

VINGMATE FCS

ADVANCED SIGHT AND FIRE CONTROL SYSTEM FOR HEAVY MACHINE GUNS AND GRENADE LAUNCHERS



The Vingmate FCS has been used with a variety of 40 mm AGLs, .50 cal., and other heavy machine guns with impressive accuracy and functionality

Capabilities

- Direct fire for point targets and improved area suppression
- Indirect fire
- Target acquisition out to 4500 m
- Battle Management (BMS) interface
- Day/night operations
- Ballistic compensation
- Airburst programming for 40 mm AGLs

Operational benefits

- Increased first hit probability
- Eliminates “walk-fire” method of engagement

- Reduced ammo consumption
- Increased mission endurance
- Reduced collateral damage
- Fast target identification and engagement
- Rapid engagement of multiple targets
- Maintain element of surprise
- Utilize air burst ammunition to defeat targets in defilade

Includes

- Day camera
- Thermal camera (optional)
- Digital magnetic compass
- GPS
- Laser range finder
- Laser pointer (optional)

We also offer the Vingmate Video Trainer for realistic drills – train without ranges, weapons, or ammo.

Technical Data – Vingmate FCS with black and white camera	
Day Sight Characteristics	
Camera FOV	3.5°
Magnification	5X
Format	4:3
Focus	30 to infinity
Video	PAL/NTSC
DRI	detection >6,000m
	recognition >1,750m
	identification >900m
Display Characteristics	
Format	800x600 (hor/vert pixels)
Control	brightness and contrast
LRF Performance	
Eye safe	class 1 per IEC60825-1 Ed1.2
Aperture	42 mm/1.65 in
Wavelength	1,550 nm
Accuracy	±1 to ±3 m
Thermal/Night Vision	
Video format	PAL/NTSC
Data communication	RS232/RS422
FCS power supply	9/12VDC/500 mA (1000 mA peak)
Mechanical mounting interface	
Mil-Std-1913 Picatinny rail/NAR	
Weight limitation	4,500g/9.9 lbs
Air Burst Programming	
ABM patterns	far/near/scatter/single
Firing modes	single and string of pearls
ABM range adjustment	increments of 1m
Power	
Battery power	BA-5800/BB2800
Optional battery power (external unit)	BA-5590/BB590
Vehicle power	28VDC(9-39VDC) compliant with Mil-Std-704D/E and Mil-Std-1275D
GPS	
Internal	NMEA0183
External	NMEA0183 and RS232/RS422
External Communication	
USB2	For SW upgrades, uploading ballistic tables and communication with Battle Management Systems
External Video Output	
Format	800x600 RGB video, H-Sync and V-Sync
Optional output	PAL Composite/S-Video
Weight	
FCS with display and key pad	5,800g/12.8 lbs

Technical Data – Vingmate FCS with colour camera	
Day Sight Characteristics	
Camera FOV	2°, 4°, 6° and 8°
Magnification	4.5X, 2.2X, 1.5X and 1.1X
Format	4:3
Focus	30 to infinity
Video	PAL/NTSC
DRI	detection >7,100m
	recognition >2,000m
	identification >1,200m
Display Characteristics	
Format	800x600 (hor/vert pixels)
Control	brightness and contrast
LRF Performance	
Eye safe	class 1 per IEC60825-1 Ed1.2
Aperture	42 mm/1.65 in
Wavelength	1,550 nm
Accuracy	±1 to ±3 m
Thermal/Night Vision	
Video format	PAL/NTSC
Data communication	RS232/RS422
FCS power supply	9/12VDC/500 mA (1000 mA peak)
Mechanical mounting interface	
Mil-Std- 1913 Picatinny rail/NAR	
Weight limitation	4,500g/9.9 lbs
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ABM patterns	far/near/scatter/single
Firing modes	single and string of pearls
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