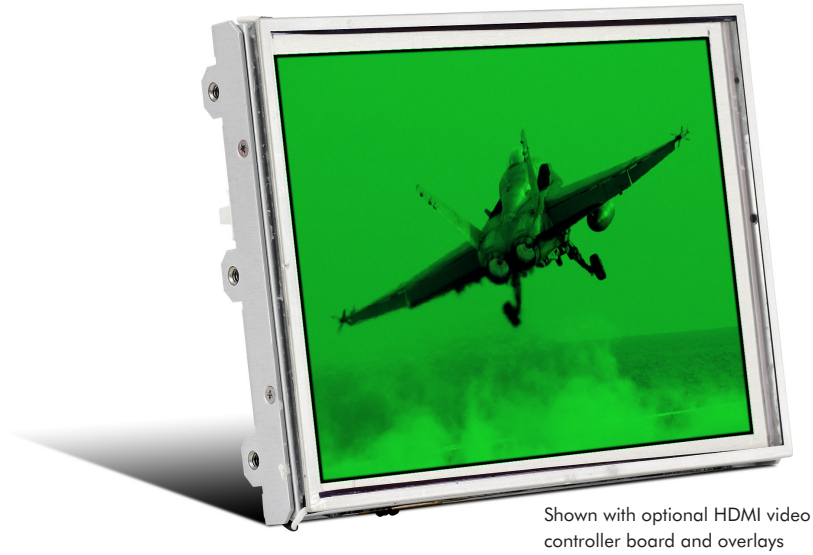
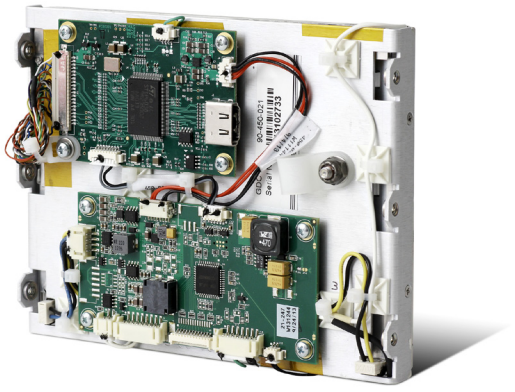
90-4065-002

Enhanced, NVIS-Compatible, Sunlight Readable, 6.5" Display Head Assembly





Shown with optional HDMI video controller board and overlays

General Digital has designed the NEC NL10276BC13-01C 6.5" XGA display for integration of a MIL-STD-3009 Class B Type II NVIS (NVG) Switchable Backlight. This NEC display has been customized specifically for use in Military and Government applications.

Please feel welcome to consult with a Sales Engineer for additional information at 516.330.5161.

FEATURES

> 6.5 inch, 1024 X 768 resolution
> 7:1 Sunlight Readable Contrast
> Backlight Draws Less Than 3 Watts
> Sunlight Readable 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
> Viewing Angle: R/L 80°/80°, U/D 80°/60°
> Operating Temperature: -20° C~70° C
> Storage Temperature: -30° C~80° C

OPTIONS

> Custom Bezels, 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)

GENERAL SPECIFICATIONS[1, 2]

Backlight	Sunlight Readable, NVIS Compatible, Dual Mode, High Efficiency LED Backlight (General Digital manufactured)
Luminance (dark room) **@ Contrast** (dark room) **@ Power**	3240 cd/m² @ 373:1 @ 10.35 W[3] 1130 cd/m² @ 357:1 @ 2.58 W 1070 cd/m² @ 364:1 @ 2.42 W[4] 768 cd/m² @ 365:1 @ 1.60 W[5]
NVIS-B Radiance	Compliant (see NVIS data below)
NVIS White	Compliant (see NVIS data below)
Module Size (mm)	153.0 (W) x 118.0 (H) x 9.0 (D)
Display Area (mm)	132.096 (H) x 99.072 (V)
Display Size (diagonal)	6.5 inches
Drive System	A-Si TFT Active Matrix
Display Color	16.7 Million Colors
Pixels	1024 (H) x 768 (V)
Pixel Arrangement	RGB Vertical Stripe
Dot Pitch (mm)	0.043 (H) x 0.129 (V)
Viewing Angle	Horizontal: ±80°; Vertical: +80°, –60° (at the contrast ratio > 10:1)
Polarizer Surface	Clear + Antireflection
Polarizer Pencil-Hardness	2H (minimum)
Color Gamut (against NTSC color space)	36% typical (at LCD panel center)
Response Time	*Ton* + *Toff* (10–90%); 25 ms (typical)
Signal System [8-bit Digital Signals for Data of RGB Colors, Dot Clock (CLK), Data Enable (DE)]	LVDS 1 Port
Power Supply Voltage	LCD Panel Signal Processing Board: 3.3 V
Storage Temperature	-30°–80° C
Operating Temperature	-20°–70° C
Weight	170 g

1 The specifications provided for the NEC NL10276BC13-01C are based on their data sheet.

2 Available with optional NVIS capability.

3 Rail temperature of 50° C.

4 For customer comparison: At OEM power consumption, the modified display achieves greater brightness than the unmodified OEM display.

5 For customer comparison: At OEM brightness, the modified display consumes less power than the unmodified OEM display.

CONTRAST (Per MIL-L-85762-A)[6]	**OEM Antireflective Overlay**	**LCD Heater & EMI Shield Overlays**
Luminance (dark room) **@ Contrast** (sunlight conditions) **@ Power**	3240 cd/m² @ 20.64:1 @ 10.35 W[3] 1130 cd/m² @ 8.19:1 @ 2.58 W 1070 cd/m² @ 7.93:1 @ 2.42 W[4] 768 cd/m² @ 5.05:1 @ 1.60 W[5]	1020 cd/m² @ 3.72:1 @ 6.31 W

6 All the data for the 90-4065-002 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	0.198
V'	0.506	0.506
Error Radius (max. passing = 0.04)	0.020	0.020

NVIS RADIANCE B	**OEM Antireflective Overlay**	**LCD Heater & EMI Shield Overlays**
NVIS Radiance B (max. passing = 2.2 nW/cm²/sr)	**0.828** nW/cm²/sr (Compliant)	**0.842** nW/cm²/sr (Compliant)

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