



VINGMATE **FAMILY**

THIS IS MODERN WAR FIGHTING
LASE – AIM – FIRE

TAKING RESPONSIBILITY IN A CHANGING WORLD

 RHEINMETALL

THE VINGMATE FAMILY

Rheinmetall's Division Electronic Solutions is the world's foremost supplier of fire control systems for armed forces and government agencies. The Vingmate family of fire control systems (FCSs) provides users with a broad range of enhanced capabilities, increasing the effectiveness of the gunner while maximizing the potential of the host weapon system and munitions being utilized.



ROBUST CAPABILITIES

The Vingmate family of fire control systems provides users with robust capabilities and a critical edge when confronting current and future threats. These systems are easy to use, can be quickly mounted onto existing weapons, and are compatible with current and next-generation munitions. The Vingmate family of FCSs turns existing weapons into hard-hitting combat multipliers dramatically increasing effectiveness in any theatre of operation. The increased performance delivered by Rheinmetall helps customers meet current requirements and bridge critical capability gaps in a cost-effective manner.



IMMEDIATE PRECISION

The Vingmate family consists of four fire control solutions, providing increased accuracy and performance for heavy machine guns, automatic grenade launchers (AGLs), for high velocity, stand-alone or underslug grenade launchers for low and medium velocity and shoulder-fired weapon systems:

- **Vingmate FCS4500**
The industry standard for high velocity AGLs and heavy machine guns
- **Vingmate SL1000**
The next generation fire control system for shoulder-launched weapons
- **MR800**
The most advanced fire control system for low and medium velocity 40 mm grenade launchers and shoulder-launched weapons
- **MR500**
The light weight fire control system for low and medium velocity 40 mm grenade launchers and light shoulder-launched applications

Capabilities provided by the Vingmate family include:

- **Precision**
Our sights dramatically increase the accuracy of the host weapon, resulting in improved first-round hit probability and reducing the risk of collateral damage
- **Airburst capable**
Technology enables use of 40 mm- and 84 mm airburst ammunitions
- **Lase, aim and fire**
Day/night capable, these products provide gunners with easy to use interfaces, as well as point and shoot functionality
- **Mission endurance**
Reduced ammunition consumption per target resulting in increased mission endurance
- **Cost savings**
Modular solutions to meet specific requirements and enhanced training opportunities

VINGMATE FCS 4500

The ultimate warfighting game changer!

The Vingmate FCS is used on medium calibre, crew served weapon systems. The intended use is as a day-night sight and fire control system, providing capabilities for all critical and non-critical mission scenarios.

The Vingmate FCS should be mounted on soft mount cradles for best performance. The weapon system can be ground mounted using a tripod, or be vehicle mounted. The complete system can be used in a wide range of climatic environments such as snow, desert, mountain, jungle and urban warfare areas.

FEATURES

- LRF covering twice the distance of the ammo
- 3 FOV CMOS day camera
- Highly flexible
 - Supports multiple weapons
 - Supports multiple ammunitions including air burst
- Built-in GPS
- Azimuth sensor
- Battle Management System compatible
- Indirect fire (high and low quadrant)
- Controlling and programming Air Burst Munition
- Fitted for use of laser pointers
- Can be used with I² light intensifier
- Vehicle mounted or ground mounted

BENEFITS

- The element of surprise:
 - Very high first hit probability out to 1,500 metres
 - Accurate out to 2,000 metres
 - Fast target identification and engagement
 - Facilitates rapid multiple target engagements
 - Indirect fire
 - Increased tactical flexibility
- More effective use of the weapon:
 - Less ammo consumption per target
 - Increased mission endurance
 - Less crew exposure and increased safety
- Reduces the risk of collateral damage:
 - Turns the AGL from an area suppressive weapon to a accurate force multiplier



MR800

The expert in the middle

The Multi-Ray 800 is a rail mounted fire control unit specially designed for 40mm low and medium velocity grenade launchers and shoulder-launched rockets (e.g. M72/AT4). With its unique light weight construction and built-in laser range finder it adds just 700 grams to the host weapon. The Multi-Ray 800 supports multiple weapons and ballistics, it increases the precision of the weapon system and the effectiveness of the user, while simplifying training and reducing cost.



MR500

The smart compromise

The Multi-Ray 500 is a rail mounted fire control unit specially designed for 40mm low and medium velocity grenade launchers and shoulder-launched rockets (e.g. M72/AT4). Its unique light weight construction adds just 300 grams to the host weapon. The Multi-Ray 500 supports multiple weapons and ballistics, it increases the effectiveness of the user, while simplifying training and reducing cost.



FEATURES

- Light weight – 700 grams or less
- Highly accurate (1 metre accuracy)
- Highly flexible
 - Supports multiple weapons
 - Supports multiple top sights
 - Supports multiple ammunitions including air burst (40mm and rockets)
- Designed for left, right or top mounting
- Day and night capable (IR Illuminator, IR Target Marker and Visible Target Marker included)
- Quick selector for two predefined ammunitions and distances
- Storage for up to 32 ammunitions to select from
- Air Burst Programmer included

BENEFITS

- Significantly improved first hit probability
- Reduced ammunition consumption per target
- Reduced engagement time
- Increased mission endurance
- Operational in less than 3 seconds
- Easy to handle/employ
- Supports all users (left and right handed)
- Cost effectiveness
- Laser range finder 1,550 nm

FEATURES

- Light weight – 300 grams or less
- Follows accurately the pre-programmed ballistic table
- Highly flexible
 - Supports multiple weapons
 - Supports multiple top sights
 - Supports multiple ammunitions including air burst (40mm and rockets)
- Ambidextrous – Designed for both right and left handed shooters
- Day and night capable (IR Illuminator & IR Target Marker incl.)
- Quick selector for two predefined ballistic tables
- Storage for up to 32 ballistic tables
- Fixed graduated scale
- Customized distance resolution 1, 5 or 10 metres

BENEFITS

- Reduced ammunition consumption per target
- Reduced engagement time
- Increased mission endurance
- Operational in less than 2 seconds
- Easy to handle/employ
- Supports all users (left and right handed)
- Cost effectiveness

VINGMATE SL1000

The preferred sight for shoulder-launched weapons

The Vingmate Shoulder-Launched 1000 is a fire control system specially designed for shoulder-launched rockets (e.g AT4/CG 84 mm/Panzerfaust/RPG), but can easily adapt to 40 mm high velocity grenade launchers (e.g Mk19/GMG/Mk47).

Its unique construction and built-in laser range finder supports up to 1,300 grams of GFE sights and the FCS itself just adds 1,300 grams to the host weapon. The SL1000 supports multiple weapons and ballistics, it increases the precision of the weapon system and the effectiveness of the user, while simplifying training and reducing cost.



BENEFITS

- Significantly improved first hit probability
- Reduced ammunition consumption per target
- Reduced engagement time
- Increased mission endurance
- Operational in less than 3 seconds
- Easy to handle/employ
- Cost effectiveness
- Laser range finder 1,550 nm

FEATURES

- Payload – 1,600 grams or less
- Highly accurate (1 metre accuracy)
- Highly flexible – supports multiple rocket launchers – supports multiple top sights – supports multiple ammunitions including air burst (40mm and rockets)
- Designed for left or top mounting
- Day and night capable (IR Illuminator, IR Target Marker and Visible Target Marker)
- Quick selector for two predefined ballistic tables and distances
- Storage for up to 1,000 ballistic tables
- Air Burst programmable

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