

MSPG-5800

LVDS & V-by-One Video Signal Generator



Front View



Rear View

Product Summary

The MSPG-5800 is a high-performance panel signal generator designed for the development, production, and quality verification of LCD, OLED, and industrial display panels. Supporting the latest display interfaces, it enables accurate performance evaluation of a wide range of panels, serving as a professional test instrument used across R&D, production lines, and quality control (QC).

The MSPG-5800 supports a maximum dot frequency of 1.2GHz and, through its V-by-One HS (Vx1) 16-lane high-speed interface, reliably outputs ultra-high-resolution UHD (3840x2160) video signals at 60Hz and 120Hz. This allows precise verification of the performance and reliability of the latest UHD display panels, providing stable testing even in high-speed data transmission environments.

It also supports the LVDS (Low Voltage Differential Signaling) interface, enabling screen inspection of HD and Full HD panels, with support for up to Full HD (1920x1080) at 120Hz. With both V-by-One HS and LVDS interfaces available in a single unit, it can flexibly adapt to the development and production environments of various display panels.

The MSPG-5800 adopts a modular slot-type structure, allowing V-by-One HS slots and LVDS slots to be easily swapped depending on the intended use. This enhances the equipment's versatility and scalability, and is designed to efficiently adapt to evolving display interface environments.

Key Features

- Slot-type structure allows swapping between LVDS and V-by-One slots for inspection
- Easy operation via LCD touch panel
- IR remote control support
- Supports loading a variety of patterns and timings
- Displays X, Y coordinates of defective dots or lines using a USB mouse
- Easy program upgrade, option data copy, and backup via USB memory
- Supports Character, Color, and OSD patterns, with moving function in up, down, left, right, and diagonal directions
- Easy up/down adjustment of dot clock, H-frequency, and V-frequency for convenient output inspection
- Automatic brightness up/down adjustment function
- Safe mode boot: enables booting in safe mode in case normal mode boot fails
- Password function: prevents unauthorized changes to signal generator option settings configured by the main user (password changeable)

Specifications

Item	Specification	
Model	MSPG-5800	
Scan & Function Group	Scan Group Editing	Supports editing up to 99 groups (40 steps per group)
	Function Group Editing	Supports editing up to 99 groups (30 steps per group)
Data Storage	Supports up to 999 Patterns (User: 1-500, Default: 501-999)	
	Supports up to 999 Timings (User : 1~500, Default : 501~999)	
Touch Screen LCD	Resolution : 800 x 480	
	Supports numbers, uppercase/lowercase letters, and 24 special characters when editing namescidental operation	
	Supports numbers, uppercase/lowercase letters, and 24 special characters when editing names	
USB Input	• Easily copy and back up option data using USB memory • Directly output image files stored on a USB memory device without saving them to the equipment • Easy equipment upgrade via USB memory • GUI interface using a USB mouse and touch screen	
IR Remote Control	Allows calling and changing VDD On/Off, timing & pattern, function group, scan group, and more using a standard TV remote control	
Power	AC 100 ~ 240V, 50/60Hz	
Operating Temperature	0°C ~ 40°C	
Operating Humidity	Up to 80% RH (Non-Condensing)	
Dimensions (W×D×H)	330x320x140 (mm)	
Weight	5.6Kg	

※ Notes

Rev. 1 | 20260814

* Specifications and design are subject to change without prior notice.

Specifications

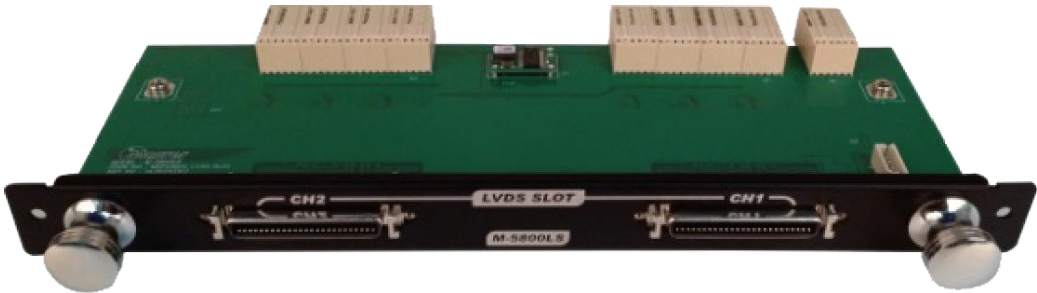
V-by-One(Vx1) Slot



Item	Specification
Resolution	Max 3840x2160@120Hz
Interface	Support V-by-One(Vx1) 16 Lane
Bit rate	Support 8bit/10bit
Pixel Data Mode	1, 2, 4, 5, 10 Division
Dot CLK	Adjustable from 50 to 85MHz in 0.01MHz increments
특징	FI_RE_51HL/41HL Type, 2-Channel Slot-Type Configuration

Specifications

LVDS Slot



Item	Specification
Resolution	Max 3840x2160@120Hz
Interface	LVDS Interface
Bit rate	Switchable between 6-bit / 8-bit / 10-bit
Mode	• Supports Single Mode (25MHz ~ 100MHz) • Supports Dual Mode (50MHz ~ 200MHz) • Supports Quad Mode (100MHz ~ 500MHz)
Remarks	• 3M (50-pin), 2-Channel Slot-Type Configuration • Switchable between VESA Format, JEIDA Format, and Non-JEIDA Format • User-selectable Even/Odd pin map order, allowing reversal as needed