

## Technical Specifications

Parameter	Samson Jr.	Samson Mini	Samson Dual	Samson 30mm
Mount:				
Mount Type	Independent mounting system for weapon and Sight Pod	Dual-axis, gyro-stabilized mounting system for weapon and Sight Pod	Dual-axis, gyro-stabilized mounting system for weapons and Sight Pod	Dual-axis, gyro-stabilized, retractable, multi-channel sight, weapon mounting system
Armament*:				
Main weapon	One of the following**: • 5.56mm * • 7.62mm *	One of the following**: • 5.56mm * • 7.62mm * • 12.7mm * • 14.5mm KPVT • 40mm (AGL) *	One of the following**: • 7.62mm * • 12.7mm * • 14.5mm KPVT • 40mm (AGL) * • ATK LW 25mm • ATK LW 30mm	One of the following: • ATK Mk44 30mm • 2A42 30mm Automatic Cannon • 40mm
Secondary weapon	N/A	N/A	One of the following: • 5.56mm * • 7.62mm * • 12.7mm *	One of the following: AGL 40mm 7.62mm Coax MG
Force Multipliers		• ATGM Launcher • ASM	• ATGM Launcher • ASM	• ATGM Launcher • ASM
Obscurants		• SGL	• SGL	• SGL
Sight Pod (Day, Night, LRF)	Observation suite fastened rigidly to the Mount Assy	Observation suite fastened rigidly to the Mount Assy with optional super elevation	Multi-sensor suite with super elevation and lead angle compensation	Gimballed, multi-sensor suite
Power Supply	Operating Voltage Range: Nominal 18-32 VDC			
Compliance with Environmental Conditions (partial list)	<ul style="list-style-type: none"> <li>• MIL-STD-1275</li> <li>• MIL-STD-461</li> <li>• MIL-STD-810</li> <li>• STANAG 2895</li> <li>• EN 60825</li> </ul>			
External Interfaces	<ul style="list-style-type: none"> <li>• I/O video channels</li> <li>• RS422/RS485/RS232 comm channels</li> <li>• CAN-BUS comm channel</li> <li>• Ethernet</li> <li>• I/O discrete lines</li> </ul>			

\* Multiple Versions, Western and Eastern

\*\* Interchangeable by the crew

### Legend

AGL - Automatic Grenade Launcher

ASM - Anti-Structure Munitions

AT - Anti-Tank

ATGM - Anti-Tank Guided Missile

GPMG - General Purpose Machine Gun

LW - Light Weight

SGL - Smoke Grenade Launcher

HMI - Human Machine Interface

## Samson RWS Family™ Remote Weapon Stations

Superior crew performance with maximum survivability



Samson Jr.



Samson Mini



Samson Dual



Samson 30mm

## SAMSON – All-round battle-proven solutions for low-to-high intensity combat threats

Globally integrated on thousands of fielded ground and naval platforms, RAFAEL's SAMSON family of advanced RWS capitalizes on extensive combat experience with a deep understanding of emerging military needs. All of the RWS elements utilize more than 90% tested and qualified Manufacturer Off-the-Shelf (MOTS) hardware and software. All these render SAMSON the most cost-effective solution for securing optimal operational capabilities while minimizing risks.

The SAMSON design underscores crew survivability and safety. Reduced environmental emissions and a low noise level inside the crew compartment ensure better crew workload performance.

### Main Advantages

- Robust design for wheeled and tracked vehicles without modifications
- Accommodates multiple weapons (Eastern and Western)
- Proven first-hit accuracy
- Lightweight, safer alternative to the traditional turret
- Maximum survivability design, including RAFAEL's below-deck ammunition reloading system
- Integrated Automatic Target Tracking (ATT), Anti-Collision System (ACS) and Fire Inhibit System (FIS)
- Three-level Built-In Test (BIT), with minimal Special Test Equipment (STE)
- High Reliability, Availability, Maintainability and Durability (RAM-D)
- Interfaceability with C<sup>4</sup>I and external sensors (including hostile fire indicators) for superior 360° situational awareness



Samson Jr.



Samson Mini



Samson Dual



Samson 30mm



HMI Components

### SAMSON Jr.

The lightest of the SAMSON RWS family, the SAMSON Jr. is designed for wheeled, tracked and naval platforms which mandate minimum deck load and silhouette. Designed for defensive fire in military and para-military operations, the SAMSON Jr. mounts a variety of crew-exchangeable small caliber armaments, including 7.62 mm or 5.56 machine guns, sharpshooter rifles and non-lethal weapons.

This RWS features full stabilization between the weapon's Line of Fire (LOF) and the sighting system's Line Of Sight (LOS) for superior targeting and high hit probability.



### SAMSON Mini

This dual-axis, gyro-stabilized RWS is designed for use on light wheeled or tracked combat vehicles, fast attack boats and other platforms requiring improved offensive capabilities. This single-weapon RWS accommodates a variety of armaments including a 5.56mm SAW and LMG, 7.62 mm GPMG and Gatling gun, 12.7 mm HMG, 14.5 mm, 40 mm AGL, ATGM Launcher and ASM, fed by high-

capacity magazines. Supported by a ballistics-protected multi-sensor Sight Pod, with a mechanism for super elevation ballistic angle calculations, the SAMSON Mini provides a 'round-the-clock' response to battlefield challenges.

Safety-related movement and firing limitations are implemented using the ACS/FIS.



### SAMSON Dual

The SAMSON Dual is a dual-axis, gyro-stabilized RWS that simultaneously mounts two weapons. Developed originally to carry a 25-30mm lightweight weapon as main armament and 7.62mm secondary weapon for short range engagements, the SAMSON Dual enables multiple-threat handling in high-mobility scenarios. Much more robust than equivalent systems, the SAMSON Dual is also strong enough to incorporate an ATGM Launcher as a force multiplier.

The SAMSON Dual incorporates

an independent commander's sight and operation station to facilitate "hunt-kill" capabilities. It can slew continuously clockwise or counter-clockwise over 360° in azimuth, at high slew rates in both azimuth and elevation, while mounting both weapons and full ammunition capacity.

With crew survivability a top priority, RAFAEL's unprecedented under-armor reloading system boosts lethality while maximizing crew protection.



### SAMSON 30mm

The SAMSON 30 mm or "Triple RWS" is a 30mm Weapon RWS designed for use on any modern armored, high-mobility fighting vehicle, new or upgraded, without modifications. It mounts main and secondary armaments, of Eastern and Western origins, including a 30 mm Main Cannon (Mk 44), 30 mm Automatic Cannon, 40 mm AGL, and 7.62 mm Coaxial Machine Gun (MG). Additional mountable force multipliers include ATGM Launchers, ASM, and SGL obscurants. Equipped with a dual-axis, gyro-stabilized, retractable, multi-channel sight, weapon mounting system, the

system's configuration provides the Commander with full "hunt-kill" capabilities without interfering with the Gunner's current missions.

The system provides enhanced observation during day and night missions and high-precision firing capabilities, supported by a sophisticated two Degrees Of Freedom (DOF) Line-Of-Sight (LOS) stabilization system, and 3rd Generation FCS for effective shooting-on-the-move.

