

## Product Information

### 12.1-inch XGA Color TFT-LCD Module



AA121XL01

10% smaller in size with super high brightness

## Summary

Product name	Part Number	Luminance (cd/m <sup>2</sup> )	Price of sample (Tax not included)	Shipment date	Production per month
12.1-inch XGA Color TFT-LCD Module	AA121XL01	1,000	50,000JPY	February1, 2010	5,000units

In recent years, TFT-LCD modules have been widely used in a variety of applications and environments. Store or warehouse inventory management and factory processing management often relies on POS systems with information display monitors as well as portable data terminals, which interpret digital pen movements. These applications in particular need TFT-LCD modules that are compact and maintain high brightness to ensure high optical performance.

## Features

### 10% smaller size and 20% less thickness helps reduce size and weight of portable data terminals and other display monitors for POS systems

Without changing the 12.1-inch size of the active area, Mitsubishi Electric has reduced the module size from 280.0mm (W) x 210.0mm (H) x 12.0mm (D) to 260.5mm (W) x 203.0mm (H) x 9.7mm (D), which is approximately 10% smaller and 20% thinner compared to the AA121XK01, the previous model with a luminance of only 500 cd/m<sup>2</sup>. The weight has also been reduced by 20% from 750g to 610g.

### Market-leading super high brightness, long lifespan and inverter-less specification incorporating white LED backlight

By incorporating white LED backlights, the new 12.1-inch XGA TFT-LCD module has achieved a market-leading super high brightness of 1000 cd/m<sup>2</sup>, allowing excellent visibility in bright environments. The minimum backlight lifespan is 60,000 hours at room temperature (25 °C), making the product suitable for long-use applications. To the AA121XL01's inverter-less construction helps eliminate the need for portable data terminals and other POS system display monitors to incorporate high-voltage inverters for the TFT-LCD modules, thereby lowering product costs.

### Market-leading wide operating temperature range

Mitsubishi Electric's TFT-LCD modules have a market-leading operating temperature range of -30 to 80 degrees C, making the products suitable for applications that require use in harsh operating environments.

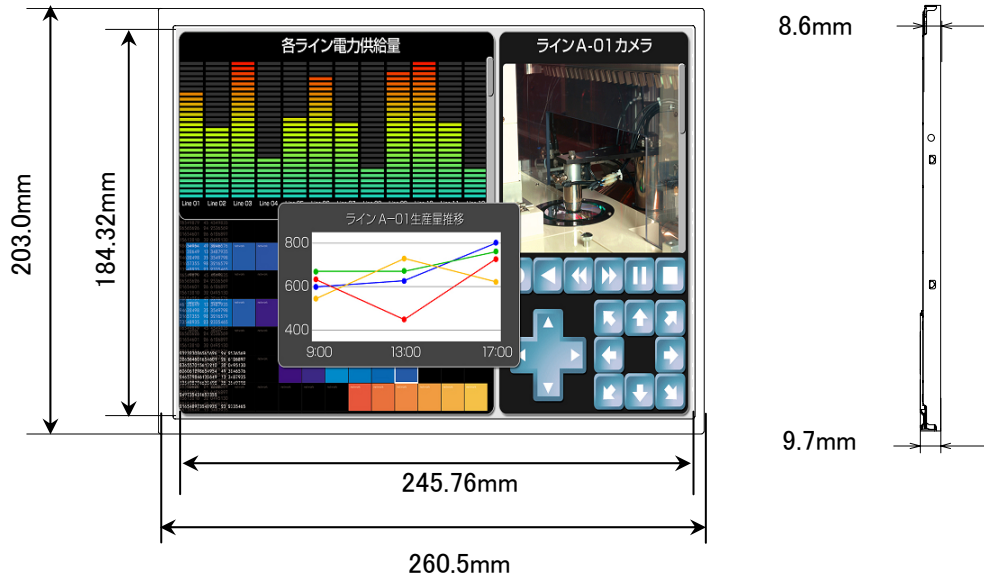
### Displaying vivid and clear images

Mitsubishi Electric's TFT-LCD modules incorporate the company's original color conversion technology, which helps show natural and realistic images by adjusting lost colors arising from LCD characteristics, providing clear and vivid color display.

### Environmental consideration

All Mitsubishi Electric TFT-LCD modules are compliant with the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS), and are mercury-free.

## Module Size



## Overview

Item	Specifications
Part Number	AA121XL01
Display size/ Resolution	12.1-inch XGA
Display Area (mm)	245.76 (H) × 184.32 (V)
Number of Dots	1024 (H) × 768 (V)
Pixel Pitch (mm)	0.240 (H) × 0.240 (V)
Contrast Ratio	600:1
Luminance (cd/m <sup>2</sup> )	1000
Viewing Angle (CR>10)(°)	-80 ~ +80 (H), -60 ~ +80 (V)
Optimum Viewing Angle (Contrast ratio)	6 o'clock
Number of color	262K (6bit/color) 16.77M (8bit/color)
Backlight Unit	LED
Electrical Interface	LVDS 6/8bit
Module Size (mm)	260.5 (W) × 203.0 (H) × 9.7 (D)
Operation Temperature (°C)	-30 ~ +80
Storage Temperature (°C)	-30 ~ +80

## Application

Portable data terminal

## Future development

Environment friendly, and advantageous performances of white LED backlight TFT-LCD module is expected to grow in demand. We plan to increase our white LED TFT-LCD module product offering including the wide format to meet further demand.

### MITSUBISHI ELECTRIC CORPORATION

2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN TEL+81-3-3218-3210 FAX +81-3-3218-4862  
<http://www.mitsubishichips.com/> E-Mail: Web.handotai@mf.MitsubishiElectric.co.jp