

## Product Information

### 14.1-inch and 17.5-inch Color TFT-LCD Modules



AA141TC01 / AA175TD01

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New LED backlights deliver longer lifetime, enhanced efficiency

#### Summary

Product	Model	Luminance (cd/m <sup>2</sup> )	Shipment date	Production per month
14.1-inch Wide-XGA TFT-LCD Module	AA141TC01	800	July 1, 2010	2,000 units
17.5-inch Wide-XGA TFT-LCD Module	AA175TD01	800	June 1, 2010	1,000 units

TFT-LCD modules have recently come to be widely used in varied environments and touch screen applications such as ticket machines, photo printers and digital signage displays. In particular, demand has risen for wide displays that can show more information on one screen. There is also growing demand for products that use LEDs as backlights rather than CCFLs, which use mercury. LED backlights not only have a longer lifetime, but also eliminate the need for high-voltage inverters, which require safety and noise reduction measures.

Mitsubishi Electric was one of the first companies to incorporate LED backlights in its TFT-LCD modules. With the addition of the two new LED backlight models, Mitsubishi Electric's TFT-LCD module lineup now includes 18 different screen size and resolution types, 16 of which use LED backlights. Mitsubishi Electric aims to further expand its lineup of industrial-use TFT-LCD modules in the future.

## Features

- In addition to providing a longer lifetime, LED backlights make these TFT-LCD modules inverter free, unlike Mitsubishi Electric's previous models which used cold cathode fluorescent lamp (CCFL) backlights. At a room temperature of 25 degrees Celsius, LED backlights have an operating life of at least 80,000 hours. The TFT-LCD modules also produce a brightness of 800cd/m<sup>2</sup>, making them suitable for outdoor use and in very bright environments.
- The AA175TD01 and the AA141TC01 both achieve a market-leading wide operating temperature range of -20 degrees to 70 degrees Celsius, making them suitable for use in severe climatic environments. In addition, the package size, mounting position, signal interface connectors and pin alignments are consistent with the company's previous models, for easier replacement.
- The two TFT-LCD modules are also fully compliant with the European Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (RoHS) directive, and are completely mercury-free.

## Overview

Item	Specifications	
	AA141TC01	AA175TD01
Model Name	AA141TC01	AA175TD01
Display Size	14.1-inch	17.5-inch
Display Area (mm)	303.36 (H) × 189.6 (V)	380.2 (H) × 228.1 (V)
Number of Dots	1280 (H) × 800 (V)	1280 (H) × 768 (V)
Pixel Pitch (mm)	0.237 (H) × 0.237 (V)	0.297 (H) × 0.297 (V)
Contrast Ratio	700:1	700:1
Luminance (cd/m <sup>2</sup> )	800	800
Viewing Angle (CR>10)(°)	-80 ~ +80 (H) -60 ~ +80 (V)	-80 ~ +80 (H) -60 ~ +80 (V)
Optimum Viewing Angle (Contrast Ratio)	6 o'clock	6 o'clock
Number of Colors	262K (6 bit/color) 16.77M (8 bit/color)	262K (6 bit/color) 16.77M (8 bit/color)
Backlight Unit	LED	LED
Electrical Interface	LVDS 6/8 bit	LVDS 6/8 bit
Module Size (mm)	326.0 (W) × 216.5 (H) × 16.0 (D)	404.0 (W) × 258.0 (H) × 16.2 (D)
Operating Temperature (°C)	-20 ~ +70	-20 ~ +70
Storage Temperature (°C)	-20 ~ +80	-20 ~ +80

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