MFD-4820 LARGE AREA DISPLAY

MAKING FLIGHTS MORE EFFECTIVELY HANDS-ON

Touchscreen ease for reduced workload

Rotary-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 10,000 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 provide for 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 4.25” 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**  
>10,000 operating hours (ARW environment)

**Brightness**  
>300 fL

**NVG compatibility**  
MIL-STD-3009, Class B and MIL-L-85762A, Class B

**Certification**  
Developed to ARP-4754, DO-254 DAL A, DO-178C DAL A/B

**Video inputs**  
Left video: 2x ARINC 818, 2x SMPTE 292/424 (optional), DVI (optional) or display port (optional)  
Right video: 2x ARINC 818, 2x SMPTE 292/424 (optional), 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 (optional)  
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.