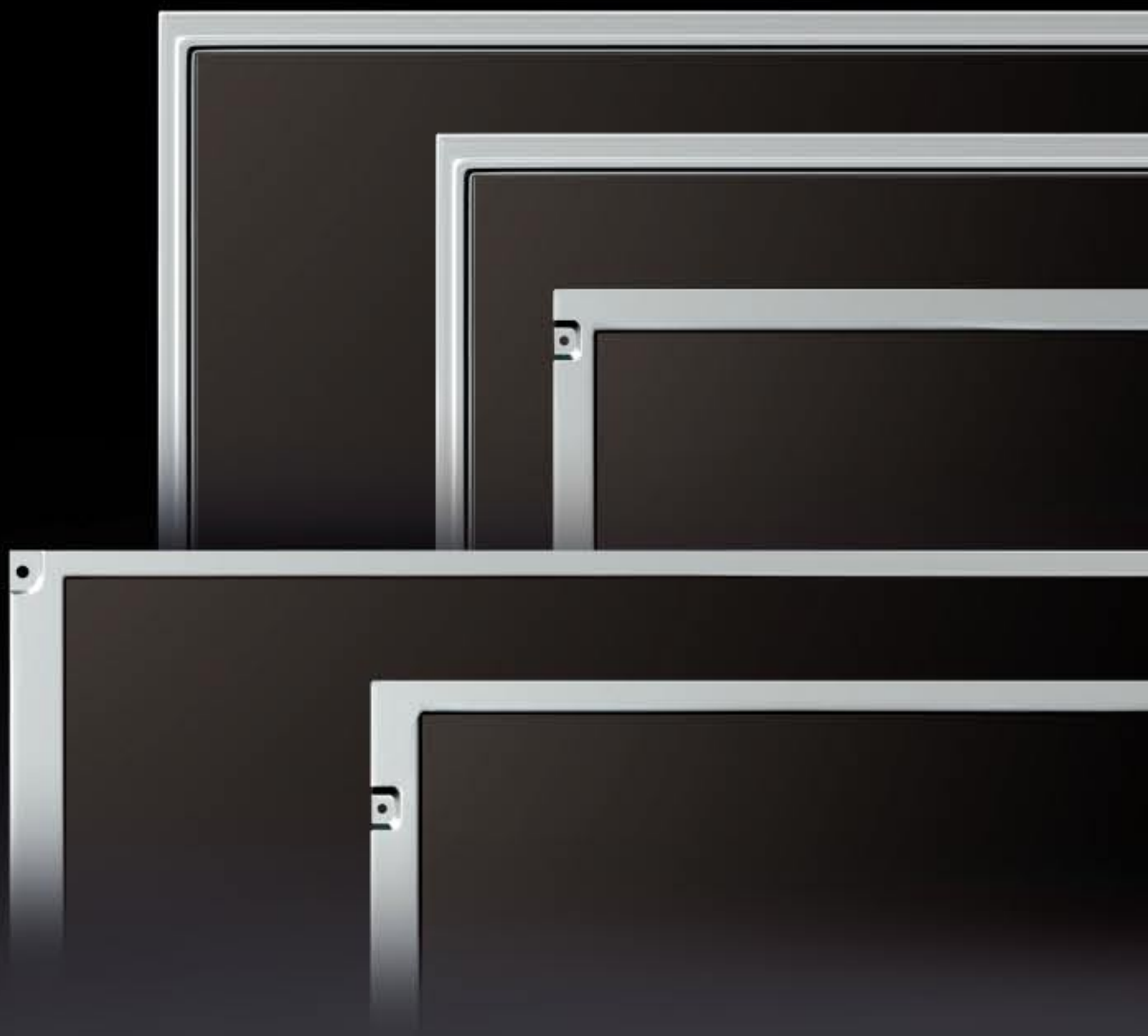




Changes for the Better

COLOR TFT-LCD MODULES
FOR INDUSTRIAL USE

The Next Step in the Evolution of Displays



for a greener tomorrow





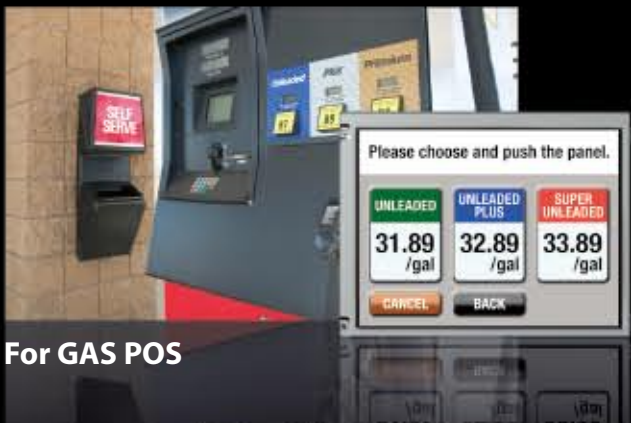
For In-Flight Monitor



For Bank ATM

True-to-life Color Reproduction & Variety of Sizes Highly Advanced TFT-LCD Modules by Mitsubishi Electric

Mitsubishi Electric color thin-film transistor liquid-crystal display (TFT-LCD) modules are produced utilizing advanced imaging and color reproduction technologies and come in a variety of sizes to match diversified needs. With applications including point of sale (POS) terminals, vending and ticketing machines, bank automatic teller machines (ATMs) and monitors in vehicles and boats, our TFT-LCD modules have become an essential part of society