

# Pixell PX-46m Ultra Thin Mullion 46" LCD Video Wall Display



## CLARITY MATRIX LCD Video Wall System

For control room and public venue video wall customers who need a thin profile video wall and uninterrupted operation, Clarity™ Matrix LCD Video Wall System is the ultra-narrow bezel LCD video wall system that provides outstanding tiled visual performance, supports extended operation and requires minimal installation space.

Unlike other products, Clarity Matrix combines an ultra-thin profile and unique tiling optimization features in an integrated, mission-critical system design. Clarity Matrix utilizes commercial-grade 46" LCD panels with breakthrough narrow-bezel characteristics resulting in just a 7.3mm pixel-to-pixel gap between images on adjacent panels in the video wall.

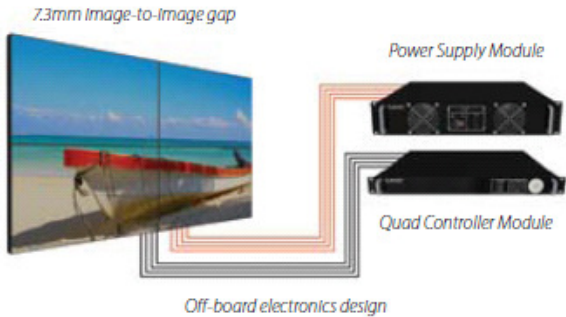
The Clarity Matrix LCD Video Wall System makes the most of LCD technology's slim profile and vibrant visual performance while easing the difficulties in achieving perfect alignment, optimal cooling, simplified service and extended operation.

## UNIQUE ARCHITECTURE & BENEFITS BY DESIGN

The Clarity Matrix Video Wall System was architected and developed by video wall industry experts in a way that specifically addresses the challenges faced by all video wall installations: mounting and alignment, reliability and extended operation, service and maintenance access and simple, effective image processing and management.

At the heart of the Clarity Matrix architecture is a distributed design that takes heat, complexity and unreliability out from behind the LCD panel and replaces it with a centrally located, easily accessible and highly reliable rack-mounted system. The key components of the Clarity Matrix Video Wall System include the following.

- Streamlined Clarity Matrix LCD Modules tile together to form the video wall and display the images.
- Clarity Matrix EasyAxis mounting system simplifies the task of installing and perfectly aligning the LCD Modules while allowing for efficient in-wall service.
- Clarity Matrix Quad Controller Module and Power Supply Module drive the wall and facilitate uninterrupted operation.
- Clarity Matrix configuration, management and processing software makes set-up and management of the wall easier and accommodates a range of image processing solutions.

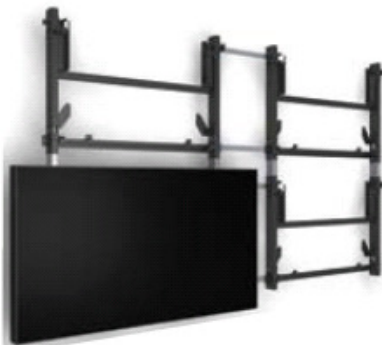


## UNCOMPROMISING IMAGE QUALITY

### EasyAxis Mounting System

The Clarity Matrix Video Wall System includes the EasyAxis mounting system. The EasyAxis mounting system is designed to be attached to a wall, used with optional free-standing bases or secured overhead in a flying configuration. The single mount supports all these configurations. When used in wall-mount configuration, horizontal and vertical connection brackets ensure that each mount is perfectly spaced from its neighbor in the video wall. The mount system also incorporates a service mode to accommodate front and rear in-wall repair of any LCD module in the video wall.

EasyAxis mounts are designed to facilitate the thinnest profile LCD video wall in the market. The combination of the mount plus the Matrix LCD Modules "blade" design result in video walls that measure a mere 4.5 inches in depth, screen-to-wall, as opposed to other designs that require 60% more clearance.

