

RHEINMETALL FIELDRANGER® WEAPON STATIONS
A FAMILY OF DIGITAL AND STABILISED PLATFORMS



Intended to carry out multirole tasks, the Rheinmetall Fieldranger® family of weapon stations is based on a flexible concept in order to meet different user requirements. Designed for high-speed engagement, these robust weapon stations offer accurate firing-on-the-move capabilities under the most adverse conditions.

FIELDRANGER LIGHT



FIELDRANGER MULTI



FIELDRANGER DUAL



FIELDRANGER 20



Introducing the new family of Fieldranger® remotely controlled weapon stations (RCWS). Fully digital and stabilised, they are designed for use in a wide variety of mission profiles and on all types of vehicles as no hull penetration is required. Operational 24/7, the Fieldranger family is the perfect solution for precise engagement of targets while keeping the operator under armour.

As an established and recognised supplier of RCWS on the international market, Rheinmetall has integrated more than a thousand stations for the Canadian Army, the French Armed Forces, and the Belgium Army, to name a few. Rheinmetall's RCWS are recognised for their endurance under extreme conditions, ease of use, reliability, and precision.

## **FLEXIBLE ARCHITECTURE**

The Fieldranger design allows for growth potential and offers flexibility to meet customers' specific requirements:

- Integration of small and medium calibre weapons
- Integration of a broad range of optical modules
- Integration of weapon calibres of all origins
- Operation as a standalone system or integrated with legacy technologies and battle management systems

### **INCREASED FIREPOWER**

Full weapon vector stabilisation, advanced ballistic calculation, and optional target tracking features provide a fast and effective fire-on-the-move capability. Engagement performance can be further enhanced with superelevation and supertraverse features, which provide ballistic range and lead angle compensations without requiring reticle shift by the operator.

# **ENHANCED SIGHT CAPABILITY**

The integration of the optical module, which includes day camera, thermal imager, and laser rangefinder, dramatically increases situational awareness and maximises crew protection. Observation, target identification, and engagement can hence be performed safely in both day and night operations.

## **OPTIMISED MISSION EXECUTION**

- Easy installation with no deck penetration
- Simple switching of weapons
- Quick start-up time
- Precise bullet counter and last round warning
- Manual backup mode
- Optional ROSY Rapid Obscuring System or conventional smoke grenade launcher
- Optional ASLS Acoustic Shooter Locating System



### **EXPERT GUIDANCE AND SUPPORT FROM DAY ONE**

Applying a genuine client-centric approach, Rheinmetall provides professional support services right from the beginning of every project through the weapon stations' entire life cycle. Delivering operational requirements analysis, project management, system definition, training courses, procurement, vehicule integration, and after-sales support and maintenance, service experts ensure that all of the objectives are met along every step of the way.

To ensure that operators are mission-ready and that weapon stations are operated at top performance, Rheinmetall offers a standalone classroom with skilled trainers. Every functionality of the RCWS can be addressed thanks to the instructor stations, gunner trainee stations, and after-action review station. Operators are able to train in a synthetic environment where weather conditions, both friendly and enemy entities, as well as real-life mission scenarios can be simulated in order to reach a new level of realism.







# FIELDRANGER® LIGHT COMPACT. LIGHTWEIGHT. ACCURATE.



TECHNICAL DATA	
Dimensions in mm (HxWxL)	521 x 854 x 1043
Weight (without weapon and ammunition)	75 kg
Movement limits	
Traverse arc	n x 360°
Elevation arc	-20° to +60°
Maximum rotation speed	
Traverse	80°/s
Elevation	80°/s
Weapon type and ammunition box capacity	
5.56 mm x 45	220 rounds
7.62 mm x 51	220 rounds
7.62 mm x 54	220 rounds

Gunner EO sensor unit and fire control
TV/IR/LRF sensor package
Options
Stabilisation
Larger ammo box (600 rounds)
Acoustic sensors and laser warning receiver
Target tracker
Two control handles
Smoke protection system (ROSY Rapid Obscuring System or
conventional smoke grenade launcher)
Ballistic protection
Commander fire control and display

The Fieldranger Light is designed for use on light vehicle platforms where weight and height are critical, but where compromise on the performance of the weapon station is not an option. Very lightweight, this weapon station can be easily installed on the roof of all types of platforms within minutes.

The Fieldranger Light can be mounted with a 5.56 mm or 7.62 mm machine gun on a soft recoil mount, which reduces shock and vibration, and improves the accuracy of the firing system. As an option, it can also be fitted with the ROSY Rapid Obscuring System or a conventional smoke grenade launcher to provide smoke protection in the desired direction. The Fieldranger Light represents a great solution to engage targets in close range and provides efficient self-protection 24/7 in all weather conditions.





# FIELDRANGER® MULTI MODERN. VERSATILE. HIGHLY EFFICIENT.



Versatile and adaptable, the Fieldranger Multi is designed for tactical military vehicles and can be used in static environments for infrastructure protection or border control.

This weapon station integrates a single weapon mount assembly that can be easily adapted to accommodate weapon of various calibres, such as 12.7 mm and 7.62 mm, as well as 30 mm or 40 mm Automatic Grenade Launcher (AGL). The flexibility of the design makes it easy to interchange the weapons on the mount cradle in a short period of time. As an option, the Fieldranger Multi can also be fitted with the ROSY Rapid Obscuring System or a conventional smoke grenade launcher to provide smoke protection.

