

Clarity Matrix G3 LCD Video Wall System



#### Next-Generation Performance, Control and Value

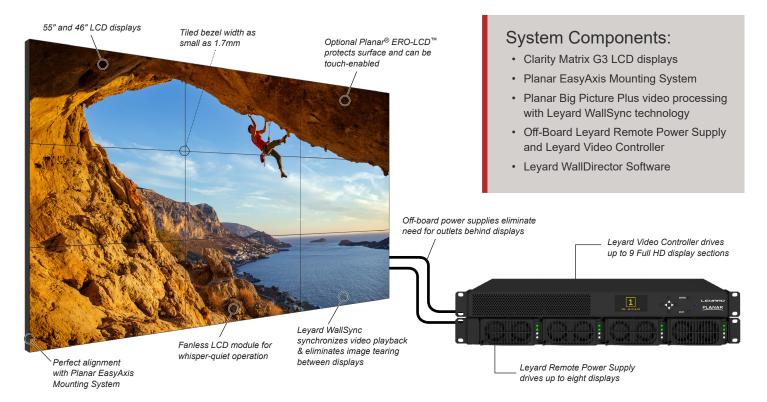
The Clarity<sup>®</sup> Matrix<sup>®</sup> G3 LCD Video Wall System is the ultimate LCD video wall solution for applications seeking the very best visual performance and mission-critical reliability.

Clarity Matrix G3 features a unique design that optimizes the extremely thin bezel LCD with 24x7 operation, minimal installation depth and simplified design, installation and service. With a tiled bezel as small as 1.7mm, Clarity Matrix G3 includes the integrated Planar<sup>®</sup> EasyAxis<sup>™</sup> Mounting System and an off-board electronics and power supply architecture, reducing total-cost-of-ownership while delivering the most reliable LCD video wall solution.

# Unique Architecture and Benefits by Design

Designed and developed by video wall industry experts, the third generation Clarity Matrix G3 LCD Video Wall System addresses the challenges faced by all video wall installations including: mounting and alignment, reliability and extended operation, service and maintenance access and simple, effective image processing and management.

At the heart of Clarity Matrix G3 is a distributed design that takes heat, complexity and potential points-of-failure off the LCD display and places it with a centrally located, easily accessible and highly reliable rack-mounted system.



# Simplified Design, Installation and Service

Designing, installing and servicing an LCD video wall has never been easier with Clarity Matrix G3. The architecture is focused on eliminating compatibility and integrity concerns, as well as eliminating costs associated with long distance cable extenders and AC power outlets behind the video wall. Fewer cables are necessary to run to the video wall, simplifying and reducing the cost of the system.



#### Architecture Advantages:

- Integrated video and power extension up to 200 feet (60 meters)
- Rack-mount components can be co-located with sources and processing equipment for easy serviceability and no disruption at the video wall
- · No third-party long-distance extenders or cables needed
- Entire video wall is controlled with a single remote control, RS-232 or LAN device, including third-party control system
- · Power and video looping between panels for minimizing long-distance cable runs
- · No AC outlets required behind the displays

# Perfect Alignment

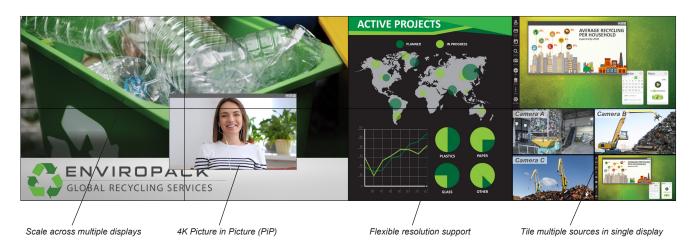
The Clarity Matrix G3 LCD Video Wall System includes the Planar EasyAxis Mounting System with built-in precision alignment capabilities, an in-wall service position and an industry-leading total installation depth as small as 3.6" (91mm). As a result, Clarity Matrix G3 has the thinnest footprint of any LCD video wall, making it compliant with the Americans with Disabilities Act (ADA) requirement for protruding objects of less than four inches. Planar EasyAxis adjustment cams facilitate precise 6-axis alignment ensuring uniform, minimized imageto-image gap.