and people's lives today. Features include excellent visibility, stylish design, simplicity of use and customer-focused product development.



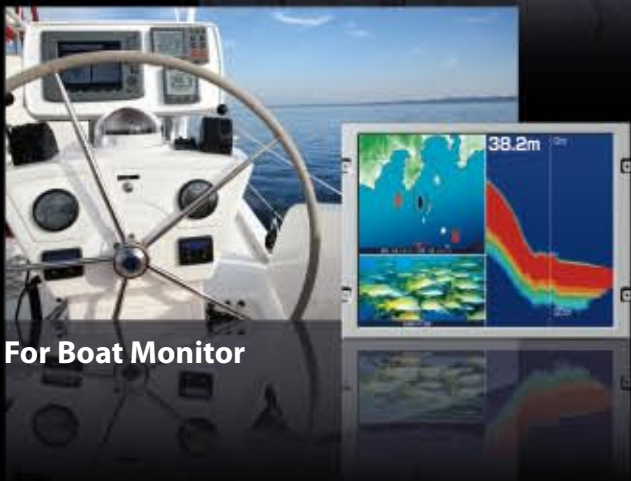
For GAS POS



For Camera Monitor



For Train Monitor



For Boat Monitor



For Drive-through

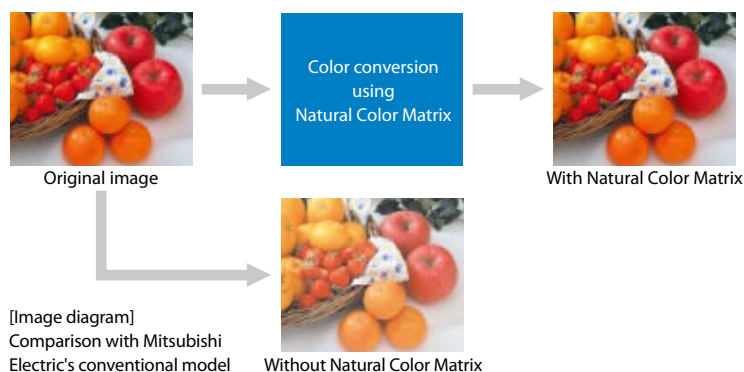
White LED Backlighting

White light-emitting diodes (LEDs), which consume less power and have superior electrical properties compared to their conventional cold cathode fluorescent lamp (CCFL) counterparts, are increasingly being used as LCD backlights. At Mitsubishi Electric, we were among the first to focus on white LEDs, and initiated their use in industrial-use LCDs. White LED backlights are available not only for standard products, but also for high-brightness products utilized outdoors.



