

BARRACUDA PANELMOUNT SOLAR/NVIS/MIL™ 15.0

Environmentally Sealed High Bright NVIS Compatible Military Compliant Panel Mount 15.0" LCD Monitor

STANDARD FEATURES

- › Rugged Military-Grade Enclosure (MIL-DTL-901E Compliant)
 - › Marine-Grade Powder Coat and Primer
- › Sealed (IP67) Panel Mount Enclosure, Keypad, Connectors
 - › Pressure Equalization Filter Protects Seals
- › High Resolution, High Contrast, Extended Temperature LCD
 - › High-Performance, Value-Add Optical Films and Coatings
 - › Dual-Mode (Sunlight Readable & NVIS) LED Backlight
 - › Optically Bonded Glass-Film-Glass Resistive Touch Sensor
- › Integrated EMI Mesh for MIL-STD-461 Compliance
- › VGA, DVI-D and Composite/NTSC Inputs
- › MIL-STD-704 Compliant DC Power Supply
- › Sealed, Backlit (Dimmable), NVIS-Compatible Keypad with Finger Guard
- › Programming Port for Field-Installable Software Upgrades
- › Advanced Video Controller Functions
- › Programmable Backlight Controller Auto Adjusts Maximum Brightness in Response to Temperature Changes
 - › Monitors Feedback From 5 Thermal Sensors (P/S [2], LED Controller [2], LED Rail, Internal Ambient Temperature)
 - › Programmable Max/Min Limits for Each Mode (S/R and NVIS)



The **Barracuda PanelMount Solar/NVIS/MIL 15.0** represents the pinnacle of value-add engineering and performance found in a military-grade monitor.

The rugged aluminum enclosure, connectors and keypad are fully sealed (IP67 compliant) to facilitate use in hostile environments. Connectors are recessed in the rear to reduce the overall footprint. A panel mount bezel makes installation into an existing console easy and reliable. Additional mounting options are available. Sealed connectors are provided with protective hoods for additional protection when not in use.

Optically bonding the touch sensor to the sunlight readable/NVIS display minimizes internal reflections, promotes optimal contrast, and increases the effectiveness of the LCD in high ambient lighting environments. The bond eliminates the air gap between the sensor and the screen that otherwise could allow moisture and condensation to deposit. The bonded sensor serves as a shatter-resistant vandal shield, also.

The Glass-Film-Glass resistive touch sensor facilitates gloved operation while offering best-in-class optical transmissivity. Integration of

a circular polarizer, ¼-wave retarder, and an antiglare coating further enhances the contrast, greatly improving useability in high ambient lighting conditions. An integrated EMI micro-mesh filter reduces EMI/RFI emissions, promoting MIL-STD-461 compliance.

The integrated video controller supports a native resolution of 1024 x 768 up to 75 Hz, and scalable resolutions up to 1920 x 1200 @ 60 Hz. A large assortment of analog and digital video inputs are supported. Advanced features are available including Picture-In-Picture, image flip and invert, serial (remote) interfacing, and resolution scaling options. An HDMI signal extender is embedded, enabling external DVI-D cable runs of greater than the industry standard of 5 meters.

A military-grade (MIL-STD-704 compliant) DC power supply permits operation of +9 to +36 VDC, making this device ideal for shipboard, ground vehicle or mobile applications alike.

The Barracuda is engineered for integration of a variety of LCDS, backlights, overlays (heaters, optical and solar filters, touch sensor technologies, etc.), keypads, and connectors. The baseline configuration can be modified, tailored or redesigned electrically or mechanically to meet customer-specific requirements.

