

1060 Display Series

Cutting-Edge Displays for Commercial and Military Applications



- Patented design
- Built-in Test
- Rugged design
- NVIS

Enhance your situational awareness to make better informed decisions. Mercury's patented display technologies deliver unparalleled optical performance for the most demanding missions while providing the lowest total cost of ownership.

Capable of 1.3 billion colors and 1024 shades of gray. The DDA-1060 true 10-bit grayscale display provides superior clarity empowering decision makers to positively identify targets more quickly, without the use of additional personnel or assets.

The DDA-1060 incorporates a backlight design that consistently maintains the LED's rated luminance performance during the backlight's lifetime. With a sustained level of brightness, across wide-ranging temperature variations, the DDA-1060 provides best in class rendering of IR images.

Integral EMI shielding built into the DDA-1060 minimizes EMI. Optionally, this feature can be configured to serve as a heater.

Every Mercury display has Gamma tuned with a closed loop control system. This is done to minimize flicker, reduce image retention, control viewing angles, and verify monotonic grayscale performance curve (minimize image inversion). Gamma tuning also harmonizes display performance so that displays mounted side by side appear visually identical.

Built-in test circuitry monitors the DDA-1060's overall health and performance, down to the source and gate drivers, to ensure the display is operating properly.

The DDA-1060 is guaranteed to meet DO-160 and MIL-STD-810 performance requirements throughout its lifespan. Mercury offers 10 years of availability for all standard and custom products to minimize the disruption of obsolescence.

Mercury Systems is a leading commercial provider of secure sensor and safety-critical processing subsystems. Optimized for customer and mission success, Mercury's solutions power a wide variety of critical defense and intelligence programs.



ACQUIRE



DIGITIZE



PROCESS



STORAGE

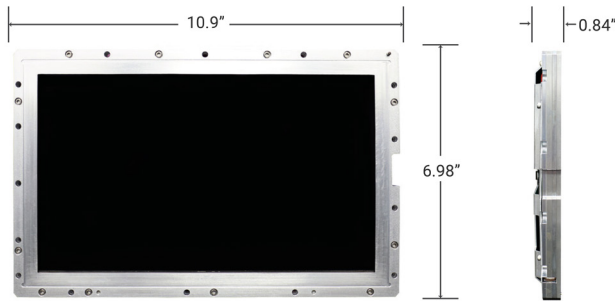


EXPLOIT



DISSEMINATE

1060



General Specifications

AMLCD

Active Display Area	9.2" x 5.2", 10.6" diagonal
Pixel Format (HxV)	1280 x 720
Color Groups per Inch	138.5
Aspect Ratio	16:9
Color Depth	10-bit, 1024 gray shades
Display Operating Mode	IPS, normally black
Front Surface Treatment	ITO (Indium-Tin-Oxide) for LCD drain and heater

Backlight

Day Mode	White LED, edge-lit, > 150fL to < 0.5fL
Night Mode	White LED, edge-lit, > 7.0fL to < 0.03fL
NVIS	NVIS: MIL-STD-3009, nNRB < 2.2 (optional)

Electrical

Power Supply Voltage	5 VDC
VCC Power	6W (max)
Backlight Voltage	12 VDC
Backlight Power	10W (max)
Heater Power Voltage	28 VDC
Heater Power	90W (max)

1060 Display Configurations

- 1060 display head assembly (DHA)
 - Includes driver circuit card assembly and backlight controller circuitry
 - White LED backlight
 - Packaged design
- 1060 addressable cell assembly (ACA)
 - Includes driver circuit card assembly tab bonded to AMLCD
 - No backlight
- 1060 bare glass

Features

- Normally black operating mode, IPS technology
- Day/night mode backlight (MIL-STD-3009 compliant)
- Designed and tested to withstand harsh environments
- High resolution, wide viewing angle, and low surface reflection
- Compact packaging
- LVDS digital video interface
- Operating temperature: -55°C to +71°C
- RS-422 serial interface for control and BIT reporting
- Integral heater enables below -20°C temperature operation
- Internal temperature sensors
- 97% NTSC color gamut
- Higher luminance available at higher backlight power
- Closed-loop backlight to ensure constant luminance performance over the operating temperature range and lifetime of the product

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