

Experience Flexible 4K Streaming & Recording



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



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

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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.

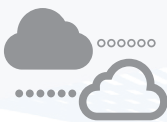
The Matrox Maevex 6100 Series is the next generation in Matrox's AV-over-IP portfolio—the world's first to deliver quad 4K input capture and encode for real-time streaming and/or recording four or more 4K/UHD and Full HD channels simultaneously. Ideally suited for process control, digital signage, military,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

Built on H.264, Maevex 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 Maevex unit on the subnet, and easy addition for units outside the subnet.
- Configure settings and parameters on each Maevex unit from a central application accessible from multiple locations on the network.
- Monitor and manage the entire Maevex installation of hardware, devices, and streams through the intuitive PowerStream Plus software and/or API.¹ Choose from three levels of implementation:



Included PowerStream Plus software application for easy deployment. Gain plug-and-play functionality and full access to the complete feature set immediately after download and control the entire Maevex network from centralised locations.



PowerStream Plus API for access to entire application feature set. Supports customization from single-function application creation to full integration of all PowerStream Plus features into customized applications. RESTful APIs also available for more flexible and portable software development and direct access to Maevex devices.



Software rebranding tools for customised branding of Maevex software enabling customised naming, logos, color schemes, and corporate identity for complete corporate integration.

Markets

Maevox 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

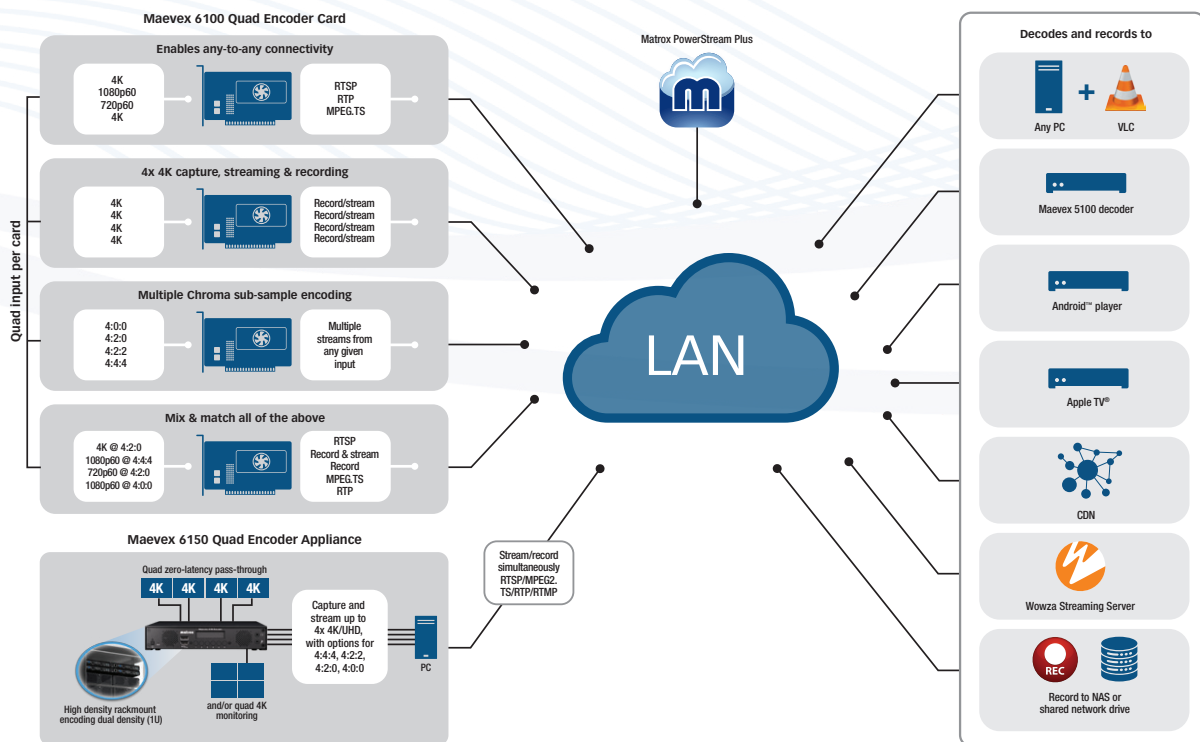


Video on Demand



OTT Services

Maevox 6100 Series Delivers Workflow Flexibility



Appliance and card images:



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



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



Matrox Maevox 6100 Quad 4K Encoder Card

Tech Specs

MaeveX 6100 Card & MaeveX 6150 Appliance

Performance

Maximum Capture Resolution

- 2x 3840x2160 @60Hz or 2x 4096x2160 @60Hz¹
- 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 Capability²

- 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 Mbps³
- 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 drive⁴

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 MaeveX 5100 Series and MaeveX 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 API⁵
- .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

MaeveX 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 Output⁶

- 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

Noise Emission

- ~25 dB at full stream/record capacity

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 ½R)

Part Number

- MVX-E6150-4

Accessories

- Rackmount Kit (RMK-19TR-A)

MaeveX 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

Accessories

- Secure HDMI cable solution (SK-SLNA-0F)

1. Requires specific source timings, in YUV 4:2:0, 12 bits per pixel (8 bits per component); 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. MaeveX 6150 only.

5. Contact Matrox for more details.

6. Maximum resolution: 1920x1080.