Experience Flexible 4K Streaming & Recording

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

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

matrox.com/graphics
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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. Choose from three levels of implementation:

1. PowerStream Plus software for easy deployment. Gain plug-and-play functionality and full access to the complete feature set immediately after download.
2. 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.
3. White-labelling for personalized branding of Matrox software with naming, logos, colors, and corporate identity for complete corporate integration.

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1. See PowerStream Plus datasheet for additional details.
Maevex 6100 Series

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
- Science & Technology
- Government
- Security
- Military
- Enterprise
- Healthcare
- Industrial, Automation & Production
- House of Worship
- Education
- Video on Demand
- OTT Services

Maevex 6100 Series Delivers Workflow Flexibility

Maevex 6100 Quad Encoder Card
- Enables any-to-any connectivity
- 4x 4K capture, streaming & recording
- Multiple Chroma sub-sample encoding
- Mix & match all of the above

Maevex 6100 Quad Encoder Appliance
- Quad zero-latency pass through
- Capture and stream up to 4x 4K/UHD
- Mix/patch 4K monitoring

Matrox PowerStream Plus
- Decodes and records to
  - Any PC VLC
  - Android™ player
  - Apple TV®
  - CDN
  - Wowza Streaming Server
  - Maevex 5100 decoder
  - Matrox PowerStream Plus
  - Record to NAS or shared network drive

Microsoft Windows Media Encoder
- Record & stream
  - RTSP
  - RTP
  - MPEG.TS

MPEG 2 encoder
- Record & stream
  - RTSP
  - RTP
  - MPEG.TS

RTSP
- Stream/record
  - RTSP/MPEG2
  - TS/RTP/RTMP

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

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Microsoft Windows Media Encoder
- Record & stream
  - RTSP
  - RTP
  - MPEG.TS

MPEG 2 encoder
- Record & stream
  - RTSP
  - RTP
  - MPEG.TS

RTSP
- Stream/record
  - RTSP/MPEG2
  - TS/RTP/RTMP

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

## Maevex 6100 Card & Maevex 6150 Appliance

### Performance
- **Maximum Capture Resolution**
  - 2x 3840x2160 @60Hz or 2x 4096x2160 @60Hz
  - 4x 3840x2160 @30Hz or 4x 4096x2160 @30Hz

### Encoding
- **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
- 2x 3840x2160 @60Hz
- 2x 4096x2160 @60Hz
- 4x 3840x2160 @30Hz
- 4x 4096x2160 @30Hz
- 1x 3840x2160 @30Hz
- 1x 1920x1080 @60Hz
- 1x 1920x1200 @60Hz

### Profiles
- **Baseline (BP)**, main (MP), high (HP), 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
- 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, PSP, quadrant

### Scaling
- Yes

### Recording
- **File Format**
  - .mp4

### Networking Interface
- **Streaming Protocols**
  - RTSP/RTCP/RTP (all required), RTP, RTMP, MPEG2.TS over UDP

### Command & Control
- HTTP/HTTIPS over TCP, UPnP

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

### IP Addressing
- IPv4, DHCP (default)/static IP

### PowerStream Plus API
- Full-access to entire feature set via API
- NET 4.5 or higher, stand-alone library

### Supported Operating Systems

## Maevex 6150 Appliance

### Connectivty
- **Network Connector**
  - PowerStream family
  - 3x RJ45 with status LED indicators
  - 1x control and stream

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

### Video Output/Pass-Through
- 4x HDMI (Type A) with audio support

### Video Monitoring Output
- 1x DisplayPort 1.1

### Audio Input
- 4x HDMI digital LPCM two-channel stereo audio

### Audio Output
- 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

### Part Number
- MVX-E6150-4

### 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.

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