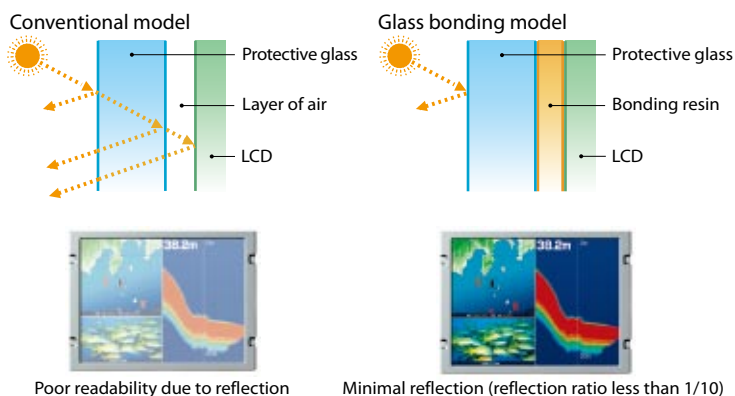
Natural Color Matrix

Today, industrial-use LCDs are incorporated into a range of different equipment where they display a wide variety of content. An increasing number of these applications require natural color reproduction. Mitsubishi Electric's unique Natural Color Matrix color conversion technology was introduced as a standard feature in the company's industrial-use LCDs beginning from the early stages of production providing stunningly vivid color reproduction.



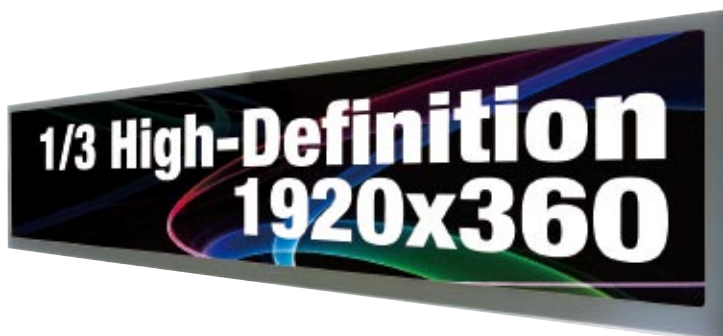
Glass Bonding Technology

Outdoor-use equipment incorporating LCDs often comes equipped with a glass panel to protect the LCD surface. However, the reflection of sunlight off the surface of the LCD can adversely affect visibility. As a solution, Mitsubishi Electric has introduced bonding of the LCD and protective glass with resin. This minimizes the reflection of sunlight and realizes superior visibility for products with protective glass.



Wide Product Line-up








A diverse line-up of TFT-LCD modules is available, including a full range of standard resolution displays. Examples of special industrial-use LCDs include a 9.0-inch quarter-high-definition (QHD) resolution monitor ideal for camera monitor applications and a wide 19.2-inch full high-definition monitor that is one-third the height of conventional displays.



LINEUP





A line-up rich in variety to match diversified customer requirements

Standard

	 5.7"	 6.5"	 8.4"	 10.4"	 12.1"	 15.0"	 17.0" / 19.0"
QVGA 320x240	AA057QD01						
VGA 640x480	AA057VF02 AA057VG02 CMOS-IF Compatible	AA065VD01 AA065VD03 CMOS-IF Compatible AA065VE01	AA084VE01 AA084VG01	AA104VH02 AA104VH12			
SVGA 800x600		LVDS-IF Compatible	AA084SB01 AA084SB11	AA104SH02 AA104SH12	AA121SM02		
XGA 1024x768			AA084XB01 AA084XB11 LVDS-IF Compatible	AA104XD02 AA104XD12	AA121XK01 AA121XL01	AA150XS02* AA150XS11* AA150XT01* AA150XT11*	
SXGA 1280x1024	Mounting Compatible						AA170EB01 AA190EA01 2ch LVDS-IF Compatible

*The pin assignment is compatible, but the connector model name is different.