BARRACUDA PANELMOUNT SOLAR/NVIS/MIL™ 15.0

SPECIFICATIONS

Display

- » 15.0"
- » 1024 x 768 Pixels
- » Optically Bonded (Standard)

LED Backlight Luminance

- » Sunlight Readable & NVIS-Compatible (Dual Mode)
- » Standard Luminance Available

Video Controller

- » 1024 x 768 @ up to 75 Hz
- » Image Scaling up to 1920 x 1200 @ 60 Hz
- » Serial Port Control
- » Image Flip and Invert
- » Picture-in-Picture

Video Inputs

- » VGA (1)
- » DVI-D (1)
- » Composite/NTSC (1)

Video

- » Field Programmable

OSD Controller

- » Field Programmable
- » Dual Keypad Support
- » Backlit Keypad

Backlight Controller

- » Field Programmable
- » Supports Single or Dual Mode LED Backlights
- » Greater Than 1000:1 Dimming Ratio
- » Programmable (Min. & Max.) Brightness Set Points for Each Mode
- » Optional Dimming Algorithms
- » Other Programmable Features

LED Driver

- » Dual Mode Controller for Sunlight Readable and NVIS LED Backlights
- » Saves and Recalls Each Brightness Setting Independently
- » PWM Dimming
 - › Logarithmic Dimming (Optional)
- » Programmable Maximum Backlight Power
- » Thermal Monitoring and Protection
- » Programmable Max. and Min. PWM Levels
- » Sync to Keypad Backlights Capability

Keypad

- » 10 Keys (OSD, System Power, Backlight Power, NVIS Mode)
- » Silicone
- » Environmentally Sealed
- » NVIS-Compatible Backlight (Dimmable)

Power Supply

- » +9 to +36 Vdc Input
- » MIL-STD-704 Compliant

Enclosure & Dimensions

- » Rugged Aluminum Construction
- » Environmentally Sealed to IP67
- » Panel Mount Front Bezel with Finger Guard for Keypad
- » Bezel: 14.00" x 17.00" x 0.406" (H x W x D)
- » Enclosure: 12.00" x 15.00" x 3.160" (H x W x D)

Connections (Environmentally Sealed)

- » Video Input (VGA, DVI-D, NTSC)
- » Programming Port
- » Remote Keypad
- » DC Power
- » Touch (USB)

Overlays

- » 5-wire
- » Glass-Film-Glass
- » Resistive Touch Sensor
- » Integrated EMI Micro-mesh Filter
- » Antireflective Coating
- » Circular Polarizer
- » ¼-Wave Retarder

Films

- » Custom LCD Film Stack (Sunlight Readable Only)

Other Features

- » HDMI Signal Extender to Support >5m External Cable Runs
- » Programming Ports to Upgrade Control Electronics Firmware in the Field
- » Compliant with MIL-STD-461 and MIL-STD-810
- » Extended Temperature Range LCD (-30°C to +85°C)
- » Backlight Kill Key (Local Only)
- » Backlight Global Kill Key (Group Command)

Options

- » Alternative LCDs & Backlights
- » Assortment of Video Controllers
- » Industrial- and Military-Grade Connectors
- » Variety of Keypads (Membrane, Silicone, Backlit)
- » Custom Mechanical, Electrical, Optical and Software Design and Modifications
- » Wide Range of Display Overlays
 - › Filters
 - › Heaters
 - › Resistive Touch Screen
 - Glass-Film-Glass
 - Circular Polarizer
 - ¼-Wave Retarder
- » Consult a Sales Engineer for More



Sealed dimmable NVIS-compatible silicone keypad with finger guard

BARRACUDA PANELMOUNT SOLAR/NVIS/MIL™ 15.0



Rear view showing GORE® vent and sealed circular military connectors

GD GENERAL DIGITAL
An SBA Small Business Concern

60 Prestige Park Road

East Hartford, Connecticut 06108

Phone 860.282.2900 | Toll-Free 800.952.2535

E-mail gdc_info@generaldigital.com



DISCLAIMER

Information contained in this document is proprietary to General Digital Corporation and is current as of publication date. This document may not be modified in any way without the express written consent of General Digital. Product processing does not necessarily include testing of all parameters. General Digital reserves the right to change the configuration and performance of the product and to discontinue product at any time. **The appearance of U.S. Department of Defense (DoD) visual information does not imply or constitute DoD endorsement.**

© 2020 General Digital Corporation. All rights reserved.
All product names are trademarks of their respective companies.

999-959-008r2