

SYNECTICS

# Synergy Display

## Optimised hardware for your critical control room operations

The Synergy Display range provides the reliability and optimal performance you need for your 24/7 security operations.



## Why Choose Synergy Display?

### Designed for Video

Extensively tested to ensure high reliability for your critical 24/7 control room operations.

### Flexible Format

The range can be configured for operator or display wall use, accommodating a wide range of video playback and data requirements within your control room.

### Responsive

Synergy layouts can be configured to respond to selected events in your system, ensuring that relevant video and data is front of the operators during critical incidents.

### Optimised

Synergy automatically selects a lower resolution secondary IP stream (where available) in high-quantity video window layouts to maximise performance without picture quality loss.

### Scalable

Hundreds of Synergy Display devices can be configured per system, and visualised layouts in Synergy make it simple for operators to make display changes across Synergy Display Walls.

### High Performance

Up to 32x HD or 13x 4K streams are supported per device, with dynamic selection of secondary streams (where available) to further enhance video playback performance.

### Data Insights

A range of key system data can be displayed alongside video to support your day-to-day monitoring – such as RSS feeds, incoming alarms, reports, charts, and web pages.

### Multi-Monitor

Up to four monitors can be supported when using the Synergy Display Max or Ultra, maximising the benefits of the customisable Synergy user interface.

## Key Features

- Up to 32 video windows across 2x monitors  
4x monitors supported overall for Synergy Display Max/Ultra
- Support for H.265 video streams, with 60FPS and 4K video streams supported on Max and Ultra hardware
- Flexible layouts per monitor – full screen, quad, 3x3, 4x4 and more are available
- Workstation-grade hardware designed for 24/7 usage
- An optimised Windows 11 LTSC OS ensures easy installation and minimised downtime

# Specifications

| HARDWARE TYPE         | Monitor Configuration <sup>*6</sup> | Maximum SD Windows <sup>*1</sup> | Maximum HD H.264 Windows <sup>*2</sup> | Maximum HD H.265 Windows <sup>*3</sup> | 4K H.264 <sup>*4</sup> | 4K H.265 <sup>*5</sup> |
|-----------------------|-------------------------------------|----------------------------------|--|--|------------------------|------------------------|
| Pro v4.2 (DIS-1042)   | 2 x 1080p<br>2 X 4K                 | 32                               | 18                                     | 18                                     | 2                      | 2                      |
| Max v4.2 (DIS-2042)   | 2 X 1080P<br>2 x 4K                 | 32                               | 32                                     | 32                                     | 4                      | 4                      |
| Ultra v4.2 (DIS-3042) | 2 x 1080p<br>2 x 4K                 | 32                               | 32                                     | 32                                     | 13                     | 13                     |

## IT ARCHITECTURE

|         |  |  |  |  |  |  |
|---------|--|--|--|--|--|--|
| CPU     | Intel Core Ultra 5 (Arrow Lake)                                |  |  |  |  |  |
| RAM     | 16GB DDR5 (2x 8GB)   |  |  |  |  |  |
| Host OS | Windows 11 IoT Enterprise LTSC 2024                            |  |  |  |  |  |
| OS Disk | 256GB M.2 NVMe SSD   |  |  |  |  |  |
| GPU     | Pro: Intel Graphics<br>Max/Ultra: Nvidia Professional Graphics |  |  |  |  |  |

| PORTS    | Pro v4.2  | Max v4.2   | Ultra v4.2   |
|----------|---|--|--|
| USB      | Front:<br>2x USB 3.2 Gen 2 (Type-A)<br>1x USB 3.2 Gen 2x2 (Type-C)<br>Rear:<br>3x USB 3.2 Gen 2 (Type-A)<br>1x USB 3.2 Gen 1 (Type-A) | Front:<br>1x USB 3.2 Gen 2 (Type-A)<br>2x USB 3.2 Gen 2x2 (Type-C)<br>Rear:<br>4x USB 3.2 Gen 2 (Type-A) | Front:<br>1x USB 3.2 Gen 2 (Type-A)<br>2x USB 3.2 Gen 2x2 (Type-C)<br>Rear:<br>4x USB 3.2 Gen 2 (Type-A) |
| Ethernet | Rear: 1Gbps Ethernet  | Rear: 1Gbps Ethernet   | Rear: 1Gbps Ethernet   |
| Display  | Rear:<br>1x DisplayPort 1.4<br>1x HDMI 2.1  | Rear: 4x Mini DisplayPort 1.4  | Rear: 4x Mini DisplayPort 1.4  |
| Audio    | Front: 3.5mm audio jack<br>Rear: Audio via video-out  | Front: 3.5mm audio jack<br>Rear: Audio via video-out   | Front: 3.5mm audio jack<br>Rear: Audio via video-out   |

