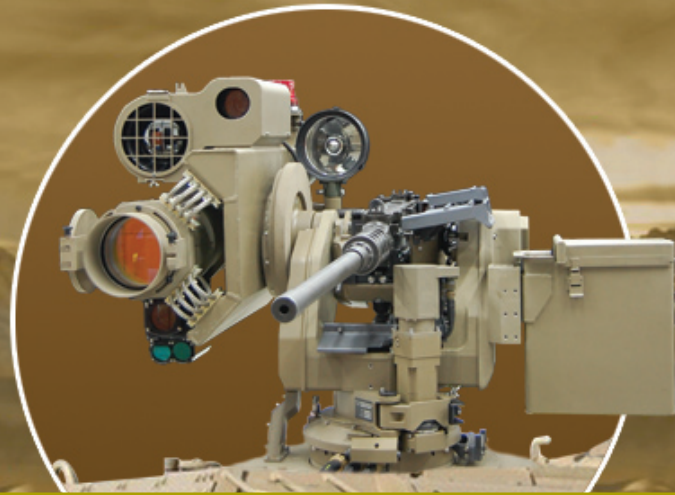


Thor™

Directed Energy Weapon for Standoff Neutralization of IEDs and UXOs



Provide route clearance capability for ground forces in areas threatened by IEDs

Benefits

- Safe, rapid, standoff neutralization of IEDs
- Minimum collateral damage (due to explosive burn-out or low order detonation)
- Remotely controlled weapon station (RCWS) capability
- Continuous laser engagement-no recharge or cool down time
- Modular add-on system for APCs and up-armored vehicles
- Combat-tested, combat-proven effectiveness

Modular add-on system for on-the-move neutralization

Rafael's Thor is a modular add-on system that enables on-the-move neutralization of explosive hazards such as IEDs (Improvised Explosive Device), UXOs (Unexploded Ordnance), cluster sub-munitions, exposed mines, and more. Thor is mounted on ground forces vehicles such as APCs or up-armored vehicles used by combat engineers or explosive ordnance disposal teams in route clearance and IED neutralization missions.

Combining high energy laser and automatic machine gun

Thor combines a high energy laser and automatic machine-gun (0.5" cal or similar) on a stabilized weapon station. The weapons are operated by a remote operator control station, with a user friendly interface (display and grips) inside the vehicle. The dual weapon

capability enables safe, surgical stand-off neutralization of IEDs and UXOs by laser directed energy or by kinetic energy when using the machine gun as a standoff disrupter. Moreover, the weapon station, with its embedded machine gun, provides the vehicle with self-protection. Thor gives the mission commander freedom of movement for a wide variety of defensive and offensive missions in areas threatened by IEDs.

Thor

Dual Capabilities Offer Flexibility

The weapon station with dual machine gun and laser capabilities provides flexibility. The directed, high energy laser gives the experienced operator the ability to neutralize the IED's content by means of burning, deflagrating, or detonating the explosive. The IED can also be neutralized by targeting the operating device by cutting a wire or detonating cord. Later the IED can be retrieved by a robot for further neutralization and investigation.

The laser beam can also be used for target discrimination via short time lasing as camouflage, unlike stone or earth, burns. The machine-gun can be used for unearthing buried threats or uncovering hidden targets, for example, behind stones.

Features

- Rapid, long-range standoff neutralization capability
- Continuous laser operation even in hot environment
- Ability to neutralize thick-walled targets
- Fine precision
- Flexible integration on large variety of vehicles and APCs due to modular design
- No mobility limitations to host vehicle



On Puma



On M-113 APC



Burnt EFP Side Charge



Low Order Detonation of Aerial Bomb

Technical Specifications

General Characteristics		Mini-Samson RCWS Characteristics	
External RCWS weight	250 kg	US Navy P/N	Mk-49 MOD0 (Based on)
Overall system weight	1,100 kg	Stabilization	Two-axis corrections
Power requirement	400W @ 24VDC	Sighting system	CCD-zoom / IR Bolometric, dual camera for laser and gun
Vehicle installation	Modular units	LRF	10-2,500 m
Laser Characteristics		User Interface	RCWS includes tracking system and firing display monitor
Laser power output	2,000 Watt	Operation angles	±150° azimuth +20°, -15° elevation
Effective range	Large stand-off distance	Slew rate	50°/Sec through < 0.5 miliradian/sec
Cooling	Water cooled system	Aiming accuracy	Less than 1 miliradian
Duty cycle	Continuous		



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