



**Astronautics** Corporation of America

**5" MFCD**

## **5" LIQUID CRYSTAL MULTIFUNCTION COLOR DISPLAY (MFCD)**

This Multifunction Color Display Unit (MFCD) is an Active Matrix Color Liquid Crystal Display. The display units are designed for multifunction application where accuracy, reliability, and high resolution are requirements. The full color (RGB) capabilities also allow the MFCD to be utilized as a Digital Map Display, while the high resolution of the AMLCD and the MFCDs monochrome capabilities allow it to operate as a sensor display. Designed and manufactured for use in both fixed and rotary wing aircraft.



### ***Astronautics 5" Color Liquid Crystal Multifunction Display features include:***

- Active Matrix Color Liquid Crystal Display,
- High Brightness, High Contrast
- 20 Multifunction Keys, RS-422 and/or Discrete
- Brightness Control
- Contrast Enhancement Filter
- Night Vision Goggle (NVG) Compatibility
- Selectable Brightness Modes: Day, Night, Auto
- Modular, Rugged Construction
- Designed to Military Standards
- Built-in-Test (BIT), RS-422 and/or Discrete (Switched)
- 256 Shades of Gray

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This sheet is for reference only, not as a basis for specifications..

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## 5" Liquid Crystal Multifunction Color Display

<b>OPTICAL SPECIFICATIONS</b>	
Useable Display Area	5.0 x 5.0 Inch
Pixel Resolution	600 x 600
Display Luminance	200 fL
Display Luminance Uniformity	Within 15%
Geometric Distortion	None Visible
Colors	256 shades of gray
<b>VIDEO SPECIFICATIONS</b>	
Typical Interfaces Available	RS-170 Monochrome/RS-170A RGB, CCIR-D Video Optional, RS-422 and Discrete interfaces
Video Timing	Per RS-170, Input Impedance -75 OHMS ±2% Triax Video Connectors
<b>MECHANICAL SPECIFICATIONS</b>	
Chassis	One Piece Cast- Aluminum
Envelope	- 6.3 x 6.3 x 10.0 inches
Weight	10 Pounds
<b>POWER SPECIFICATIONS</b>	
Power	28 Volt DC Power per Mil-Std-704 50 Watts Power Consumption (AVG) 100 Watts (Max) Heaters (light and display) Display Operation Unaffected by Input Voltage Variations
<b>RELIABILITY/MAINTAINABILITY</b>	
Built-in-Test (BIT)	Automatic Fault Monitoring Identification of Failed CCA via RS-422
Reliability	6,000 hours MTBF (per Mil-Std-217D)
Maintainability	30 Min MTTR
<b>ENVIRONMENTAL SPECIFICATIONS</b>	
Temperature	-40°C to +55°C Operating (continuous) +71°C Intermittent
Altitude	0 to 55,000 Feet
Vibration	5g, 50-2000 Hz
Shock	15g, 11 milliseconds
EMI/EMC	Per Mil-Std-461
Humidity	Up to 100% Condensing

**FOR MORE INFORMATION ON THIS OR ANY OF OUR OTHER PRODUCTS/SYSTEMS PLEASE CONTACT:  
ASTRONAUTICS MARKETING, Phone: (414) 449-4000, Fax: (414) 447-8231, E-mail: busdev@astronautics.com  
OR VISIT OUR WEBSITE [www.astronautics.com](http://www.astronautics.com)**

***A World Leader in Navigation and Display Systems since 1959***

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