Matrox® **Maevex 7100 Series**
Open-standard, 4K60 AVoIP encoding for optimal performance with minimal network bandwidth usage

Matrox® Maevex 7100 Series (7112A and 7112H) single-channel video encoders are designed to deliver a comprehensive and flexible streaming solution using open standards. These standalone AVC/HEVC encoders provide high compression, ultra-low latency, 4K60 input capture and high-quality encode with zero-latency pass-through. Both models are compact, fanless, low power, and rack-ready. Leveraging H.265 technology, Maevex 7112H can encode video at low bitrates.

Maevex 7112A and 7112H provide secure streaming, offer adjustable parameters, and support multiple streaming protocols. These encoders fit seamlessly into existing infrastructures and complement the Maevex product line. Well-suited for diverse applications, Maevex 7100 Series is ideal for secure command and control centers, operation rooms, and other mission critical environments. TAA-compliant SKUs are available.

matrox® video

Key features and benefits

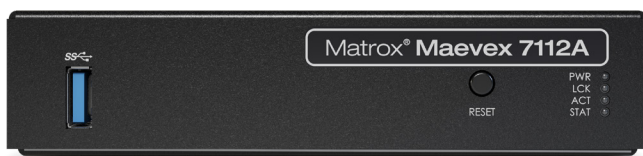|	
4K60 input capture and encode	Stream and record—simultaneously—up to 4K60, with high quality scaling options.
Zero latency pass-through	Achieve zero-latency pass-through for real-time output of desktop, camera, and other types of content.
Standards-based HEVC and AVC codecs	Deliver interoperability between existing devices and environments.
H.265 efficiency	Achieve flawless quality with minimal bandwidth usage.
Ultra-low latency	When paired with Maevex 6152 decoders, Maevex 7112 delivers ultra-low latency transmission.
Flexible streaming	Enjoy five streaming protocols— RTSP, MPEG2-TS, RTP, RTMP(S) and SRT—for secure, trouble-free streaming.
Fanless, quiet, and rack mountable	Deliver zero noise operation thanks to its fanless design, making Maevex 7112 ideal for control room environments and operator desktops. Install up to three devices horizontally in 1 RU of rack space.
PowerStream Plus application, Web UI, and complimentary REST APIs	Leverage the convenience of PowerStream Plus software, including the new web user interface, to configure, control, and monitor your devices. Additionally, use the complimentary REST APIs and WEB APIs to build new applications.

Highly secure and robust AV over IP solution

Maevex 7100 Series offers enterprise-grade security features to ensure protection of both the encoded video streams as well as our hardware device within your network. These include integration with Microsoft Active Directory for access control, HTTPS communication for secure device control, secure and verified firmware updates, 802.1x support for network authentication, regular vulnerability updates, and the Secure Reliable Transport (SRT) support with AES encryption.

Unmatched convenience with single stream and record

Maevex 7112 encoders deliver source content to on-premises end points over LAN, WAN (VPN), and internet. Feed cloud-based servers, and record to any accessible network location, including a Network Attached Storage (NAS) and Network Video Recorder (NVR)—all in a compact form factor. You can also leverage RTMP for seamless cloud integration and reliable video streaming. Secure Reliable Transport (SRT) protocol ensures high-quality reliable streaming even on noisy or unpredictable networks.
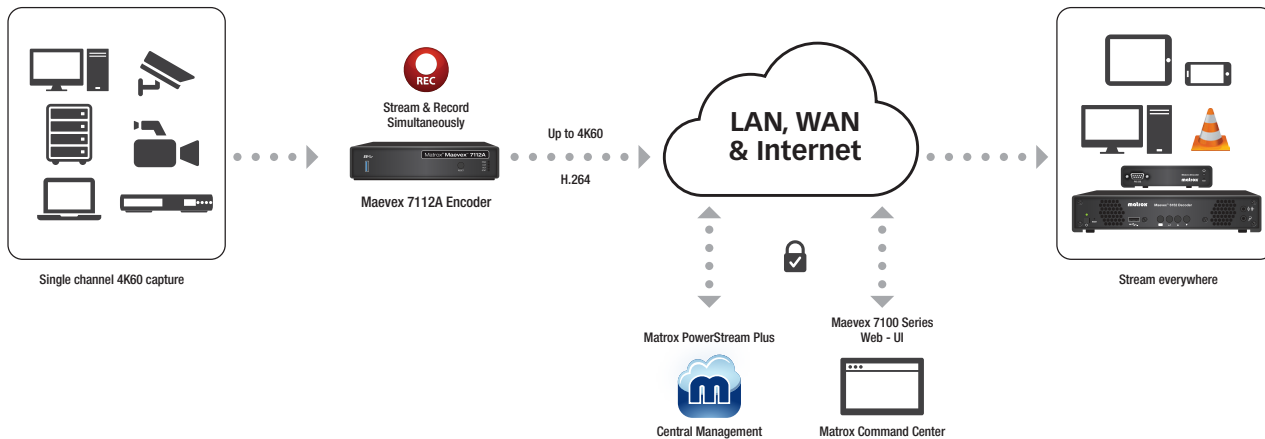
Appliance overview