| POWER             | Pro v4.2                            | Max v4.2                            | Ultra v4.2                          |
|-------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Hot Swap PSU      | No                                  | No                                  | No                                  |
| Power Consumption | Max 135W, Normal 35W                | Max 230W, Normal 60W                | Max 230W, Normal 150W               |
| BTU's             | Max 460 BTU/hr<br>Normal 120 BTU/hr | Max 785 BTU/hr<br>Normal 205 BTU/hr | Max 785 BTU/hr<br>Normal 510 BTU/hr |
| Supply            | External<br>100-240V~2.5A 50-60Hz   | External<br>100-240V~2.5A 50-60Hz   | External<br>100-240V~2.5A 50-60Hz   |

| GENERAL                      | Pro v4.2  | Max v4.2  | Ultra v4.2                                      |
|------------------------------|---|---|---|
| Size (H x W x D)             | 36.5mm (1.44") x 179mm (7.2")<br>x 182.9mm (7.2") | 202mm (7.95") x 87mm (3.43")<br>x 223mm (8.78") | 202mm (7.95") x 87mm (3.43")<br>x 223mm (8.78") |
| Weight                       | 3.9 kg / 8.59 lbs                                 | 3.6 kg / 7.94lbs                                | 3.6 kg / 7.94lbs                                |
| Operating Temperature        | 5°C (41°F) to 35°C (95°F)                         | 5°C (41°F) to 35°C (95°F)                       | 5°C (41°F) to 35°C (95°F)                       |
| Storage Temperature          | -40°C (40°F) to 60°C (140°F)                      | -10°C (14°F) to 60°C (140°F)                    | -10°C (14°F) to 60°C (140°F)                    |
| Humidity                     | 20-80% operating<br>10-90% storage                | 20-80% operating<br>10-90% storage              | 20-80% operating<br>10-90% storage              |
| Certifications and Approvals | CE, FCC, UKCA, NOM                                | CE, FCC, UKCA, NOM, KC                          | CE, FCC, UKCA, NOM, KC                          |
| Minimum Synergy Version      | 23.1.100  | 23.1.100  | 23.1.100  |

| APPLIANCE FUNCTIONALITY      | Pro v4.2             | Max v4.2 | Ultra v4.2 |
|------------------------------|----------------------|----------|------------|
| Synectics Watchdog Compliant | Yes                  | Yes      | Yes        |
| VESA Mount                   | Yes (mount included) | No       | No         |

| PART CODES | DESCRIPTION                |
|------------|----------------------------|
| DIS-1042   | Synergy Display Pro v4.2   |
| DIS-2042   | Synergy Display Max v4.2   |
| DIS-3042   | Synergy Display Ultra v4.2 |

| ACCESSORIES  | Synectics Part Number | Compatible With   |
|--|-----------------------|---|
| USB-A to Serial adapter<br>For usage with the Synectics EX250 Keyboard | 87-0999-0049          | All Synergy Display hardware  |
| DisplayPort to HDMI 2.0 adapter  | 87-0177-0000          | Micro v4, Micro v4.1, Pro v4, Pro v4.2                              |
| Mini DisplayPort to HDMI 2.0 adapter                                   | 00-2810-0003          | Ultra v3, Ultra v3.1, Ultra v4, Ultra Plus v1, Max v4.2, Ultra v4.2 |
| Mini DisplayPort to DisplayPort adapter                                | 00-2810-0004          | Ultra v3, Ultra v3.1, Ultra v4, Ultra Plus v1, Max v4.2, Ultra v4.2 |

\*1 Video Stream Source: SD H.264 up to 2Mbps

\*2 Video Stream Source: HD H.264, up to 6Mbps

\*3 Video Stream Source: HD H.265, up to 4Mbps

\*4 Video Stream Source: 4K H.264, up to 20Mbps

\*5 Video Stream Source: 4K H.265, up to 12Mbps

\*6 Up to 4 monitors are supported on Synergy Display Max/Ultra,, with 2 monitors capable of displaying video. Performance may vary when CAD maps are displayed.