

Display Wall Range



Synectics Display Wall Range, available in Micro, Pro and Ultra formats, enables the display of compatible IP video sources in a wide range of full and split screen configurations.

Controlled by Synergy 3 command and control platform, the Display Wall devices deliver excellent reproduction of independent live and recorded video streams from compatible third-party SD, HD and megapixel IP cameras, DVRs and encoders – including ONVIF and PSIA compliant devices, and Synectics' H.264 video encoders and HD IP camera range.

Synergy 3 can be configured for manual or automatic triggering of macros to control switching of layout and content, based on user-defined alarm conditions. This flexible display wall management solution gives operators instantaneous

access to relevant video and data for swift resolution of critical incidents

Synergy 3 makes use of optional secondary streams included with many network encoders, to ensure full frame rate, high-quality video is presented without perceived quality loss. This allows for a high camera count to be displayed irrespective of the SD, HD or 4K camera mix.

Devices to Suit Your Application

The Micro display wall is ideal for when basic display functionality must be delivered using a low profile form factor. This version is compact yet powerful enough to deliver up to 9¹ independent live and recorded streams via mini display port. An optional VESA² mount makes it well-suited to environments where space is a premium.

The Pro and Ultra display wall devices are designed for standard to large-scale control room deployments. These versions of the display wall can provide up to 32¹ live and recorded streams from compatible IP video sources. In addition to the wide range of layouts available by default (including full screen, 4x4, 2x2, 3x3) custom layouts can be created through the Synergy 3 software.

The Ultra display wall is designed to support next generation cameras with 4K resolution and 60fps streaming. With its ability to produce exceptionally detailed images, on large displays, the Ultra can be used for clear identification of on-screen images and text from a distance.

Synergy 3 Advanced Functionality⁴

With Synergy 3 the Pro and Ultra display walls offer advanced features, such as alarm and situational awareness data, in the display environment. In this advanced mode, the Ultra and Pro versions can display up to 32 independent live and recorded streams of video, alarms, web pages, system statistics, reports, charts

and RSS feeds. A live ticker tape can display useful information including user logins, alarms, tasks and live incidents, and a threat level bar displays the current system status.

In addition to advanced views, Synergy 3 allows the operation of multiple display walls from a single user interface.

¹ See Specification for stream display configurations.

² Unit can be mounted directly to the back of a monitor using VESA mount options of 75 mm (2.953") or 100 mm (3.937").

³ Secondary stream functionality must be supported by the camera.

⁴ Features noted in this section are Synergy 3 license dependent.



Micro Display Wall Features

- High performance yet compact video wall manager with energy-efficient, space-saving design
- Reliably decodes/displays up to 9¹ independent, live or recorded, streams
- Automatic frame rate reduction for simultaneous viewing of multiple camera shots
- Scalable with multiple units to display selected streams from any number of cameras

Pro Display Wall Features

- Reliably decodes/displays up to 32¹ independent, live or recorded, streams across single or dual monitors
- Available in rack or wall mount format or as a stand-alone unit
- Allows live video to be superimposed onto system maps for situational awareness
- Enables dynamic content changes based on manually or automatically triggered, user-defined alarm conditions
- Range of layouts available; full screen, 4x4, 2x2, 3x3 and customer defined layouts

Ultra Display Wall Features

- Reliably decodes/displays up to 32¹ independent, live or recorded, streams across single or dual monitors
- Allows live video to be superimposed onto system maps for situational awareness
- Enables dynamic content changes based on manually or automatically triggered, user-defined alarm conditions
- Range of layouts available; full screen, 4x4, 2x2, 3x3 and 5+1, and customer defined layouts
- Supports 60fps and 4K technologies
- Enables 2 x 2 cluster display with up to 16 video window support

Specifications

Note: Requires Firmware 1.6 or greater and Micro V2 unit required.

