Remote Controlled Weapon Stations

Third generation, high precision, high-end multi-purpose weapon system for small and mid-calibers







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Elbit Systems' Remote Controlled Weapon Station (RCWS) family is designed for dynamic or static operation, to be used on ground stationary, ground mobile or naval platforms. The high-precision, lightweight, low-profile RCWS can be mounted on any armored fighting vehicle (AFV), main battle tank (MBT) or support platform without roof penetration. The RCWS is operable from inside the vehicle by the gunner using Gunner's Control Handles and a Multi-Functional Display (MFD). With this configuration, the dual-axis and fully stabilized (optional) RCWS delivers high-speed engagement, a single phase aiming process and an exceptionally high hit probability without operator risk exposure.

Based on in-house electro-optics, the weapon system offers superior day and night viewing performance in all battlefield scenarios, including open areas, urban, mountain or anti-aircraft engagements.

The RCWS family can be adapted to a wide variety of weapon types of both Western and Eastern origins, including: 7.62mm, 12.7mm caliber weapons and 30mm or 40mm automatic grenade launchers.

Optional configurations:

- Smoke grenade launchers (SGL)
- Modular armor protection up to L3
- Commander operating station
- Anti-tank guided missiles (ATGM)
- · Non-lethal weapons

The modular optical solution can comprise a variety of possibilities from a non-stabilized single LRU optical unit and up to a dual-axis autonomously stabilized optical pod.

All can be equipped with:

- Day camera (regular and HD)
- Night camera (cooled or uncooled)
- Range finders (regular or high repetition)
- · Laser designator
- Laser marker
- · Beam spotlights

The RCWS leverages Elbit Systems' three decades of experience in the development of weapons, fire control, target acquisition, automatic target tracking, and stabilization systems. Installed on a wide range of wheeled or tracked platforms worldwide, the RCWS has been fully proven to provide effective engagement of targets while the operator is protected from hostile fire.



Dual weapon capability – The RCWS family includes a dual weapon RCWS with ready-to-fire solutions. The modular design enables multiple weapon combinations, such as 12.7mm MG with 7.62mm MG, 12.7mm with 40mm AGL, or 7.62mm MG with 40mm AGL.

Solid track record – The RCWS can be mounted on a wide range of vehicles and is successfully deployed within armed forces of countries around the world.

Minimal operator risk – Fully overhead with no deck penetration, the dual-axis stabilized RCWS

provides on-the-move accuracy while shielding the operator from danger.

Commander's sight capability – The RCWS can replace the commander's sight due to exceptional stabilization of the weapon's sight while decoupled, and is autonomously stabilized and equipped with commander's grade cameras.

High quality third-generation solution – With a robust and mature system design, the RCWS offers lower life-cycle costs by increased mean time between failures (MTBF) and decreased mean time to repair (MTTR).





Advantages

- · High-precision firepower
- · Fast and accurate aim and fire capabilities
- Minimal risk to operator fully overhead with no platform penetration
- Fully integrated with electro-optical system developed in-house
- Stand-alone or integrated with existing technologies and infrastructures
- Adaptable to weapon calibers of all origins
- Compatible with a wide range of armored vehicles (wheeled and tracked)
- Fully compliant with MIL standards
- Built on 30 years of experience with weapon stations and stabilization systems
- Seamless and convenient human-machine interface

Features

- Fully functional remote control and backup manual control
- Highly accurate bi-axial weapon and sight stabilization
- · Highly accurate on-the-move firing
- Day and night operation
- · Safety mechanism
- Automatic target tracking
- Lightweight and low profile
- Rounds counter



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Technical Specifications

Overboard Mass	<180Kg (configuration dependent)
Optics (Modular)	Day Camera: Long-range CCD Thermal Imager: Cooled/Uncooled LRF: Up to 10Km, eye safe
Armaments	7.62mm: M240, MG74, PKT 12.7mm: M2, NSVT, STK HMG 30mm: AGS17 40mm: MK19, H&K, STK AGL
Firing Modes	Single, Burst, Full
Ammunition Capacity	7.62mm: ≥400 rounds 12.7mm: ≥200 rounds 30/40mm: ≥29 grenades
Motion Velocity	Max: 1 [rad/sec] Min: 0.25 [rad/sec]
Stabilization	<0.2 mrad 1 σ
MIL-STD Compliance	810, 461, 464, 882
Additional Features	High hit probability Automatic target tracker External systems interface Battle-proven Add-on armor protection