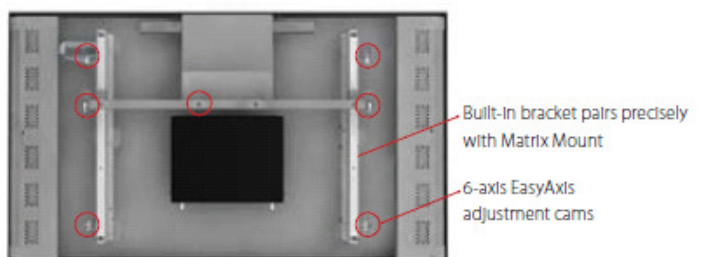


### Precise Panel Alignment

The Matrix LCD modules incorporate a single simple interface board designed to distribute off-board power, video and control signals to the LCD panel keeping depth, weight, heat and points of potential failure to an unprecedented minimum. The LCD blade-style module incorporates a bracket that is perfectly paired with the EasyAxis mount. The LCD module includes EasyAxis adjustment cams that facilitate precise 6-axis alignment ensuring uniform, minimized image-to-image gap.

The lighter design of the Clarity Matrix LCD module means that handling, installation, alignment and service are all easier to accomplish.

- 6-axis easy adjustment cams
- Lighter weight
- Fewer points of failure
- Reduced heat load
- Perfectly quiet



Matrix LCD Module

## RELIABLE OPERATION & SIMPLIFIED MAINTENANCE



*Clarity Matrix Service Mode for In-wall service*

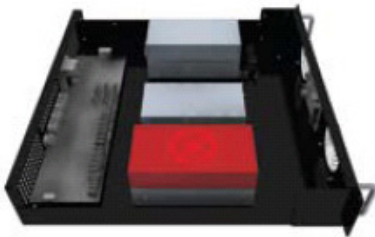
Because of the streamlined design of the Matrix LCD modules, fewer repairs are required at the panel itself. When the panels do need to be accessed or removed, this can be accomplished without removing other panels in the wall. Starting at the top of the wall, panels can be pulled up and out into Service Mode, allowing the panel below to be accessed.

Within each panel, the simple interface board can be disconnected and replaced using thumbscrews with access from either the front or the back of the wall. Panels can also be completely removed and replaced very quickly. Because of their streamlined design, they weigh less than typical LCD displays, are more easily handled, and produce no noise.

### Redundant Power Supply

The rack-mount video processing and power supply units each support 4 LCD modules, incorporate their own cooling and make configuration, maintenance and upgrades easily accessible and unobtrusive to the video wall itself.

For even further reliability, the Matrix power supply unit includes an n+1 redundant design so if any one power supply in the unit fails, the remaining 4 will continue to power 4 LCD's with uninterrupted operation.



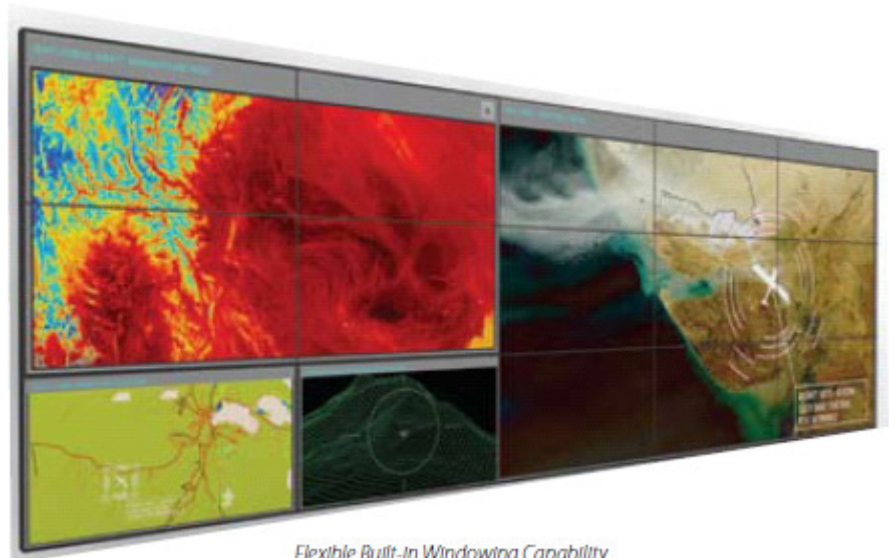
*n+1 Redundant Power Supply*

### Built in video processing

The PX-46m array has an option (Big Picture Plus) to allow stretching of a single input across multiple displays.