With its three gyroscopes and its low centre of gravity, the Fieldranger Multi offers high stabilisation performance, which enables precise engagement, aiming, and firing on targets while static or on the move.

TECHNICAL DATA	
Dimensions in mm (HxWxL)	835 x 1370 x 1321
Weight (without weapon and ammunition)	200 kg
Movement limits	
Traverse arc	n x 360°
Elevation arc	-20° to +60°
Maximum rotation speed	
Traverse	50°/s
Elevation	50°/s
Weapon type and ammunition box capacity	
7.62 mm x 51	660 rounds
7.62 mm x 54	660 rounds
12.7 mm x 99	300 rounds
12.7 mm x 108	300 rounds
30 mm x 29 grenade	48 rounds
40 mm x 53 grenade (Russian or NATO)	48 rounds

Gunner EO sensor unit and fire control
Fully stabilised TV/IR/LRF sensor package with superelevation
and supertraverse function
Stabilisation: EOS and weapon vector stabilisation
Options
Larger ammo box
Acoustic sensors and laser warning receiver
Target tracker
Two control handles
Smoke protection system (ROSY Rapid Obscuring System or
conventional smoke grenade launcher)
Integration with battle management system
Ballistic protection
Commander fire control and display





# FIELDRANGER® **DUAL** FLEXIBLE, EFFECTIVE, BIFUNCTIONAL.



The Fieldranger Dual weapon station is versatile and can support two weapons simultaneously. As main armament, the weapon station can be equipped with a 12.7 mm machine gun or with a 30 mm or 40 mm Automatic Grenade Launcher (AGL). Additionally, it is armed with a 7.62 mm coaxial machine gun for close fire support. As an option, the Fieldranger Dual can also be fitted with the ROSY Rapid Obscuring System or a conventional smoke grenade launcher to provide smoke protection.

The Fieldranger Dual is a robust weapon station that can be mounted on medium or heavy vehicles to support a large number of mission profiles in which engagement timing is critical. Having simultaneous access to two types of ammunition provides strong lethality, mission flexibility, and better responsiveness in operation.

TECHNICAL DATA	
Dimensions in mm (HxWxL)	880 x 1373 x 1204
Weight (without weapon and ammunition)	260 kg
Movement limits	
Traverse arc	n x 360°
Elevation arc	-20° to +60°
Maximum rotation speed	
Traverse	50°/s
Elevation	50°/s
Weapon type and ammunition box capacity	
Primary weapon options	
12.7 mm x 99	200 rounds
12.7 mm x 108	200 rounds
30 mm x 29 grenade	60 rounds
40 mm x 53 grenade (Russian or NATO)	32 rounds
Secondary weapon options	
7.62 mm x 51	250 rounds
7.62 mm x 54	250 rounds

# **Gunner EO sensor unit and fire control**Fully stabilised TV/IR/LRF sensor package with superelevation and supertraverse function

Stabilisation: EOS and weapon vector stabilisation

# **Options**

Acoustic sensors and laser warning receiver

Target tracker

Two control handles

Smoke protection system (ROSY Rapid Obscuring System or

conventional smoke grenade launcher)

Integration with battle management system

Ballistic protection

Commander fire control and display





# FIELDRANGER® 20 ACCURATE, LOW-PROFILE, RELIABLE.



The Fieldranger 20 is a compact and low-weight medium calibre weapon station designed to be used on light armoured or special forces vehicles. It is intended for various applications, such as security missions, fire support, and urban area combat. It can also be used in static environments for the protection of infrastructure or border control.

The integrated weapon is Oerlikon's KAE cannon, which is extremely reliable and guarantees a high rate of fire and an excellent precision even under difficult environmental conditions. A whole family of ammunition types (20 mm x 128) which offers excellent performance against all modern threats is readily available. The Fieldranger 20 proposes an effective combat range up to 2000 m, a maximum rate of fire of 1000 rounds/min, and a standard 200 rounds of ready-to-fire belted ammunition.

TECHNICAL DATA	
Cannon	
Туре	Oerlikon KAE cannon
Calibre	20 mm x 128
Maximum rate of fire	1000 rounds/min
Rapid single shot	100-300 rounds/min
Ammunition	
Number of rounds ready to fire	200
Weapon station	
Weight w/o ammunition and w/o weapon	300 kg
Weight with 200 rounds of ammo and wea	pon 475 kg
Dimensions in mm (HxWxL)	798 x 1036 x 2680
Swept radius (barrel 0°)	1910 mm
Traverse arc	n x 360°
Elevation arc	−15° to +55°
Traverse speed	60°/s
Elevation speed	60°/s

# Gunner EO sensor unit and fire control Fully stabilised TV/IR/LRF sensor package with video tracker and superelevation and supertraverse function Stabilisation: EOS and weapon vector stabilisation Options Two control handles Smoke protection system (ROSY Rapid Obscuring System or conventional smoke grenade launcher) Integration of anti-tank missile system Integration with battle management system Integration of laser warning device Commander fire control and display

Hunter-killer sight





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