SparrowHawk™

Head-Up Display

Compact and affordable, with proven performance and technology

A fully qualified and proven stroke on raster Head-Up Display (HUD), the CMC Electronics' SparrowHawk™ provides a 25° total field of view and is up to 50% smaller and lighter than competing systems. It also offers up to twice the accuracy, making it the most accurate HUD available on the market.

The SparrowHawk™ features extensive built-in testing for simplified maintainability, internal data logging and continuous in-flight testing to track system conditions during flight. It can also be fitted with an optional HUD camera, video recording system and an Up Front Control Panel, which allows the pilot to select the system mode and manually enter numerical data into the mission system.

The SparrowHawk™ HUD, combined with our Operational Flight Programs and Open Architecture Mission Computer, is a complete weapons delivery system providing a powerful, cost-effective solution for aircraft that perform a broad range of missions. Our systems designs offer fleet commonality and ensure minimal impact on the cockpit environment. These features ease and simplify pilot training and/or transition across aircraft types.

The SparrowHawk's™ high performance and low cost make it the best value solution for new military aircraft or for upgrades to existing aircraft. Every SparrowHawk™ HUD is backed by CMC Electronics' worldwide support network.

Over 100 Years of Innovation

Esterline CMC Electronics

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SPARROWHAWK™ HEAD-UP DISPLAY – CHARACTERISTICS

FEATURES	BENEFITS
Stroke Only or Stroke on Raster	Symbology can be overlaid on any raster image, e.g. FLIR or radar.
Total Field of View: 25° with 5" Aperture	Provides large, instantaneous field of view in a clear, sharp display with high brightness and clarity. Increases the pilot's aiming envelope. Allows for pinpoint accuracy and a greater combat safety margin.
Symbology Brightness Adjustable 0-3000 fL	Symbology readable under all ambient light conditions.
Automatic Brightness Control	Automatically adjusts symbol brightness for varying light ambience.
Gen 2 and Gen 3 Night Vision Goggle (NVG) Compatible	Clear, sharp HUD image during night operations.
Dual Combiner Optical System	Provides large instantaneous field of view with excellent transmissivity.
Electronic Boresighting Capability	Simplifies HUD installation process, increased accuracy.
30-Minute Operational Level Test/Remove and Replace	Enhances maintenance efficiency and extends in-service hours.
Continuous BIT	Automatically validates HUD operation.
Optional Up-Front Control Panel (UFCP)	Allows the pilot to select the system mode and manually enter numeric data into the mission system.
Optional Integrated Color HUD Camera and Video Recorder	Training or mission debriefing.
Camera Placement Forward of Combiners	Camera does not obstruct pilot's view. Camera video and HUD symbology electronically overlaid on video recorder and rear cockpit monitor produces high-quality display regardless of ambient light.
Dual Symbol Generator Capability	Hot-standby operation.
Compact, Flexible Design	Ideal for retrofit applications.
Long CRT Life	Lower life cycle costs. More than four times the life of competing HUDs.

SPECIFICATIONS

Weight	17.25 lb/7.8 kg.
Display Color	Green P-53 phosphor.
Combiner	Single or dual.
Dual Combiner	80% transmissivity.
Aperture	5"
Draw Rate	135,000°/sec maximum.
Image Distortion	<1%
Accuracy	0.0 to 2.0 mr.
Contrast Ratio	1.3 to 1 against 10,000 ftL ambient.
Power Consumption	60 Watts.
Reliability	3,500 Hr. MTBF.
Environmental	MIL-STD-810E per MIL-5400 Class 1.
EMI	MIL-STD-461D/462D.

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