For more sophisticated and/or larger quantities of input signals to be viewed see Pixell's VP series of video processors at :

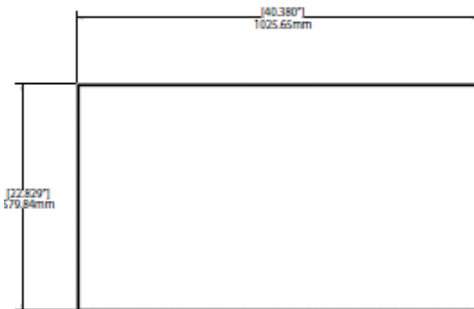
<http://www.pixell.com/video%20processors.htm>



*Flexible Built-In Windowing Capability*

# Specifications

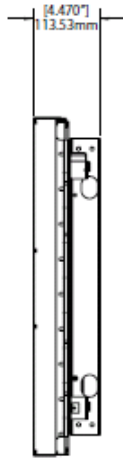
Front



Side



MODULE W/O MOUNT



MODULE W/ MOUNT

## LCD PANEL

Diagonal Size	46"
Resolution	1366 x 768
Aspect ratio (W:H)	16:9
Technology	Commercial-grade direct view LCD
Screen dimensions (active)	
Diagonal	46"
Width by height	1018.3mm x 572.5mm (active)
Cabinet dimensions (WxHxD)	
Width by height	1025.7mm x 579.8mm (module)
Installed depth with mount	4.5"
Display module depth without mount	4"
Weight including bracket	44 lbs.
Tiled image-to-image gap (minimum)	7.3 mm
Brightness (maximum)	700 nits
Response time (typical)	8ms
Contrast ratio (full field)	3000:1
Full viewing angle	178°
Colors	16.7 million
Color gamut	72% NTSC, 100% EBU
Backlight type	CCFL
Backlight life (1/2 brightness)	50,000 Hrs
Mounted depth	4.5" wall to front of screen
Acoustic noise	Fanless operation
Heat load	680 BTU per hour at 500 nit
Operating temperature range	5°-35°C (22+/-3°C for optimal screen performance)
Operating humidity range	20-80% RH non-condensing
Backlight control	Individual and wall control
Backlight sensing and reporting	At display level
Display module position sensing	Auto-sensing integrated
Power consumption	75 watts

## POWER SUPPLY MODULE

Type	2U rack mount unit powers up to 4 panels
Redundancy	n+1 redundant power supplies (optional)
Line voltage	100-200 volts ac, 50/60Hz autoswitching
Power status	Diagnostics LEDs, health monitoring and alerts

## QUAD CONTROLLER MODULE

Type	1U rack mount controller drives up to 4 panels
Inputs	4 DVI with HDCP Dual link DVI in and out
Image scaling	Clarity Big Picture Plus - 32 x 32 maximum
Mullion compensation	Integrated
Control	Clarity WalNet™ (LAN) RS-232 IR remote control
Frame lock	48-62 Hz
Controller status	Diagnostic LEDs, health monitoring and alerts

## MOUNTING

Clarity Matrix mount	1 per display included
Curved wall brackets	Optional
Floor standing mount bases	Optional
In-wall service	Front and rear
Matrix display module position adjustment	6-axis integrated
Weight per panel	14 lbs.

## SAFETY REGULATIONS

Complies with EN60950, FCC Class A, CISPR22/85, CE, EU RoHS

\*Specifications are preliminary and subject to change.