



397 Route 281
Tully, New York 13159
Phone: 315 696-6676
Fax: 315 696 9923
Email: sales@acipower.com
www.acipower.com

ACD-2446

PRODUCT DATA SHEET

1/3/14

12.1" XGA LED BACKLIT TFT LCD DISPLAY

Sunlight Readability/1000:1 Dimming/Cool Operation

GENERAL DESCRIPTION

The ACD-2446 consists of the NEC NL10276BC24-13 12.1" XGA TFT LCD Display modified with a high-performance LED backlight.

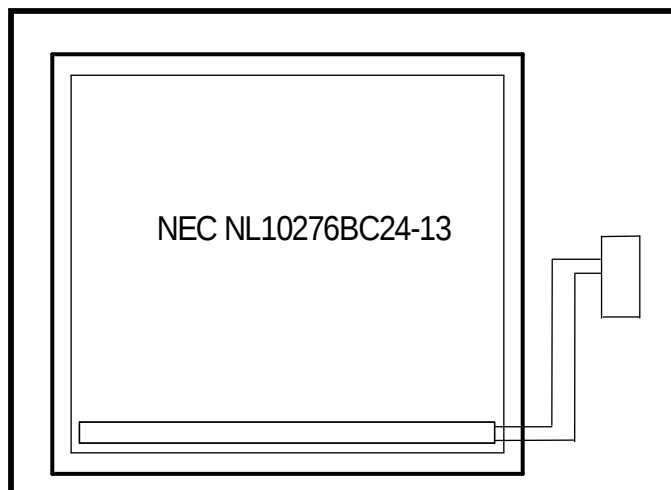
Customer Consigned Panel

Performance at given brightness level

1000 cd/m² with 6.4 Watts LED Power

Display outline identical to standard CCFL equipped panel.

For many applications, satisfies sunlight readability goals.



LCD PANEL HIGHLIGHTS

12.1" TFT LCD Module

XGA 1024(H) x 768(V)

Active Area: 245.76mm(H) x 184.32mm(V)

16.7 colors (RGB 8-bits data driver)

LVDS Electrical Interface

Contrast Ratio 600:1 Typical

Display Mode Normally White

Surface Treatment: 3H Hardness

RoHS Compliant

For complete LCD specifications (standard panel), refer to NEC datasheet NL10276BC24-13

LED BACKLIGHT FEATURES

White LED edge-light Flex rail.

Single connector connection, allows easy interconnect with LED driver.

Projected lifetime > 75,000 hours

Active fault protection keeps remaining LEDs operating normally, if one should ever fail.

1000:1 or better dimming ratio, guaranteed.

1 For best power transfer and control, use ACI-1865 driver. Do not set the driver output current (Ifwd) higher than the value specified in the Maximum Ratings table of this document. Please contact the factory for more specific use LED driver solutions if required.

MAXIMUM RATINGS*

Symbol	Parameter	Value	Unit
Top	Operating Temperature of Display (Center of Display Surface)	-10 to +70	°C
Tled	Operating Temperature of LED Edge Light (Light Rail Contact)	-30 to +85	°C
Tstg	Display Storage Temperature	-20 to +80	°C
Ifwd	LED Forward Current	36.0	mADC

*Maximum Ratings are those values beyond which damage may occur.

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 30mA per bank, LED rail ACR-0534-2413, 4 banks per rail, 1 rail per display, Ta = +25Deg-C, LCD un-powered

Symbol	Parameter	Test Condition	Min	Typ	Max	Unit
Bp	Panel Brightness		900	1000	1100	cd/m ²
X	White X Coordinate			0.278		-
Y	White Y Coordinate			0.331		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 30mA per bank, 4 banks per rail, 1 rail per display, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Nom	Max	Unit
Vfwd	LED Rail Forward Voltage Drop		48	53	58	VDC

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

