



FCS-MR800

40 MM FIRE CONTROL SYSTEM & AIRBURST PROGRAMMER

The Fire Control System MR800 (FCS-MR800) from Rheinmetall Soldier Electronics (RSE) is a highly integrated system for 40mm low and medium grenade launchers. It can be mounted on any stand-alone, underslung or multiple grenade launcher via Picatinny rail. The integrated ballistic computer stores the ballistics of 32 different ammunition types and calculates a ballistically corrected aim point. With its precise range finding (inbuilt LRF) and accurate elevation angle, the FCS-MR800 increases the first round hits.

The FCS-MR800 is completed by the electronically focusable IR illuminator and the two built-in aiming lasers (infrared and visible). To keep the aiming point in focus, the FCS-MR800 automatically moves the inner module part to adjust the elevation angle. The FCS-MR800 improves the first round hit probability. It includes an Infrared Air Burst Munition (IR-ABM) programmer which increases the lethality of individual rounds and allows engagement of targets behind cover or in trenches. Eye safe training mode for effective force on force training. Laser output power is set by smart colour-coded trigger cables or dongles (RSE patent granted) e.g. white and blue for training, black and grey for operations.

FEATURES

- Electronically focusable IR illuminator
- IR aiming laser and visible aiming laser

- All lasers and LRF co-aligned to bore sight with a single adjustment
- Tactical LRF (invisible to night vision goggles)
- Inclinator – measures shooter/target elevation delta – perfect for uphill and downhill shooting
- Inbuilt ABM programming unit: programs ammunition (from Rheinmetall) in first few meters of flight
- Ready for radio transmission with Nammo ABM ammunition
- Waterproof up to 10m for 1h (IP68)
- Powered by two IEC CR17345/CR123 batteries

BALLISTIC COMPUTER

- Calculates the correct elevation angle, stores the ballistics for 32 round types – only desired types shown
- Compact servomotor – adjusts the correct aiming point

WEAPON MOUNTING

- Standard picatinny mount (MIL-STD-1913/STANAG 4694)
- Various sights available
 - Aimpoint®
 - Trijicon®
 - Docter®

TECHNICAL DATA

General

Length x width x height ¹⁾	155 x 75 x 115 mm
Extension from rail	70 mm
Weight incl. battery, rail mount and reflex sight	710 g
Battery	2x IEC CR17345/CR123
Battery life	4 h (Dual IR 30/80 mW) or 500 target acquisitions
Waterproof (IP68)	10 m for 2 h
Operating temperature (STANAG 2895)	-32°C to +71°C
Test standard	MIL-STD-810
Range finder	
Measurement range	1,500 m
Power output	5 W pulse
Wavelength	1,550 nm
Typ. Beam divergence	0.5 mrad

Ballistic computer

Type	RSE Algorithm
Max. storage capacity	32 ammunitions types
Elevation mechanism	Electric motor
Tilt/Elevation range	0° to 30°
Atmospheric sensors	Pressure, humidity, temperature
Canting assistance	In display, blinking red dot sight and blinking IR laser
Airburst programmer (integrated)	
Power output	5 W pulse
Wavelength	905 nm

MODE DATA

Mode	typ. wavelength	typ. output power	typ. beam divergence
Visible aiming laser red	640 nm	60 mW	0.5 mrad
IR aiming laser	850 nm	30 mW	0.5 mrad
IR illuminator w. electronic focus	850 nm	60 mW	5 mrad to 150 mrad

¹⁾ Height is including Docter® sight.

All parameters in the tables were measured at room temperature.



Laser beams can cause damage to your eyes. The user is responsible to observe the local safety regulations.

Subject to technical changes, error, and printing errors.

CONTACT US

For more information or questions about an individual configuration of the Rheinmetall Soldier Electronics products, please contact our sales consultants.

sales.rse@rheinmetall.com

Rheinmetall Soldier Electronics GmbH

Bodenseeallee 3 · 78333 Stockach · Germany · sales.rse@rheinmetall.com · www.rheinmetall.com