

## MOSARC™ LARGE AREA DISPLAY

# OPEN SYSTEMS ARCHITECTURE, **FUTURE-READY AVIONICS**

# Improved situational awareness, flight safety and reliability for the mission of tomorrow

Reduce pilot workload and improve mission performance with the Collins Aerospace Mosarc large area display (LAD). Pilots can easily access a wide variety of critical flight information, improving the safety and performance of each flight.

Our Mosarc LAD has a monolithic liquid crystal display (LCD) which features a resistive multi-touch surface optimized for use with bare or gloved hands, eliminating unintended touchscreen activations. With high resolution technology, the Mosarc LAD displays fully saturated colors in both day and night vision goggle (NVG) modes.

In addition to offering more cockpit forward visibility and weight balance flexibility, our Mosarc LAD increases overall sunlight visibility and has electrically independent left/ right halves to ensure fully redundant operation. Pilots see clear, synchronized, artifact-free video across the center of the display, enhancing operational usage and safety.

Our rugged, lightweight design delivers reliable performance in extreme environments with more than 15,000 operating hours mean time between failures (MTBF). Production units are available now.

#### FIGHTER DISPLAY ENHANCEMENTS

- Open, tailorable and high-performance large area display improving pilot situational awareness with evolving fighter platforms
- Wide-screen and configurable LAD to accommodate advanced and evolving Human Machine Interfaces and formatting
- Remote Mosarc LAD provides greater weight balance flexibility when paired with separate computer

#### **KEY FEATURES & BENEFITS**

- Key panel and plain bezel options available for fighter applications
- Fault-tolerant, glove compatible, resistive touchscreen
- Optimized touch-activation force for improved accuracy and glove usage
- · Maximum leverage of human-machine interfaces
- Redundancy via left/right functionally independent electronics ensures safety and simplifies airworthiness approval
- 1024 x 2560 pixel LCD with 128 dpi and fully saturated colors in day or **NVG** mode
- Optical design eliminates canopy reflections
- Optional power and control configurations
- Redundant cooling solution ensures unit stays cool





MTBF 15,000 hours

Brightness >300 fL (default config)

>500 fL (optional)

NVG compatibility MIL-STD-3009, Class B and

MIL-L-85762A, Class B

**Certification** Developed to ARP4754A, DO-254 DAL A,

DO-178C DAL A/B

Video inputs Left video: 2x ARINC 818,

2x SMPTE 292/424

Right video: 2x ARINC 818,

2x SMPTE 292/424

Connector(s) Left video, I/O and power MIL

circular connectors

Right video, I/O and power MIL

circular connectors

I/O complement Left +28 VDC power

Right +28 VDC power

LCD heater +28 VDC power or LCD heater +270 VDC power

0-5 VDC or 0-5 V 400 Hz AC bezel backlight

Six input discretes per half

One output discrete per half (bezel control discretes optional)

Two left/right digital serial bus (RS-422 full duplex with dual-redundant outputs

One left/right maintenance serial bus

(RS-485 half-duplex input)

Specifications subject to change without notice.

### **SPECIFICATIONS**

**Display type** Remote display split electrically into left/

right halves for fully redundant operation

T.98 in. x 19.96 in. (~20,2 x 50,7 cm), left/

right electrically independent, 1024 x 2560

resolution, 128 dpi

**Size** 9.5 in. H x 21.5 in. W x 2.9 in. D

 $(\sim 24,1 \times 54,6 \times 7,3 \text{ cm})$  excluding mounting flange, finger rails and connectors, behind

instrument panel

**Touchscreen** Resistive, low-latency multi-touch

Weight ~19 lbs.

Input power +28 VDC display power

**Power dissipation** 150 W maximum;

350 W maximum (optional LCD heater on)

**Mounting** Eight front-mounting screws

**Cooling** Internal redundant quiet fans

Storage temp. -54° C to 95° C

Operating temp.  $-40^{\circ}$  C to 71° C



#### **COLLINS AEROSPACE**

+1.319.295.5000 | +1.319.295.4085 6thgenfighter@collins.com collinsaerospace.com