Maevex 7112A (AVC), front view

Maevex 7112A (AVC), back view

Maevex 7112H features a similar form factor to 7112A

Maevex 7100 Series delivers workflow flexibility

Technical specifications

	Maevex 7112A	Maevex 7112H
Performance		
Maximum capture resolution	1x 3840x2160 @60Hz	
Color space capture	• RGB and YUV 8-bit support • Color space conversion support	
Encoding formats (Codecs)	• Video: H.264/MPEG-4 Part 10 (AVC) • Audio: MPEG-4 AAC-LC, OPUS and LPCM	• Video: H.264/MPEG-4 Part 10 (AVC) • Video: H.265/MPEG-H Part 2 (HEVC) • Audio: MPEG-4 AAC-LC, OPUS and LPCM
Chroma sub-sampling	4:2:0 (8-bit)	
Encoding capability @4:2:0	1x 3840x2160 @60Hz	
Profiles	Baseline (BP), Main (MP), High (HiP), High10 (Hi10P), Intra, up to Level 5.2	Main (MP), Main Intra, Main10, Main10 Intra, Main, Intra up to Level 5.1 High Tier
Encoding level	Up to 5.2	
Bitrate range (Per stream)	• 64Kbps to 60 Mbps • 15 Mbps (default)	
Rate Control	CBR, VBR, adjustable GOP size	
Audio sample frequency	32 kHz, 44.1 kHz, and 48 kHz	
Audio bitrates	From 64 to 320 Kb/s (AAC-LC, OPUS and LPCM)	
Scaling	Yes	
Recording		
File formats	Transport Stream (.TS)	
Programmability	Start/stop, duration, file location	
Recording locations	• Shared network drive or NAS • USB 3.0*	
Networking interface		
Streaming protocols	• RTSP (TCP), RTCP & RTP (UDP) - all required • RTP over UDP • SRT over UDP • RTMP/(S) • MPEG2-TS over UDP • MPEG2-TS over RTP • RTSP over TCP (interleaved)	
Command & control	HTTPS over TCP, UPnP (discovery), SSDP	

Technical specifications (Cont.)

	Maevex 7112A	Maevex 7112H
Networking interface (Cont.)		
Network standard	• 100/1,000 base-T Ethernet, auto speed, half/full duplex • IGMPv2 and IGMPv3 support	
IP addressing	iPv4, DHCP (default) and static IP address support, iPv6*	
IP stream support	Unicast, multicast	
Network security	802.1x support*	
Software		
PowerStream Plus (Free download)	• Compatible with Maevex 6100 Series and Maevex 5100 Series • Network discovery • Encoding and recording management • Multi-protocol management • Frame rate management • Resolution control • Administrator and user credential management • Scaling management	
Command Center Web-UI	• Encoding and recording management • Multi-protocol management • Frame rate management • Resolution control • Scaling management	
Maevex 7100 Series REST API	Available for lower-level development	
Supported operating systems	Microsoft® Server® 2022, Windows® Server® 2019, Windows® 11, Windows® 10	
Connectivity		
Network connector	1x RJ45 with status LED indicators	
Video input	1x HDMI® 2.0 (Type A) with audio support	
Video output/Pass-through	1x HDMI® 2.0 (Type A) with audio support	
Audio input	• 1x HDMI digital LPCM two-channel stereo audio • 1x 3.5 mm analog stereo audio in - 0.57 Vrms -29 kΩ -6 dB to +16.5 dB	
Audio output	1x HDMI digital LPCM two-channel stereo audio	
USB (For recording)	1x USB 3.0*	
Hardware		
Noise emission	Fanless	
Power supply	• 100-240 VAC in, 12 VDC out, ~12W typical (40W max) • Barrel locking power connector	
Power cords included	US, EU, UK, Aus/NZ	
Product dimensions	7.11 x 5.50 x 1.31 in (18.07 x 13.97 x 3.33 cm)	
Form factor	• Standalone appliance • Rack mountable (1U, 1/3R) • Weight is ~350 grams/0.77 lbs	
Operating conditions	Temp: 0 to 45 degrees C Altitude: 650 hPa (3580m) to 1013 hPa (0m) Humidity: 10 to 90% non-condensing	
Storage conditions	Temp: -40 to 70 degrees C Altitude: 192 hPa (12000m) to 1020 hPa (-50m) Humidity: 10 to 90% non-condensing	
Part numbers	MVX-E7112A-1	MVX-E7112H-1
Accessories	• Rackmount Kit (part number: RMK-19TR-A) • Secure Cable Solution for HDMI (part number: SK-SLND-4)	

* *Available in future software release.*

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