

MediaWall X

Distributed Video Wall Processor

Seamless, Scalable, Synchronized Video Walls

The RGB Spectrum *MediaWall*® X is a high-performance, IP-based distributed video wall processor that delivers 4K video wall processing in an ultra-compact form factor. Its distributed, serverless architecture enables multiple *MediaWall* X endpoints to operate as a single synchronized video wall system, supporting virtually any wall size, layout, or display configuration.

MediaWall X utilizes RGB Spectrum *Zio*® 5000 and 2100 Series encoders over standard Ethernet networks, as well as third-party H.264 (AVC) and H.265 (HEVC) video sources, including IP cameras and other networked devices.

By integrating video decoding, graphics processing, networking, and compute resources into a single platform, *MediaWall* X delivers reliable, low-latency visualization for mission-critical environments. Fully TAA-compliant and supporting both H.264 and H.265 content, *MediaWall* X is ideal for control rooms, operations centers, security applications, and other demanding visualization deployments.



www.rgb.com/mediawall-x

Key Features

- Distributed Video Wall Processing with Encoder & Decoder Endpoints
- Scalable, serverless architecture for simplified deployment and expansion
- Supports H.264 (AVC), H.265 (HEVC), HTML5, and HDMI content sources
- Supports video walls with up to 64 4K60 displays or 256 2K60 displays
- Multiple encoder configurations available
- Ultra-compact form factor for space-constrained installations

High-Performance Video Wall Processing

- Drive video walls with up to 64 4K displays or larger using *QuadPlex* technology
- Decode up to: 1 × 8K60, 6 × 4K60, 12 × 4K30, 18 × 1080p60, 34 × 1080p30, 72 × 720p30 streams
- Output up to four 4K60 HDMI displays per endpoint
- Synchronize content across multiple endpoints for seamless video wall operation

Distributed Architecture

- Serverless design eliminates the need for dedicated video wall servers
- Compact footprint enables installation behind or near displays
- Reduces infrastructure, cabling, rack space, and deployment complexity
- Scales easily from small video walls to large multi-wall deployments

Security

- Hardware-based encryption protects sensitive data
- Hardened Linux operating system with a controlled software environment
- Designed for secure operation in mission-critical environments

Configuration & Control

- Automatic device discovery and system configuration
- Flexible video wall and bezel management
- Intuitive drag-and-drop source management
- Rapid creation of layouts, overlays, annotations, and custom workspaces

Specifications

PHYSICAL	
Outputs	• 4x HDMI
Ethernet	• 1GbE / 2.5GbE (RJ45)
Max Resolution	• 4096 x 2160 @ 60 Hz
Form Factor	• 1U, half-rack appliance
Dimensions	• 19cm x 14.8cm x 3cm
Mounting	• Rackmount compatible, VESA mountable
NETWORK	
Interfaces	• 10/100/1000/2.5G Ethernet, auto-detect
IP Support	• IPv4 / IPv6
Transport	• Unicast, multicast
Addressing	• DHCP (default), Static
STREAMING	
Streaming Protocols	• RTSP, SRT
Management Protocols	• Telnet, HTTP
VIDEO & AUDIO	
Pixel Formats	• RGB 8:8:8 (24 bpp), YUV 4:4:4 / 4:2:0
Processing	• Composite, key, crop, mirror, flip
DECODING	
H.264/H.265 Support	• Up to level 5.2, 4:2:0, 8-bit Up to level 6.2, 4:2:0 & 4:4:4, 8-bit
Streams (per endpoint unit)	• 1x 8K60, 6x 4K60, 12x 4K30, 18x 1080p60, 34x 1080p30, 72x 720p30
ENVIRONMENTAL & POWER	
Operating Temp	• 0°–40°C
Humidity	• 10–90% non-condensing
Storage Temp	• -20°–70°C
Power Consumption	• 45W typical
Power Supply	• 19V, 90W PSU (locking)
COMPLIANCE	
Regulatory	• FCC, CE, RCM, ICES-003, KC, UKCA
Environmental	• RoHS, China RoHS, REACH, WEEE
Compliance	• TAA Compliant

Note: Units mounted side-by-side require proper ventilation and a maximum ambient temperature of 30°C for optimal performance.



Contact us to learn more.

RGB Spectrum HQ: 1-510-814-7000 • Contact your sales manager: [rgb.com/contact](https://www.rgb.com/contact)

1101 Marina Village Pkwy, Suite 101 • Alameda, CA 94501