

# Experience Flexible 4K Streaming & Recording



## Matrox® Maevex 6100 Series Quad 4K Enterprise Encoder Card & Appliance



- Industry-Leading Technology
- Flexible Communication
- Complete Reach and Control

# Experience Flexible 4K Streaming & Recording

Leveraging ever-expanding IP networks to push and pull content, networked technologies make it easier than ever to meet the growing demand for increased capacity and any-to-any connectivity. Compressed H.264 technology meets almost every need and requirement for quality, low bit rate streaming and recording—including 4K—and allows for multiple streams of almost every type of content to be delivered over standard 1 Gigabit Ethernet networks.

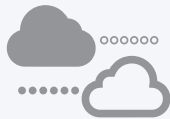
The Matrox Maevev 6100 Series is the next generation in Matrox's AV-over-IP portfolio—the world's first to deliver quad 4K input capture and encode for real-time streaming and/or recording four or more 4K/UHD and Full HD channels simultaneously. Ideally suited for process control, digital signage, military, healthcare, government, education, and other applications, the Maevev 6100 Series is available in two convenient form factors—Maevev 6100, a single-slot, high-density quad encoder card and Maevev 6150, a system-independent, standalone quad encoder appliance with zero-latency pass-through for each input.

Built on H.264, Maevev 6100 Series plug-and-play solutions fit seamlessly into existing infrastructures and interoperate with virtually any H.264 decode device, ensuring high-density content distribution and system scalability. Robust Matrox PowerStream Plus software—the market's most advanced AV-over-IP software tool—completes the solution and provides flexible management of local or remote data across the entire network.



## Industry-Leading Technology

- Drive quad 4K/UHD and Full HD capture, encoding, streaming, and recording—simultaneously.
- Deliver best-in-breed H.264 encoding support for up to 4K/UHD with configurable multi Chroma sub-sampling options for 4:4:4, 4:2:2, 4:2:0, and 4:0:0.
- Use PowerStream Plus software to configure multi-protocol streaming, multi-bitrate streaming, multiple source capture, multiple picture-in-picture (PIP) and quadrant composite options, and more.



## Flexible Communication

- Work simultaneously on multiple tasks in multiple settings on a single card or appliance, without sacrificing quality. Feed on premises or cloud-based servers and systems to reach internet viewers; push many streams over LAN for local viewers; and record to local or network storage for later editing and viewing, concurrently.
- Employ simultaneous video streaming, processing, and recording on all channels, while customizing settings independently on each channel.
- Transmit live or recorded content to and from multiple video-on-demand platforms.



## Complete Reach and Control

- Simplify workflow with auto discovery of any Maevev unit on the subnet, and easy addition for units outside the subnet.
- Configure settings and parameters on each Maevev unit from a central application accessible from multiple locations on the network.
- Monitor and manage the entire Maevev installation of hardware, devices, and streams through the intuitive PowerStream Plus software and/or API.<sup>1</sup> Choose from three levels of implementation:



**PowerStream Plus software** for easy deployment. Gain plug-and-play functionality and full access to the complete feature set immediately after download.



**PowerStream Plus API** for command-level access to entire application feature set. Supports customization from single-function application creation to full integration of all PowerStream Plus features into customized applications.



**White-labelling** for personalized branding of Matrox software with naming, logos, colors, and corporate identity for complete corporate integration.

# Markets

Maevex 6100 Series are a perfect fit for many applications. Have a specific idea in mind? Contact our sales team and work together to build a solution.