CLIENT	Number of Monitors Total	Maximum Video Windows	Maximum SD ⁵ Windows	Maximum HD ⁶ Windows	Maximum HD 60fps ⁷ Windows	Maximum 4K ⁸ Windows
Micro	1	9	9	6	0	0
Pro	1	16	16	16	0	0
	2	32	32 (4x4 + 4x4)	18 (3x3 + 3x3)	0	0
Ultra	1	16	16	16	9 (3x3)	1
	2	32	32 (4x4 + 4x4)	32 (4x4 + 4x4)	8 (2 x 2 + 2 x 2)	2 (1 + 1)

⁵ – 2.0mbps D1 25/30 FPS

⁶ – 6.0mbps 1080p 25/30 FPS

⁷ – 6.0mbps 1080p 60 FPS

⁸ – 12.0mbps 4k 25/30 FPS

IT ARCHITECTURE

CPU Intel i5 (Micro) / Intel i7 Kabylake (Pro / Ultra)

RAM 8GB DDR3 (Micro) / 16GB DDR4 Pro / Ultra

O/S Microsoft WES7 (Micro) / Microsoft IOT (Pro / Ultra)

OS Disk 256 GB MSATA

PORTS

Micro

Pro

Ultra

	Micro	Pro	Ultra
USB	Front Side – x2 USB3 Rear – x2 USB3	Front Side – x2 USB2 Rear – x4 USB3	Front Side – x2 USB2 Rear – x4 USB3
Ethernet	1 x 1000BT NIC	2 x 1000BT NICs Teamable	2 x 1000BT NICs Teamable
Display ⁹	1 x HDMI or Mini DP	2 – 1 x Displayport / HDMI and 1 x HDMI	4 x Mini DP / HDMI
Audio	Line-out / Display	Line-out / Display / Mic-in	Line-out / Display / Mic-in

POWER

Micro

Pro

Ultra

	Micro	Pro	Ultra
Hot Swap PSU	N/A	N/A	N/A
Power Consumption	Max 65w / Norm 40w	Max 110w / Norm 25w	Max 195w / Norm 30w
BTU's	138 per hour	240 per hour	340 per hour
Supply	100-240VAC 3.43A 50-60Hz	100-240 VAC 2-4A 50-60Hz	100-240VAC 3.5-7A 50-60Hz

GENERAL	Micro	Pro	Ultra
Size (H x W x D)	116.6 mm x 112 mm x 49 mm / 4.5" x 4.4" x 1.9"	90 mm x 250 mm x 200 mm / 3.5" x 10" x 7.8"	190 mm x 210 mm x 340 mm / 7.5" x 8.2" x 13.3"
Weight	0.5 kg / 1 lb	3 kg / 6 lb	5 kg / 10 lb
Operating Temperature	18°C-25°C / 64°F-77°F Recommended, Max 25°C / 77°F	18°C-35°C / 64°F-95°F Recommended, Max 45°C / 110°F	18°C-30°C / 64°F-86°F Recommended, Max 35°C / 95°F
Storage Temperature	-20°C-80°C -4°F-176°F	-20°C-80°C -4°F-176°F	-20°C-80°C -4°F-176°F
Humidity	5% to 90% Non-condensing, 40% Recommended	5% to 90% Non-condensing, 40% Recommended	5% to 90% Non-condensing, 40% Recommended
Certifications and Approvals	CISPR 24, EN 61000-3-2, EN55022, ICES-003, EN 61000-3-3, EN55024, CISPR 22, RoHS, UL 60950-1, IEC 60950-1, EN 60950-1, BSMI CNS 13438, FCC CFR47 Part 15 B, GOST-R, CSA C22.2 No. 60950-1, VCCI V-3, NOM-019-SCFI-1998	RoHS Compliant EMI / EMC Certification ¹⁰ TUV Certification ¹⁰ UL 60950-1:2007	RoHS Compliant EMI / EMC Certification ¹⁰ TUV Certification ¹⁰ UL 60950-1: 2007
Virus Protection Included	Yes	Yes	Yes
APPLIANCE FUNCTIONALITY	Micro	Pro	Ultra
Synectics Watchdog Compliant	Yes	Yes	Yes
Rack Kit	N/A	Yes	N/A
Wall Mount	N/A	Yes	N/A
VESA Mount	Yes	N/A	N/A

⁹ – Adapter may be required for monitor connection.

¹⁰ – Certification pending.