

# 10.4" Flat Panel Display



**IA** INNOVATIVE  
AEROSYSTEMS

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## Technical Overview

Innovative Aerosystems has developed a highly flexible flat panel display for commercial and military aircraft. Its unique design concept permits rapid modification of graphic display formats, and more importantly, rapid certification by the FAA, or other cognizant authorities through its patented integrity monitoring system.

The display system is ideally suited for applications of primary flight/navigation display, multifunction display, and display of mission data. IA displays have backlighting that is quadruply redundant; IA uses LED backlighting with exceptional reliability and without loss of intensity during the service life of the display.

IA displays incorporate both the Display Unit (DU) and the Symbol Generator (SG) into one Integrated Display Unit, providing a compact design with reduced wiring. This smart display incorporates a high end 3D graphics rendering engine with fully anti-aliased graphics depiction.

Exceptional readability is gained with each display due to a proprietary surface treatment method. Using familiar display formats, minimal time is required for operator conversion training. IA displays are easily adaptable to future requirements, due to the use of our flexible graphic symbology.

The 10.4" MFD is also intended for use as a tactical display and provides the operator with exceptional image clarity and luminance and features an optional touch screen interface.



## Key Features

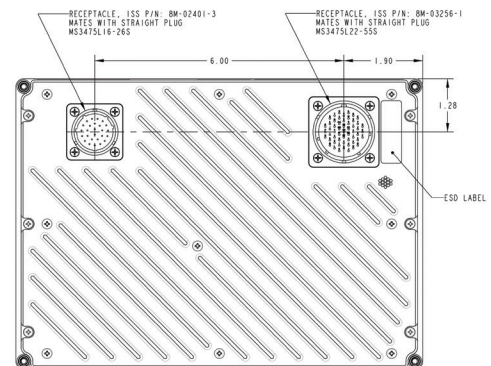
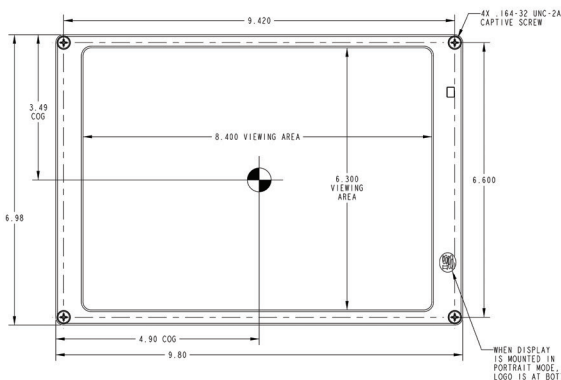
- Instant Recognition Formats
- Touch Screen Controls (Optional)
- Point and Select Data Entry
- TAWS w/ Terrain Maps
- HD (High Definition) 1024 x 768
- Warnings, Annunciation Checklist
- Able to interface with a wide range of selectable Data Concentrator Units and Display Control Panels
- Readability in Sunlight
- Non-glare, Anti-reflective Display Surface
- Navigation Route with WX and TCAS
- Extensive I/O Capabilities
- NVIS Compatible
- HUD Interface (Optional)
- EVS Interface (Optional)

## Operating Specifications - Display

Specification	10.4" Display
Resolution	1024 x 768 HD multi-color LCD
Pixel Density	123 ppi
Full color TFT LCD	Yes
Viewable Area	8.267" x 6.181" active area
Viewing Angle (typical)	Portrait or Landscape 85/85/85/85
Contrast Ratio (typical)	700:1
Surface Reflectance	< 0.7%
Sunlight Readability	160FL Calibrated
Brightness Control	1000:1
Video Cable Length	Digital 33 ft (10m) max, optional 656 ft (200m)
Overall Dimensions (typical)	9.80" x 6.98" x 3.00"
Weight	7.6 lbs
Std Power Input	28 VDC (Standard) 115 VAC/400 Hz (Option)
Cooling	No Forced Air Cooling Required
MTBF (operating hours)	> 31,000 hours
Response Time (Total)	Less than 16mS
Temp Range	-40°C (with optional heater) -20°C (without heater). + 70 °C (short term) + 55°(long term)

Specification	10.4" Display
<b>Interface Options:</b>	
Bezel Controls (Option)	Yes
Analog RGB Video Input	Yes
Analog Video Interface (RS170)	Yes
Digital Video Input (DVI)	Yes
Discretes	Input (8x) Output (2x)
RS-422	Yes; 3x RS-422 interface ports
ARINC 429	Yes; 4x receive and 4x transmit channels (speed configurable)
Ethernet	3 Channels
DVI Output Option	Yes
RS-170 Output Option	Yes
Touch screen	Resistive Glove Compatible
NVIS Compatible (Option)	Yes
Luminance	0.05 fL min up to 200+ fL (Range is configurable)
Anti-Aliasing	Yes
<b>Display Processing</b>	
Video Merging	Yes
Windowing	Yes
Overlay	Yes

## Outline Dimensions





**Data Sheet and all information contained in it is proprietary to Innovative Aerosystems  
All specifications subject to change without notice from the manufacturer.**

**Innovative Aerosystems is the world's leading supplier of RVSM solutions and a trusted integrator of Cockpit Information Systems (Cockpit/IP®) across the Commercial Air Transport, Military, and Business Aviation markets. We deliver advanced, cost-effective avionics by incorporating leading-edge technologies into proven, mission-ready systems for the global aerospace industry.**



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