Wide










	 4.3"	 5.0"	 9.0"	 12.1"	 14.1"	 17.5"
Wide-VGA 800x480	AA043MA01 CMOS-IF	AA050ME01 AA050MG01 AA050MG02 CMOS-IF	AA090ME01 AA090MF01			
Wide-XGA 1280x768						AA175TD01*
Wide-XGA 1280x800			LVDS-IF Compatible	AA121TD01	AA141TC01	

*The pin assignment is compatible, but the connector model name is different.

Special










	 9.0"	 19.2"
QHD 960x540	AA090AA01	
1/3 HD 1920x360	LVDS-IF Compatible	AA192AA01*

*The pin assignment is compatible, but the connector model name is different.

 White LED Back Light	 LED Driver	 Natural Color Matrix
 Color Saturation 72%	 Low Reflection	 Transflective
 Super High Brightness	 Super Wide Viewing Angle	 Feed Forward Driving (Motion Improvement Technology)

Other available features are glass bonding type and touch panel type. Please contact our sales office.

Specification

Screen Size (inch)	Resolution (pixel)	Model Name	Features*									Electric Interface	Brightness (cd/m ²)	Contrast Ratio	Viewing Angle (°) <U/D><L/R>	Number of Colors	Outline Dimensions (mm) <W><H><D>
			White LED Back Light 	LED Driver 	Natural Color Matrix 	Color Saturation 72% 	Low Reflection 	Transflective 	Super High Brightness 	Super Wide Viewing Angle 	Feed Forward Driving (Motion Improvement Technology) 						
4.3	Wide-VGA (800x480)	AA043MA01	✓		✓						CMOS	200	400:1	45/65, 65/65	262K/16.7M	103.0x67.5x5.3	
5.0	Wide-VGA (800x480)	AA050ME01	✓								CMOS	420	450:1	65/45, 65/65	16.7M	118.5x77.8x3.5	
		AA050MG01	✓						✓		CMOS	800	900:1	85/85, 85/85	16.7M	118.5x84.7x3.9	
		AA050MG02	✓				✓		✓		CMOS	800	900:1	85/85, 85/85	16.7M	118.5x84.7x3.9	
5.7	QVGA (320x240)	AA057QD01	✓	✓							CMOS	450	800:1	80/60, 80/80	262K	144.0x104.6x8.8	
	VGA (640x480)	AA057VF02	✓	✓	✓						CMOS	400	600:1	80/60, 80/80	262K	135.0x104.6x8.85	
		AA057VG02	✓	✓	✓			✓			CMOS	300	185:1	50/65, 80/80	262K	135.0x104.6x8.85	
6.5	VGA (640x480)	AA065VD01	✓		✓						CMOS	700	600:1	80/60, 80/80	262K	154.0x121.0x11.0	
		AA065VD03	✓		✓		✓				CMOS	700	600:1	80/60, 80/80	262K	154.0x121.0x11.0	
		AA065VE01	✓		✓						LVDS	700	600:1	80/60, 80/80	262K/16.7M	154.0x121.0x11.0	
8.4	VGA (640x480)	AA084VE01			✓			✓			CMOS	200	200:1	50/70, 80/80	262K	199.5x149.0x11.5	
		AA084VG01	✓		✓						CMOS	800	600:1	80/60, 80/80	262K	199.5x149.0x11.5	
	SVGA (800x600)	AA084SB01	✓		✓						LVDS	600	600:1	80/60, 80/80	262K/16.7M	199.5x149.0x11.5	
		AA084SB11	✓		✓				✓		LVDS	1200	600:1	80/60, 80/80	262K/16.7M	199.5x149.0x11.5	
	XGA (1024x768)	AA084XB01	✓		✓						LVDS	500	600:1	80/60, 80/80	262K/16.7M	199.5x149.0x11.5	
		AA084XB11	✓		✓				✓		LVDS	1000	600:1	80/60, 80/80	262K/16.7M	199.5x149.0x11.5	
