Color TFT-LCD Modules Serve Industrial and Outdoor Applications

Mitsubishi Electric announced the launch of its 7.0-inch WVGA and 10.6-inch WXGA color TFT-LCD modules featuring white light-emitting diodes (LED) and extended backlighting. These industrial-use modules, suitable for outdoor applications such as digital signage and marine electronics, offer super-high brightness and high contrast ratios, super-wide viewing angles and wide-ranging operational temperatures. Sales will begin on December 12 through Mitsubishi Electric offices globally (see www.MitsubishiElectric.com/bu/tft_lcd/network [1]). These industrial-use modules will be presented during the SPS/IPC/DRIVES 2011 in Nuremberg, Germany on November 22-24. Initial production has been set at 2,000 units per month for each model.

Both models are expected to help meet the increasing demand for TFT-LCD modules offering high brightness, wide-ranging operational temperatures and wide-angle viewing for varied outdoor applications. Features of the new 7.0-inch WVGA and 10.6-inch WXGA TFT-LCD models are as follows:
- A brightness of 1,000cd/m2 and a contrast ratio of 1,000:1 for easy viewing even in bright outdoor environments.
- Super-wide 170-degree horizontal and vertical viewing angles for highly functional visibility and extra flexibility for off-center installations.
- Wide-ranging operational temperatures from -30 degrees C to 80 degrees C, allowing the modules to be exposed to severe climatic environments in outdoor applications.
- At 25 degrees C, the white LED backlight unit has a typical long life of 100,000 hours.
- A high-voltage inverter is not required.
- A circuit board-embedded LED driver achieves a compact, low-cost design.

The TFT-LCD module is fully compliant with the European restriction on the use of certain hazardous substances in electrical and electronic equipment (RoHS). It also is mercury-free.

For more information visit http://www.MitsubishiElectric.com [2]

Specifications

AA070MC01		AA106TA01
Display Size/Resolution	7.0-inch (800 × 480 dots)	10.6-inch (1280 × 768 dots)
Display Area (mm)	152.4(H) × 91.44(V)	231.36(H) × 138.816(V)
Number of Dots	800 (H) × 480 (V)	1280 (H) × 768 (V)
Pixel Pitch (mm)	0.1905 (H) × 0.1905 (V)	0.18075 (H) × 0.18075 (V)
Contrast Ratio	1,000 : 1	1,000 : 1
Luminance (cd/m.)	1,000	1,000
Viewing Angle (CR≥10)(°)	-85 ~ +85 (H) -85 ~ +85 (V)	-85 ~ +85 (H) -85 ~ +85 (V)
Colors	262K (6bit/color) 16.77M (8bit/color)	262K (6bit/color) 16.77M (8bit/color)
Backlight Unit	LED	LED
Electrical Interface	LVDS 6/8bit	LVDS 6/8bit
Size (mm)	169.8 (W) × 109.7 (H) × 8.9 (D)	250.0 (W) × 157.0 (H) × 8.9 (D)
Operational Temperatures (°C)	-30 ~ +80	-30 ~ +80
Storage Temperatures (°C)	-30 ~ +80	-30 ~ +80

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