### Advanced Video Wall Processing

Clarity Matrix G3 delivers extensive and flexible video wall processing options to display sources on the video wall. With Planar<sup>®</sup> Big Picture Plus<sup>™</sup> Video Wall Processing, Clarity Matrix G3 allows sources to be scaled across the entire video wall or any section of the video wall. To simplify Planar Big Picture Plus set-up, Clarity Matrix G3 has position sensors built into the LCD that determine its location within the array and scale the sources across the video wall, saving hours of set-up time.

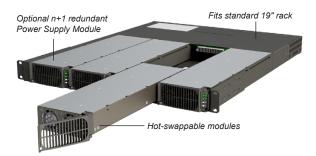
Planar Big Picture Plus Processing allows for ultra-high resolution content up to 4K to spread over multiple displays at native resolution. For more complex configurations, Clarity Matrix G3 supports all leading image processing and digital signage software solutions including the Clarity<sup>®</sup> VCS<sup>™</sup> Video Wall Processor.

Solving a range of video wall genlock and synchronization challenges, Clarity Matrix G3 includes Leyard<sup>®</sup> WallSync<sup>™</sup> genlock technology. Leyard WallSync uses Smart Genlock to automatically ensure perfectly synchronized video playback without manual configuration.



#### **Mission Critical Design**

The unique architecture of Clarity Matrix G3 provides a mission-critical design with hot-swappable redundant Remote Power Supply Modules, redundant AC input circuitry, reduced thermal stress and health and status monitoring capabilities. Clarity Matrix G3 adds n+1 hot swapping capabilities with the Leyard<sup>®</sup> Remote Power Supply so in the event of failure, the video wall remains operational without disruption.



For government and military customers delivering highly sensitive information, the Fiber Video Extension option provides a more secure and longer distance option for extending the video signal from Clarity Matrix G3 offboard electronics to Clarity Matrix G3 displays.



#### Leyard WallDirector Software

Clarity Matrix G3 introduces Leyard<sup>®</sup> WallDirector<sup>™</sup> Software— a new intuitive and powerful software tool to simplify installation, configuration and operation of your video wall.

The Leyard WallDirector Software allows users to:

- Set-up & configure a video wall
- Capture the health status of all video wall components in a centralized, convenient location
- · Recall windowing layouts via simple, one-button presets
- · Drag & drop sources on the video wall canvas
- · Easily manipulate the window size & position

| Model  | MX55X  | LX55X                | MX55U                                      | LX55U           | MX46X                                      | LX46X          | MX46U                                      | LX46U          |
|--|--|----------------------|--|-----------------|--|----------------|--|----------------|
| Diagonal   | 55in (1397mm)  |                      |  | 46in (1168.4mm) |  |                |  |                |
| Display Dimension<br>(including mount, W x H x D)                                    | 47.7 x 26.9 x 3.6in<br>(1211 x 683 x 91mm)                                 |                      | 47.8 x 26.9 x 3.6in<br>(1213 x 684 x 91mm) |                 | 40.3 x 22.7 x 3.6in<br>(1019 x 573 x 91mm) |                | 40.2 x 22.7 x 3.6in<br>(1022 x 577 x 91mm) |                |
| Display Weight (including mount)   | Lar  | ndscape: 51lb (23kg) | Portrait: 53lb (24kg)                      |                 | Landscape: 40lb (18kg)                     |                | Portrait: 42lb (19kg)                      |                |
| Brightness (cd/m <sup>2</sup> or nit)  | 800  | 500                  | 800  | 500             | 800  | 500            | 800  | 500            |
| Tiled Bezel Width  | 1.7mm (0.06in)   | 1.7mm (0.06in)       | 3.7mm (0.15in)                             | 3.7mm (0.15in)  | 1.7mm (0.06in)                             | 1.7mm (0.06in) | 3.7mm (0.15in)                             | 3.7mm (0.15in) |
| Power Consumption (typical / display)  | 220W   | 146W                 | 202W                                       | 145W            | 159W                                       | 114W           | 134W                                       | 106W           |
| Heat Load  | 940BTU/hr  | 700BTU/hr            | 888BTU/hr                                  | 700BTU/hr       | 734BTU/hr                                  | 580BTU/hr      | 648BTU/hr                                  | 563BTU/hr      |
| Mounted Depth (wall to display front)  | 3.6in (91mm)   |                      |  |                 |  |                |  |                |
| LCD Technology   | Commercial-grade direct view LCD   |                      |  |                 |  |                |  |                |
| Display Resolution   | 1920 x 1080  |                      |  |                 |  |                |  |                |
| Contrast Ratio   | 4000:1   |                      |  |                 |  |                |  |                |
| Full Viewing Angle   | 178°   |                      |  |                 |  |                |  |                |
| Backlight Sensing and Reporting  | At display level   |                      |  |                 |  |                |  |                |
| Display Module Position Sensing  | Auto-sensing integrated  |                      |  |                 |  |                |  |                |
| Acoustic Noise   | Fanless operation at the display   |                      |  |                 |  |                |  |                |
| Operating Temperature/Humidity<br>(°F/C) 20-90% relative humidity,<br>non-condensing | 5° to 40° C   41° to 104° F  |                      |  |                 |  |                |  |                |
| Protective Glass   | Planar ERO-LCD technology (Optional)                                       |                      |  |                 |  |                |  |                |
| Regulations  | Complies with EN60950, FCC Class A, CISPR22/85, EC, EU RoHS, TAA Compliant |                      |  |                 |  |                |  |                |

