



# CMA-2082F

## EW Display and Control Unit

**Selected for NATO fighter platform**

**Integrated control and display, with onboard Electronic Warfare (EW) processing**

**Cockpit orientation either landscape (as illustrated) or portrait**

### EW Processing

- Two dual-redundant MIL-STD1553B bus controllers/remote terminals/monitors
- Dedicated applications processor for EW processing (customer may write EW application software)
- Dedicated graphics processor
- Optional video output for recording and playback
- Spare card slots for interfacing of analog, discrete and digital signals

### EW Threat Display

- Full color 4" x 4" AMLCD display
- High resolution 480 x 480 RGB
- Sunlight readable with high brightness – 200fL
- NVG compatible

### EW Control

- Custom alpha-numeric keyboard
- Programmable soft keys
- On/off and brightness switch

### Environment/EMI

- MIL-STD461C and MIL-ST810 military environment ruggedized for harshest fighter and helicopter environments

### Maintainability

- BIT shop replaceable unit fault isolation and failure history for maintenance action and trend analysis
- 15-minute mean time to repair for removal and replacement, with only two connectors



# CMA-2082F EW DISPLAY AND CONTROL UNIT - SPECIFICATIONS

## PHYSICAL

|                    |  |
|--------------------|--|
| Size               | 8.25 in. W x 5.75 in. H x 8.17 in. D<br>(210 mm x 148 mm x 208 mm) |
| Weight             | 11 lb (5.0 kg)*  |
| Power Consumption  | 75 W@ 28 VDC*  |
| Heating Power      | 115 W @ 28 VDC<br>(at warm-up only)                                |
| Cooling            | Forced-air with built-in fan                                       |
| External Connector | 2 x MIL-C-38999, 79-pin<br>* Configuration dependent               |

## DISPLAY

|                   |   |
|-------------------|---|
| Type              | Full-color, active-matrix LCD                     |
| Active Area       | 4" x 4" (102 mm x 102 mm)                         |
| Pixel Array       | 480 x 480 RGB x 64 gray shades<br>(6 bits/color)  |
| Viewing Angle     | ±45° H, + 20° V, -10° V@ CR= 10:1                 |
| Contrast Ratio    | Min 5:1 CR @ 10,000 fC<br>@ optimum viewing angle |
| Luminance         | 0.10 to 200 fL                                    |
| NVG Compatibility | MIL-L-85762A Type I Class B                       |

## SIGNAL INTERFACES

## PROCESSOR / SOFTWARE

|                     |   |
|---------------------|---|
| Standard            | Two dual-redundant<br>MIL-STD-1553B BC/RT<br>RS-422 x 2   |
| Spare Card Slots    | 2   |
| Optional Interfaces | Color video output<br>Analog or discrete I/O<br>ARINC-429<br>Additional processor (i.e. Power PC) |

## PROCESSOR / SOFTWARE

|                        |                                       |
|------------------------|---------------------------------------|
| Dedicated Applications |                                       |
| Processor              | Intel 80486DX 25 MHz                  |
| Graphics/Symbol        |                                       |
| Generation             | Texas Instruments TMS 34020           |
| Serial Interface       | Intel 386EX                           |
| Applications Memory    | 4 Mbytes flash<br>2 Mbytes static RAM |
| Program Language       | ANSI C / Ada                          |

## OPERATOR INTERFACE - KEYBOARD

|                                 |                               |
|---------------------------------|-------------------------------|
| Data Keys                       | 32                            |
| Soft Keys                       | 18                            |
| On/Off and<br>Brightness Switch |                               |
| Integral Lighting               | 5 VAC/DC, externally supplied |

## ENVIRONMENTAL / EMI

|              |  |
|--------------|--|
| RTCA         | DO-160C Cat C2/MIL-STD-810                         |
| MIL-STD-461C | Class A1b  |
| Temperature  | -40°C to + 55°C continuous<br>+70°C for 30 minutes |
| Humidity     | MIL-STD-810 (aggravated)                           |
| Vibration    | MIL-STD-810 (fixed & rotary wing)                  |
| Altitude     | +50,000 ft   |



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