

# 90-4065-002

# DUAL MODE DHA 6.5

Enhanced Sunlight Readable 6.5" Display Head Assembly™ with Night Vision Capability



General Digital has designed the NEC NL10276BC13-01C 6.5" XGA display for integration of a MIL-STD-3009 Class B Type II NVIS Switchable Backlight. It is ideal for use with night vision goggles.

General Digital procures and assembles every component in this LCD for unmatched configuration control in the LCD panel industry. With sunlight readable brightness, long life cycle and high performance, this panel has been customized specifically for use in Military and Government applications.

Please consult a Sales Engineer for additional information at 800.952.2535.

Display Head Assembly Solar/NVIS 6.5  
shown with optional touch screen

## STANDARD FEATURES

- » 6.5", 1024 x 768 resolution
- » 7:1 sunlight readable contrast
- » Backlight draws less than 3 Watts
- » High brightness LED backlight produces 1000+ nits
- » Switchable between Day/Night and NVIS modes
- » Fully Dimmable (~1000:1)
- » LVDS (Low Voltage Data Signal)
- » Selectable 8-bit or 6-bit digital signals of RGB

## AVAILABLE OPTIONS

- » Custom bezels and enclosures
- » HDMI video controller board
- » Optical bonding (display enhancement)
- » Antireflective or antiglare protective glass overlay
- » Various overlays: EMI, heaters, vandal shields, more
- » Touch screens: capacitive, resistive, circular polarized, more

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## DISPLAY<sup>1, 2</sup>

Size (Diagonal)	Viewing Area (W x H)	Module Dimensions (W x H x D)	Resolution (Pixels)	Number of Colors	Response Time (Rise/Decay)	Viewing Angle (Horizontal - L/R)	Viewing Angle (Vertical - U/D)
					Ton + Toff (10–90%)	(At the contrast ratio > 10:1)	
6.5"	5.20" x 3.90"	6.02" x 4.65" x 0.35"	1024 x 768	16.7 Million	25 ms (Typical)	±80°	+80°/-60°

Luminance (dark room) @ Contrast (dark room) @ Power	LED Backlight (General Digital manufactured)	Drive System	Pixel Arrangement	Dot Pitch (H x V)	Color Gamut (against NTSC color space)
3240 cd/m <sup>2</sup> @ 373:1 @ 10.35 W <sup>3</sup> 1130 cd/m <sup>2</sup> @ 357:1 @ 2.58 W 1070 cd/m <sup>2</sup> @ 364:1 @ 2.42 W <sup>4</sup> 768 cd/m <sup>2</sup> @ 365:1 @ 1.60 W <sup>5</sup>	Sunlight Readable NVIS Compatible Dual Mode High Efficiency	A-Si TFT Active Matrix	RGB Vertical Stripe	0.043 x 0.129 mm	36% Typical (at LCD panel center)

Polarizer Surface	Polarizer Pencil-Hardness	Signal System [8-bit digital signals for data of RGB Colors, Dot Clock (CLK), Data Enable (DE)]	Power Supply Voltage	Temperature, Operating	Temperature, Storage	Weight
Clear + Antireflection	2H (minimum)	LVDS 1 Port	LCD panel signal processing board: 3.3 V	-20°–70°C	-30°–80°C	170 g

- The specifications provided for the NEC NL10276BC13-01C are based on their data sheet.
- Available with optional NVIS capability.
- Rail temperature of 50°C.
- For customer comparison: At OEM power consumption, the modified display achieves greater brightness than the unmodified OEM display.
- For customer comparison: At OEM brightness, the modified display consumes less power than the unmodified OEM display.

## CONTRAST (PER MIL-L-85762-A)<sup>6</sup>

Luminance (dark room) @ Contrast (dark room) @ Power
OEM Antireflective Overlay
3240 cd/m <sup>2</sup> @ 20.64:1 @ 10.35 W <sup>3</sup> 1130 cd/m <sup>2</sup> @ 8.19:1 @ 2.58 W 1070 cd/m <sup>2</sup> @ 7.93:1 @ 2.42 W <sup>4</sup> 768 cd/m <sup>2</sup> @ 5.05:1 @ 1.60 W <sup>5</sup>
LCD Heater & EMI Shield Overlays
1020 cd/m <sup>2</sup> @ 3.72:1 @ 6.31 W

<sup>6</sup> All data for 90-4056-002 was obtained while driven by a Kikisui PAD35-10L power Supply. Measurements were taken with a Minolta CS-100 photometer.

## NVIS nIRb COLOR

OEM Antireflective Overlay	LCD Heater & EMI Shield Overlays
U': 0.197 V': 0.506 Error Radius (max. passing = 0.04): 0.020	U': 0.198 V': 0.506 Error Radius (max. passing = 0.04): 0.020

## NVIS RADIANCE B (max. passing = 2.2 nW/cm<sup>2</sup>/sr)

OEM Antireflective Overlay	LCD Heater & EMI Shield Overlays
0.828 nW/cm <sup>2</sup> /sr (Compliant)	0.842 nW/cm <sup>2</sup> /sr (Compliant)



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