| Mounting Solutions                                | Planar EasyAxis Mounting System (1 per display included)   VESA hole pattern available (Optional) |  |
|---|---|--|
| Americans with Disability Act (ADA)<br>Compliance | Yes, clearance from wall under 4in  |  |
| Orientation                                       | Landscape or Portrait   |  |
| Floor Standing Mount Bases                        | Optional  |  |
| In-Wall Service                                   | Front and Rear  |  |
| Display Module Position Adjustment                | 6-axis integrated adjustments   |  |

| REMOTE POWER SUPPLY         |  |                                       |  |  |
|-----------------------------|--|---------------------------------------|--|--|
| Model                       | RPS110                                       | RPS220                                |  |  |
| Туре                        | 1RU rack mount; 19in (482.6mm) rack          | 1.5RU rack mount; 19in (482.6mm) rack |  |  |
| Line Voltage                | 100-240 Volts AC autoranging                 | 200-240 Volts AC autoranging          |  |  |
| Power Output                | 1200W per output                             |                                       |  |  |
| Power Supply Configurations | 1, 2 or 3 outputs                            | 2, 4 or 6 outputs                     |  |  |
| Redundancy                  | n + 1 redundant option                       |                                       |  |  |
| Hot Swap                    | Supported for each power supply module       |                                       |  |  |
| Low Power Standby Mode      | <3W in standby mode                          |                                       |  |  |
| Power Status                | Diagnostic LEDs per power supply module      |                                       |  |  |
| Maximum Distance from Wall  | 200ft (60m) standard, 500ft (152.4m) maximum |                                       |  |  |

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| VIDEO CONTROLLER           |  |  |
|----------------------------|--|--|
| Туре                       | 1U rack mount controller drives<br>up to 9 Full HD (1920x1080) panels  |  |
| Video Inputs               | 4x HDMI 2.0 (w/ HDCP 2.2); 1x DisplayPort 1.2  |  |
| Video Outputs              | 9-Output Controller: 9x RJ45 8P8C, 1x DisplayPort 1.2<br>4-Output Controller: 4x RJ45 8P8C, 1x DisplayPort 1.2 |  |
| Image Scaling              | Planar Big Picture Plus Processing, Leyard WallSync, PiP,<br>4K at 60Hz upscaling and downscaling              |  |
| Mullion Compensation       | Integrated with pixel by pixel adjustments   |  |
| Control                    | IR Remote Control, RS-232, USB,<br>Network, Leyard WallDirector Software                                       |  |
| Controller Status          | Diagnostic LEDs, health monitoring and alerts  |  |
| Maximum Distance from Wall | 200ft (60m)  |  |

| FIBER VIDEO EXTENSION MODULE OPTION   |  |  |  |  |
|---|--|--|--|--|
| 1U rack mount module drives up to 4 panels  |  |  |  |  |
| SFP multi-mode transceivers supports distances up to 1000ft<br>(300m) from video wall.<br>Compatible with single-mode transceivers supporting up to 10k<br>from the wall. (Single-mode transceivers not provided) |  |  |  |  |
| USB-B at module; USB-A at panel   |  |  |  |  |
| Embedded  |  |  |  |  |
| AC Power Adapter; 100-240V AC $\pm$ 10%, 47 to 63 Hz; 50W   |  |  |  |  |
|   |  |  |  |  |

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