MOSARC™ ADAPTIVE FLIGHT DISPLAY

OPEN SYSTEMS ARCHITECTURE, FUTURE-READY AVIONICS

Open, tailorable and adaptive by mission

The Collins Aerospace Mosarc™ adaptive flight display (AFD-3210) was developed from a proven family of commercial off-the-shelf, resistive touchscreen liquid crystal displays with multi-touch gesture support. With nine-inch diagonal displays, our Mosarc enables an open systems architecture and acts as a highly tailorable, intuitive aircraft control, primary flight or mission page display.

Night vision (NVIS) compatible, the Mosarc AFD is optimized for fighter operations and offers mounting options for new and enduring fleets to ease integration.

Mosarc AFDs expand the capabilities of current and future aircraft, offering optional software for:

- Radio management
- Checklist automation
- Flight management system (FMS)
- Navigation charts
- Weather radar
- CPDLC (FANS, ATN)
- Synoptics
- SATCOM and AOC
- Maintenance and monitoring
- Crew alerting and troubleshooting
- Customizable mission pages (i.e., weapons, datalinks)
- Primary flight display

KEY FEATURES & BENEFITS

- Open, tailorable and ruggedized AFD improving pilot situational awareness with evolving fighter platforms

- Larger 9" diagonal display enables better viewing and interpretation of data and more efficient task management

- Provides the latest LCD technology with a power-efficient, 800-by-400 resolution, 103dpi and fully saturated colors in day and NVG modes

- Can eliminate dedicated control panels

- Rugged, lightweight design delivers reliable performance in extreme environments

- Touchscreen is fault tolerant, glove compatible and offers resistive multi-touch to improve accuracy

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EXCELLING IN THE NIGHT

The Mosarc AFD was designed as a flexible, NVIS-compatible touchscreen display to be used either as a flight display in the instrument panel or in lower consoles as a system controller. It accommodates retrofit applications and fits within the typical DZUS rail width (5.75 inches) used in many aircraft. It has a large, 9-inch diagonal viewing area to display a variety of data.

The display's high-performance, low-power system processor combines with a variety of input/output signals and a GE5 2D graphics engine, resulting in a high-integrity solution. Its components support up to Design Assurance Level A (DAL A) display formats, including DO-178C and DO-254 artifacts, as well as ARINC 661 graphics protocol. This graphics protocol enables graphics to be drawn to the display from the software local to the display, as well as from remote equipment.

The Mosarc AFD features a resistive touchscreen technology compatible with any type of flight glove. The light-touch technology uses pressure on the display to sense position and minimize false activations, a common concern in cockpit environments.

FUTURE FOCUSED FROM A PROVEN LEGACY

The adaptive flight display family uses the proven implementation and touchscreen technologies of Collins Pro Line Fusion® integrated avionics system displays. It leverages the same family of networking, graphics and controllers as our proven Flight2™ integrated avionics system and Common Avionics Architecture System (CAAS) product lines. As a result, our AFDs deliver interoperability and robust, trustworthy performance.

SPECIFICATIONS

Model	AFD-3210
Size	5.75 in. (14.6 cm) W x 9.75 in. (24.7 cm) H x 3.7 in. (9.4 cm) Depth
Weight	<6 lbs.
Power	28 VDC, 50 W without heater
Input/output (I/O) complement	ARINC-708, ARINC-818 video and MIL-STD-1553
Viewing	Envelope circular: +/-40 vertical and horizontal; can be used in portrait and landscape orientation
Touchscreen	Resistive (suitable for all gloves)
NVIS radiance	In accordance with Table III of MIL-STD-3009 for Type I, Class B, electronic and electro-optical displays (multi-color)
Design assurance	DO-254 and DO-178C DAL A
Mean time between failures (MTBF)	>5,000 hours

ADDITIONAL KEY FEATURES AND BENEFITS

- Design based on proven touchscreen technologies of Pro Line Fusion displays, flying worldwide

- Leverages the same display components as other proven Collins Aerospace integrated flight decks, including networking, graphics and controllers

- Flexible design allowing for growth and incorporation of new technologies

- Can host user-created applications; or our ARINC 661 Graphics Server (AGS) can host enabling client applications connected via Ethernet to draw to the AFD-3210 display

Specifications subject to change without notice.

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