



**Palomar  
Display  
Products**

## Airborne Multi Function Displays



Palomar Display Products' Airborne Multifunction Displays (MFD) are designed to meet a broad range of guidance and control applications in fixed and rotary wing aircraft. Typical applications are mission control, guidance, weapons systems, and operation status.

LCD screen sizes are 5", 6.5", 8.4" and 10.4". The Multifunction Displays can select between one of three NTSC or PAL video inputs in and one optional VGA input. With the wide range of screen sizes, resolutions up to 1024 X 768 pixels, and up

to 24 software configurable soft keys, Palomar Display Products' MFD's satisfy almost any airborne control and display application.

With high brightness and contrast, the MFDs provide the performance necessary for use in direct sunlight. Brightness can also be set for NVG use. With over 16 million displayable colors, the MFDs accurately display detail necessary for any application.

The MFD's provide interfaces necessary for any application. Video interfaces include NTSC, PAL, DVI, and RS-170. A serial RS-422 interface is provided with additional discrete inputs and outputs. The MFD's basic package also provides a symbol generator.

All products are designed and manufactured to meet specific customer requirements. They can be tailored to operate with various video and communication standards.

### **Palomar Display Products, Inc.**

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# Airborne Multi Function Displays

## Specifications

### Optical Features

Brightness Level	788 Nits (Day), 0.03 Nits (NVG mode)
Contrast Ratio	Up to 1000:1
Color Capability	16,000,000 (8 bits/color)
LCD Viewing Angle	Horizontal: +80°/-60°, Vertical +80°/-80°
NVIS Compatibility	Yes
NVIS Compliance	MIL-STD-3009

### Electrical Features

Input Power	16-32 VDC, MIL-STD-704D
Max Power Consumption	30 W maximum
Input Power Protection	Overload, Reverse Polarity, Temporary Cut-Off (50msec)

### Video Interfaces

Input formats:	DVI,PAL, NTSC, LVDS, RS170, RS343, VGA
Output formats:	PAL, NTSC, RS170, LVDS, RS343

### Processing Features

Embedded Symbol Generator	Yes
Multi-layer On Screen Display	Yes
Serial Communication	RS422
Discrete input signals	8 inputs
Discrete output signals	5 open collector, 28 volts maximum
Built-In Test (BIT)	Periodic, Initiated, Power-up

### Environmental and General Features

Environmental Compliance	MIL-STD-810E
Operating Temperature	-20°C to +55°C
Storage Temperature	-30°C to +71°C
Cooling	Convection
Altitude	0 to 16,000ft
Vibration 5g(rms),	10Hz to 2000Hz
Shock	20g, 11msec
EMI	MIL-STD-461E, MIL-STD-704A
MTBF	Over 10,000 hours



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