Trophy Family

Technical Specifications

	TROPHY-HV	TROPHY-MV	TROPHY-LV
Countermeasure	MEFP	MEFP	Energetic Blades
Sensors	Radar	Radar	Alert / Secondary
Threats	ATGM / RPG / Tank HEAT round	ATGM / RPG / Tank HEAT round	RPG Family
Simultaneous Threats Engagement	Yes	Yes	Yes
Protection Against Short Range Launch	Yes	Yes	Yes, Very Short
Situational Awareness	Provides Launcher Location	Provides Launcher Location	NA
Collateral Damage	chance of a dismounted soldier to be injured from Trophy or the incoming threat < 1%	chance of a dismounted soldier to be injured from Trophy or the incoming threat < 1%	Minimal
Weight (Kg)	850	520	200 (HMMVVV)
Volume (m³)	0.69	0.42	0.26



Ordnance and Protection Division

Tel: (972)4-879-5058 Fax: (972)4-879-5064 E-mail: esdmrkt@rafael.co.il HQ Tel: (972)4-879-4714 Fax: (972)4-879-4657 E-mail:intl-mkt@rafael.co.il www.rafael.co.il



Trophy Family ™

Active Protection Hard Kill Systems for Heavy, Medium, and Light Armored Vehicles With Trophy, you are no longer an easy target



Trophy - HV



Trophy - MV



Trophy Family

Trophy is a situational awareness and Active Protection Hard Kill (HK) System (APS) which is available in two main configurations: HV-MV (Heavy and Medium Armored Vehicle) and LV (Light Armored Vehicle). Both configurations dramatically boost the force's survivability, and provide a vital add-on capability for the maneuvering combat teams.

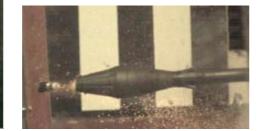
Trophy HV-MV neutralizes all types of Chemical Energy (CE) threats in flight, addressing them in four major stages: Threat

detection, threat tracking, Hard Kill (HK) countermeasure (Multiple Explosive Formed Penetrators - MEFP) activation, and threat neutralization. Only those threats which are about to hit are actioned, thereby conserving on ammunition and possible collateral damage.

Trophy-LV eliminates all RPG threats which are about to hit the vehicle. First, it acquires the threat, then charges the threatened side of the vehicle, and literally beheads the rocket before it has a chance to initiate or make impact.



- Addresses a wide range of threats, from RPGs to sophisticated, Anti-Tank Guided Missiles (ATGMs)
- Initiates the neutralization process only when the threat is about to hit
- Very high kill probability
- Neutralizes threats fired from very short ranges, and multiple, simultaneous threats arriving from the same or other direction
- Minimum collateral damage
- Reduces the platform's overall armor weight requirements



Trophy-HV

Active Protection HK System for Heavy and Medium Armored Vehicles

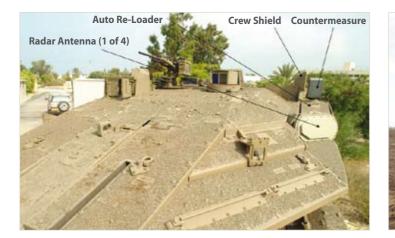
Trophy-HV protects heavy (>30 ton) and medium weight (>15 ton) armored vehicles from a wide variety of threats ranging from rockets, ATGMs and platform-fired High-Explosive Anti-Tank (HEAT) rounds.

Trophy-HV offers 360° protection

in azimuth, as well as extensive elevation coverage, while maintaining a pre-defined safety zone for friendly troops on the ground. The neutralization process is initiated only if the threat is about to hit the vehicle.

Trophy-HV is serially-produced,

tested and qualified, forming an integral part of the Merkava MkIV Main Battle Tank (MBT). Introduced operationally by the IDF in August 2009, Trophy-HV was deployed and battle-proven in combat along Israel's borders.





Trophy-MV

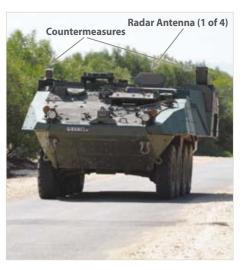
Active Protection HK System for Medium and Light Armored Vehicles

Like its HV-variant, Trophy-MV protects medium (>15 ton) and light weight (>8 ton) armored vehicles from a wide variety of threats ranging from rockets, ATGMs and platform-fired High-Explosive Anti-Tank (HEAT) rounds. Trophy-MV also offers an advanced, integrated Soft Kill (SK) capability.

Trophy-MV utilizes the same combat-proven technologies and algorithms, and most of the same

constituent elements (Manufacturer Off-the-Shelf), in a smaller, lighter package.

Trophy-MV provides the same 360° protection in azimuth, and extensive elevation coverage, with safety sector support. Trophy-MV is at final stages of development, with major risks eliminated, and has been successfully field-tested in Israel and overseas.



Trophy-LV

Active Protection HK System for Light Armored Vehicles

Utilizing the same operating principles as Trophy-HV and Trophy-MV, the downscaled Trophy-LV offers superior performance at a fraction of the weight. Trophy-LV's high kill probability against advanced threats, including the most sophisticated shoulder-fired AT-rocket propelled grenades, make it a significant force-multiplier at shorter ranges on the modern battlefield.

Trophy-LV's dimensions are

specially designed for easy integration and installation in smaller platforms. This configuration is achieved without impairing system performance, which ensures 360° protection including vehicle's windows and doors with minimal risk of collateral damage. Trophy-LV is an all-round efficient, affordable, costeffective solution that is currently undergoing field testing in a variety of operational scenarios.





