CMA-SparrowHawk™ Head-Up Display — Characteristics

**FEATURES**

- Stroke Only or Stroke on Raster
- Total Field of View: 25° with 5" Aperture
- Symbology Brightness Adjustable 0-3000 fL
- Automatic Brightness Control
- Gen 2 and Gen 3 Night Vision Goggle (NVG) Compatible
- Dual Combiner Optical System
- Electronic Reimaging Capability
- 30-Minute Operational Level Test
- Continuous BIT
- Optional Up-Front Control Panel (UFCP)
- Optional Integrated Color HUD Camera and Video Recorder
- Camera Placement Forward of Combiners
- Dual Symbol Generator Capability
- Compact, Flexible Design
- Long CRT Life

**BENEFITS**

- Symbology can be overlaid on any raster image, e.g. FLIR or radar
- Provides large, instantaneous field of view in a clear, sharp display with high brightness and clarity
- Increases the pilot’s aiming envelope. Allows for greater combat safety margin.
- Symbology available under all ambient light conditions.
- Automatically adjusts symbol brightness for varying light ambience.
- Clear, sharp HUD image during night operations.
- Provides large instantaneous field of view with excellent transmissivity.
- Simplifies HUD installation process, increased accuracy.
- Enhances maintenance efficiency and extends in-service hours.
- Allows the pilot to select the system mode and manually enter numeric data into the mission system.
- 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.
- Hot standby operation.
- Ideal for retrofit applications.
- 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.
  - MIL-STD-461D/462D.

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™ 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.
Head-Up Display

CMA-SparrowHawk™

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.

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For information inquiries, visit www.esterline.com/avionicsystems