

**MITSUBISHI ELECTRIC CORPORATION  
PUBLIC RELATIONS DIVISION**

7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, 100-8310 Japan

**FOR IMMEDIATE RELEASE**

**No. 3084**

*Customer Inquiries*

*Media Inquiries*

LCD Marketing Dept.  
Mitsubishi Electric Corporation

Public Relations Division  
Mitsubishi Electric Corporation  
[prd.gnews@nk.MitsubishiElectric.co.jp](mailto:prd.gnews@nk.MitsubishiElectric.co.jp)

[www.MitsubishiElectric.com/semiconductors/](http://www.MitsubishiElectric.com/semiconductors/)

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**Mitsubishi Electric to Expand Lineup of Tough Series TFT-LCD Modules**

*High vibration resistance, wide operating temperature range and super-wide viewing angles*

**TOKYO, February 22, 2017** – [Mitsubishi Electric Corporation](http://www.mitsubishielectric.com) (TOKYO: 6503) announced today the coming launch of a new Tough Series TFT-LCD modules—a WVGA model for wide-ranging applications in construction, agricultural vehicles, factories and more. The module comes in 7.0-inch and 8.0-inch versions and features vibration resistance up to 6.8Gs—seven times that of conventional modules—an operating temperature range of -40 to 85 degrees Celsius and an unprecedented combination of super-wide 170-degree horizontal and vertical viewing angles. Sample sales will begin March 31 through Mitsubishi Electric offices worldwide.



Mitsubishi Electric Color Tough Series TFT-LCD module  
AT070MP11

The new module is expected to meet increasing market demands for TFT-LCDs that offer rugged resilience to extreme temperatures and strong vibrations.

## **Product Features**

### **1) High vibration resistance for construction and agricultural applications**

- High vibration resistance of 6.8Gs, seven times that (1.0G) of conventional products, is suitable for equipment subject to strong shocks, such as construction, agricultural vehicles and factory-automation machines

### **2) Durability for extreme outdoor environments**

- Market-leading operating temperature range of -40 to 85 degrees Celsius, compared to -30 to 80 degrees Celsius for conventional products, suitable for outdoors and in vehicles used in extreme environments

### **3) Super-wide viewing angles, high brightness and contrast ratio**

- Super-wide viewing angles of 170 degrees, both horizontally and vertically, ensure excellent visibility for off-center installations
- High brightness of 1,100/1,000cd/m<sup>2</sup>\* and high contrast ratio of 1000:1 for easy visibility in bright environments

\* AT070MP11: 1,100cd/m<sup>2</sup>, AT080MD11: 1,000cd/m<sup>2</sup>

## **Sale Schedule**

Product	Model	Display Size	Resolution	Brightness (cd/m <sup>2</sup> )	Shipment
Tough Series TFT-LCD Module	AT070MP11	7.0-inch	WVGA	1,100	March 31, 2017
	AT080MD11	8.0-inch		1,000	April 30, 2017

## **Specifications**

	AT070MP11	AT080MD11
Display size (resolution)	7.0-inch WVGA	8.0-inch WVGA
Display area (mm)	152.4 (H) × 91.44 (V)	174.0 (H) × 104.4 (V)
Dots	800 (H) × 480 (V)	
Pixel pitch (mm)	0.1905 (H) × 0.1905 (V)	0.2175 (H) × 0.2175 (V)
Contrast ratio	1000:1	
Luminance (cd/m <sup>2</sup> )	1,100	1,000
View angles (°) (U/D), (L/R)	85/85, 85/85	
Colors	262k (6-bit/color) / 16.77M (8-bit/color)	
Color gamut (NTSC; %)	50	
Backlight unit	LED	
Backlight life time (Typ.)(hr)	100,000	
Electrical interface	LVDS 6/8bit	
Dimensions (mm)	169.8 (W) × 109.7 (H) × 8.9 (D)	192.0 (W) × 122.0 (H) × 11.2 (D)
Operating temperatures (°C)	-40 – +85	
Storage temperatures (°C)	-40 – +85	
Vibration (non-operation)(G(acceleration))	6.8	

### **Tough Series Lineup**

Display	Resolution	View angles (°) (U/D), (L/R)	Model
7.0-inch	WVGA	60/80, 80/80	AT070MJ11
<b><u>7.0-inch</u></b>	<b><u>WVGA</u></b>	<b><u>85/85, 85/85</u></b>	<b><u>AT070MP11</u></b>
<b><u>8.0-inch</u></b>	<b><u>WVGA</u></b>	<b><u>85/85, 85/85</u></b>	<b><u>AT080MD11</u></b>
10.4-inch	XGA	80/80, 80/80	AT104XH11
10.4-inch	SVGA	80/80, 80/80	AT104SN11

### **Environmental Awareness**

The model is mercury-free and fully compliant with the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) directive 2011/65/EU.

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### **About Mitsubishi Electric Corporation**

With over 90 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 4,394.3 billion yen (US\$ 38.8 billion\*) in the fiscal year ended March 31, 2016. For more information visit:

<http://www.MitsubishiElectric.com>

\*At an exchange rate of 113 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2016