



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

ACD-2320

PRODUCT DATA SHEET

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12.1" XGA LED BACKLIT TFT DISPLAY

Sunlight Readability/1000:1 dimming/Cool operation

GENERAL DESCRIPTION

The ACD-2320 consists of the Chi Mei G121X1-L03 XGA TFT display modified with a high performance LED backlight.

Customer Consigned Panel

Performance at given brightness levels

1000 cd/m² with 9.8 watts LED power

Display outline identical to standard LED equipped panel

For many applications, satisfies sunlight readability goals



LCD PANEL HIGHLIGHTS

12.1" TFT Active Matrix Color

245.76 (H) mm x 184.32 (V) mm viewable area

XGA 1024 x 768 pixels, 16.2M colors

700:1 typical contrast ratio

For complete LCD specification (standard panel), refer to Chi Mei G121X1-L03 data sheet.

LED BACKLIGHT FEATURES

White LED edge-light rail

Two wire connection (Typically 11 inches long), allows simple interconnect with LED driver¹

Projected lifetime > 75,000 hours

1000:1 or better dimming ratio, guaranteed¹

¹ For best power transfer and control, use ACI-C170090-1979 LED 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 panel surface)	-30 to +80	Deg-C
Tled	Operating temperature of LED edge light (light rail contact)	-30 to +85	Deg-C
Tstg	Display storage temperature	-40 to +85	Deg-C
Ifwd	Maximum LED edge-light forward current (DC)	108	mA

*Maximum Ratings are those values beyond which damage to the driver may occur

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 90.0mA per bank, LED rail ACR-1101-2323, 1 bank per rail, 1 rail per display, Ta = +25Deg-C, LCD unpowered

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Bp	Panel Brightness		900	1000	1100	cd/m ²
X	White X coordinate			0.285		-
Y	White Y coordinate			0.336		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 90.0mA per bank, 1 bank per rail, 1 rail per display, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vfwd	LED rail forward voltage drop		99	110	121	Vdc

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

