ Tel: (972)73-335-4714 Fax: (972)73-335-4657

E-mail: intl-mkt@rafael.co.il www.rafael.co.il