Digital Signage



Military



Enterprise



Science & Technology



Industrial, Automation & Production



Healthcare



Government



House of Worship



Education



Security

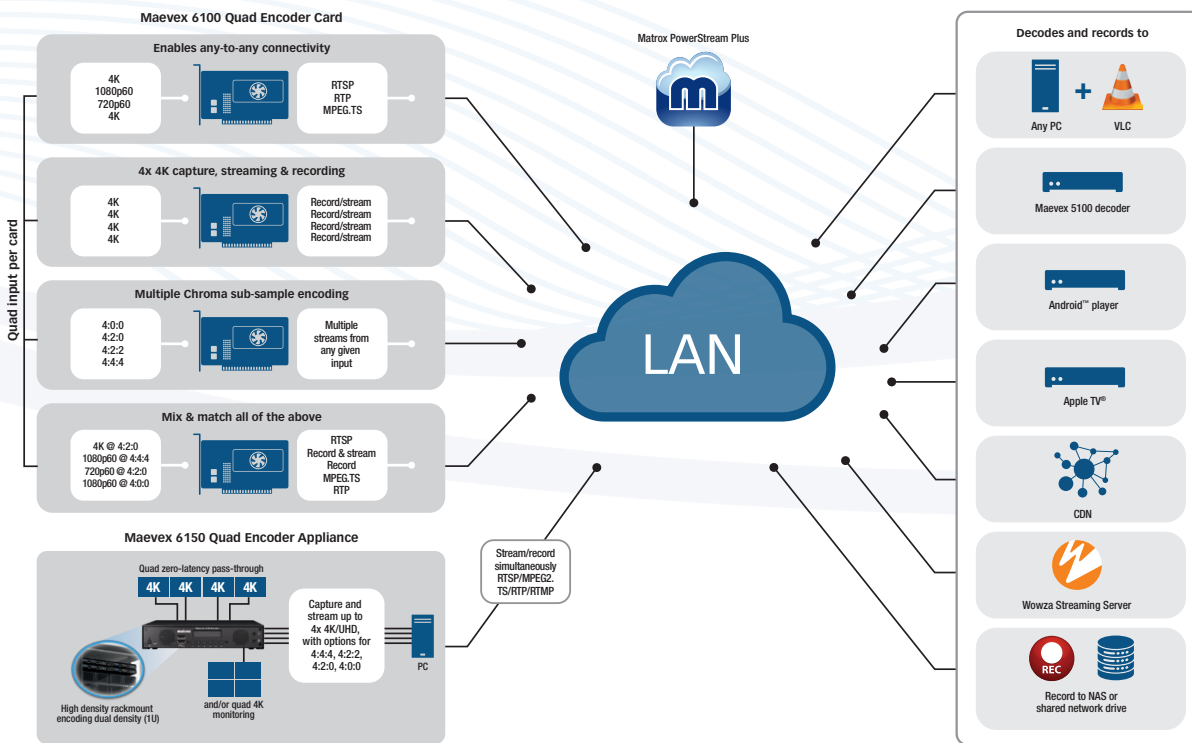


Video on Demand



OTT Services

# Maevex 6100 Series Delivers Workflow Flexibility



Matrox MaeveX 6150 Quad 4K Encoder Appliance (front view)



Matrox MaeveX 6150 Quad 4K Encoder Appliance (back view)



Matrox MaeveX 6100 Quad 4K Encoder Card

# Tech Specs

## Maevox 6100 Card & Maevox 6150 Appliance

### Performance

**Maximum Capture Resolution**

- 2x 3840x2160 @60Hz or 2x 4096x2160 @60Hz<sup>1</sup>
- 4x 3840x2160 @30Hz or 4x 4096x2160 @30Hz

**Color Space Capture**

- RGB and YUV 8- and 10-bit support
- Color space conversion support

### Encoding

**Formats (Codecs)**

- Video: H.264/MPEG-4 Part 10 (AVC)
- Audio: MPEG-4 AAC-LC/HEV1/HEV2

**Chroma Sub-Sampling**

- 4:0:0, 4:2:0 (8-bit and 10-bit)
- 4:2:2 (8-bit), 4:4:4 (8-bit)

**Maximum Encoding Capability<sup>2</sup>**

- 2x 3840x2160 @60Hz 4:2:0
- 2x 4096x2160 @60Hz 4:2:0
- 4x 3840x2160 @30Hz 4:2:0
- 4x 4096x2160 @30Hz 4:2:0
- 1x 3840x2160 @30Hz 4:4:4
- 3x 1920x1080 @60Hz 4:4:4
- 3x 1920x1200 @60Hz 4:4:4

**Profiles**

- Baseline (BP), main (MP), high (HiP), high 10 (Hi10P), high 4:2:2 (Hi422P), high 4:4:4 predictive profile separate plane (Hi444PP), CAVLC 4:4:4 intra (44)

**Encoding Level**

- Up to 5.2

**Bitrate Range (Per Stream)**

- 50 Kbps to 120 Mbps<sup>3</sup>
- 15 Mbps (default)