9.0	Wide-VGA (800x480)	AA090ME01	✓		✓	✓				✓	LVDS	400	900:1	85/85, 85/85	262K/16.7M	219.0x136.2x9.5	
		AA090MF01	✓		✓						LVDS	800	800:1	80/60, 80/80	262K/16.7M	219.0x136.2x9.5	
	QHD (960x540)	AA090AA01	✓	✓		✓				✓	✓	LVDS	400	1000:1	85/85, 85/85	262K/16.7M	217.0x130.0x9.5
10.4	VGA (640x480)	AA104VH02	✓		✓						CMOS	800	700:1	65/65, 70/70	262K	230.0x180.2x10.5	
		AA104VH12	✓		✓				✓		CMOS	1500	700:1	65/65, 70/70	262K	230.0x180.2x10.5	
	SVGA (800x600)	AA104SH02	✓		✓						LVDS	700	700:1	80/60, 80/80	262K/16.7M	230.0x180.2x10.5	
		AA104SH12	✓		✓				✓		LVDS	1200	700:1	80/60, 80/80	262K/16.7M	230.0x180.2x10.5	
	XGA (1024x768)	AA104XD02	✓		✓						LVDS	600	700:1	65/65, 80/80	262K/16.7M	230.0x180.2x10.5	
		AA104XD12	✓		✓				✓		LVDS	1000	700:1	65/65, 80/80	262K/16.7M	230.0x180.2x10.5	
12.1	SVGA (800x600)	AA121SM02	✓		✓						LVDS	550	600:1	80/60, 80/80	262K/16.7M	280.0x210.0x12.0	
	XGA (1024x768)	AA121XK01	✓		✓						LVDS	500	600:1	60/80, 80/80	262K/16.7M	280.0x210.0x12.0	
		AA121XL01	✓		✓				✓		LVDS	1000	600:1	60/80, 80/80	262K/16.7M	260.5x203.0x9.7	
	Wide-XGA (1280x800)	AA121TD01	✓	✓	✓						LVDS	700	700:1	80/60, 80/80	262K/16.7M	283.0x185.1x9.7	
14.1	Wide-XGA (1280x800)	AA141TC01	✓		✓						LVDS	800	700:1	80/60, 80/80	262K/16.7M	326.0x216.5x16.0	
15.0	XGA (1024x768)	AA150XS02	✓			✓	✓			✓	LVDS	350	1000:1	85/85, 85/85	262K/16.7M	326.0x255.0x16.6	
		AA150XS11	✓		✓	✓			✓	✓	LVDS	1100	1000:1	85/85, 85/85	262K/16.7M	326.0x255.0x16.6	
		AA150XT01	✓		✓						LVDS	800	800:1	60/80, 80/80	262K/16.7M	326.0x255.0x16.6	
		AA150XT11	✓		✓				✓		LVDS	1500	800:1	60/80, 80/80	262K/16.7M	326.0x255.0x16.6	
17.0	SXGA (1280x1024)	AA170EB01			✓	✓					LVDS	550	800:1	80/60, 80/80	262K/16.7M	358.5x296.5x16.9	
17.5	Wide-XGA (1280x768)	AA175TD01	✓		✓						LVDS	700	700:1	80/60, 80/80	262K/16.7M	404.0x258.0x16.2	
19.0	SXGA (1280x1024)	AA190EA01	✓		✓				✓		LVDS	1500	800:1	80/80, 80/80	262K/16.7M	404.2x330.0x14.9	
19.2	1/3 HD (1920x360)	AA192AA01	✓	✓	✓						LVDS	500	700:1	80/60, 80/80	262K/16.7M	496.0x109.2x13.9	

* Other available features are grass bonding type and touch panel type. Please contact our sales office.

COLOR TFT-LCD MODULES FOR INDUSTRIAL USE

Please see here in detail.

<http://www.MitsubishiElectric.com>

Keep safety first in your circuit designs!

●Mitsubishi Electric Corporation puts the maximum effort into making LCD products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with LCD may lead to personal injury, fire or property damage. Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of non-flammable material and (iii) prevention against any malfunction or mishap.

Notes regarding these materials

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