

MAKING FLIGHTS MORE EFFECTIVELY HANDS-ON

Touchscreen ease for reduced workload

Fixed-wing pilots can access critical flight information with greater ease and flexibility with the Collins MFD-4820 large area display. Its wide, resistive multi-touch surface is optimized for use with gloved hands, to eliminate unintended touchscreen activations.

The MFD-4820 includes an 8-by-20-inch monolithic liquid crystal display (LCD). This eliminates the center mullion that in two side-by-side displays can introduce center-area blurriness or visual chatter.

In addition, the MFD-4820 has electrically independent left/right halves. This redundant-design architecture enhances operational usage and safety. Together, these features enable synchronized, artifact-free video formats across the center of the display.

The MFD-4820 increases sunlight visibility by providing more than 300 fL with less than 150 W of +28 VDC input power and a greater than 20:1 high-ambient contrast ratio.

Its high-reliability design projects a mean time between failures of more than 15,000 operating hours.

Bring greater clarity, variety of information and safety to your flights with the MFD-4820.

KEY FEATURES AND BENEFITS

- Latest LCD technology provides high resolution (1024 by 2560) with 128 dpi and fully saturated colors in day and NVG modes
- Touchscreen is fault tolerant, glove compatible, resistive multi-touch
- Optimized touch-activation force eliminates unintended activations for improved mission performance and reduced pilot workload
- Left/right functionally independent electronics ensure fully redundant operation
- Rugged, lightweight design delivers reliable performance in extreme environments
- Unique optical design mitigates canopy reflections
- Optional configurations include bezel buttons and alternate video interfaces



SPECIFICATIONS

Display type Remote display split electrically into left/

right halves for fully redundant operation

LCD 7.98" x 19.96", electrically left/right

independent, 1,024 x 2,560 resolution

(128 dpi)

Size 9.5" H (excluding mounting flange) x

21.5" W x 3.64" D (behind instrument panel, excluding finger rails and connectors)

Touchscreen 8" x 20" resistive, low-latency multi-touch

Weight <20 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 Two internal fans

Storage temp. -54° C to 95° C

Operating temp. -40° C to 71° C

MTBF >15,000 operating hours

(AIF environment)

Brightness >300 fL

NVG compatibility MIL-STD-3009, Class B and

MIL-L-85762A, Class B

Certification Developed to ARP-4754, D0-254 DAL A,

DO-178C DAL A/B

Video inputs Left video: 2x ARINC 818,

2x SMPTE 292/424, DVI (optional)

or display port (optional)

Right video: 2x ARINC 818,

2x SMPTE 292/424, DVI (optional)

or display port (optional)

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

LCD heater +270 VDC power (optional)

0-5 VDC bezel lighting voltage

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