**Rate Control**

- CBR, VBR, favor quality (optimize for desktop or latency), adjustable GOP size

**Audio Sample Frequency**

- 32 kHz, 44.1 kHz, and 48 kHz

**Audio Bit Rates**

- Up to 576 Kbps (AAC-LC), 288 Kbps (AAC-HEV1), 144 Kbps (AAC-HEV2)

**Video Compositing**

- Yes, fixed formats including PIP, PBP, quadrant

**Scaling**

- Yes

### Recording

**File Format**

- .mp4

**Programmability**

- Start date and time, duration, maximum file length, file frequency

**Recording Locations**

- Shared network drive or NAS
- Local USB ports for USB flash drive and external hard drive<sup>4</sup>

### Networking Interface

**Streaming Protocols**

- RTSP/RTCP/RTP (all required), RTP, RTMP, MPEG2.TS over UDP

**Command & Control**

- HTTP/HTTPS over TCP, UPnP

**Network Standard**

- 100/1,000 base-T Ethernet, auto speed, half/full duplex

**IP Addressing**

- IPv4, DHCP (default)/static IP address support

**IP Stream Support**

- Unicast, multi-unicast, multicast

### Software

**Software Interface**

- PowerStream Plus (free download)

**Command & Control**

- Compatible with Maevox 5100 Series and Maevox 6100 Series
- Network discovery
- Multi-encoding and recording management
- Multi-protocol management
- Frame rate management
- Resolution control
- Administrator and user credential management
- Scaling management
- SNMP support

**PowerStream Plus API**

- Full-access to entire feature set via API<sup>5</sup>
- .NET 4.5 or higher, stand-alone library

**Supported Operating Systems**

- Microsoft® Windows® 10 (64-bit), Server® 2012 R2, Windows 8.1 (32-bit, 64-bit), Windows Server 2012, Windows 7 (32-bit, 64-bit), Windows Server 2008 R2

## Maevox 6150 Appliance

### Connectivity

**Network Connector**

- 2x RJ45 with status LED indicators
- 1x control and stream
- 1x stream only

**Video Input**

- 4x HDMI (Type A) with audio support

**Video Output/Pass-Through**

- 4x HDMI (Type A) with audio support

**Video Monitoring Output<sup>6</sup>**

- 1x DisplayPort 1.1

**Audio Input**

- 4x HDMI digital LPCM two-channel stereo audio
- 4x 3.5 mm analog stereo audio
- 1x 3.5 mm stereo mic in

**Audio Output**

- 4x HDMI digital LPCM two-channel stereo audio
- 1x 3.5 mm headphones out
- 2x USB 2.0 (front)
- 1x USB 3.0 (back)

### Hardware

**Power Supply**

- 100-240 VAC in, 12 VDC out, 60W
- DIN4 locking power connector

**Power Cords Included**

- US, EU, UK, Aus/NZ

**Product Dimensions**

- 8.53 x 7.45 x 1.68 in (21.7 x 18.9 x 4.3 cm)

**Form Factor**

- Standalone appliance
- Rack-mountable (1U dual-density)

**Part Number**

- MVX-E6150-4

## Maevox 6100 Card

### Connectivity

**Network Connector**

- 1x RJ45 with status LED indicators

**Video Input**

- 4x Mini HDMI (Type C) with audio support

**Audio Input**

- 4x HDMI digital LPCM two-channel stereo audio

### Hardware

**Product Dimensions**

- 9.02 x 4.38 inches (22.91 x 11.13 cm)

**Form Factor**

- Single-slot, full-height card
- PCIe x8

**Part Number**

- MVX-E6100-4

1. Requires specific source timings; contact Matrox for more details.

2. Each encoding capability is independent of the others listed, and excludes any additional processing such as compositing, scaling, etc. Content can affect results.

3. Maximum operational bitrate per stream is dependent on number of streams and features enabled.

4. Maevox 6150 only.

5. Contact Matrox for more details.

6. Maximum resolution: 2560x1600.

## Contact Matrox to Learn More or Purchase

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### About Matrox Graphics Inc.

Matrox Graphics is a global manufacturer of reliable, high-quality ASICs, boards, appliances, and software. Backed by in-house design expertise and dedicated customer support, Matrox products deliver stellar capture, extension, distribution, and display. Engineering high-quality products since 1976, Matrox technology is trusted by professionals and partners worldwide. Matrox is a privately held company headquartered in Montreal, Canada. For more information, visit [www.matrox.com/graphics](http://www.matrox.com/graphics).

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