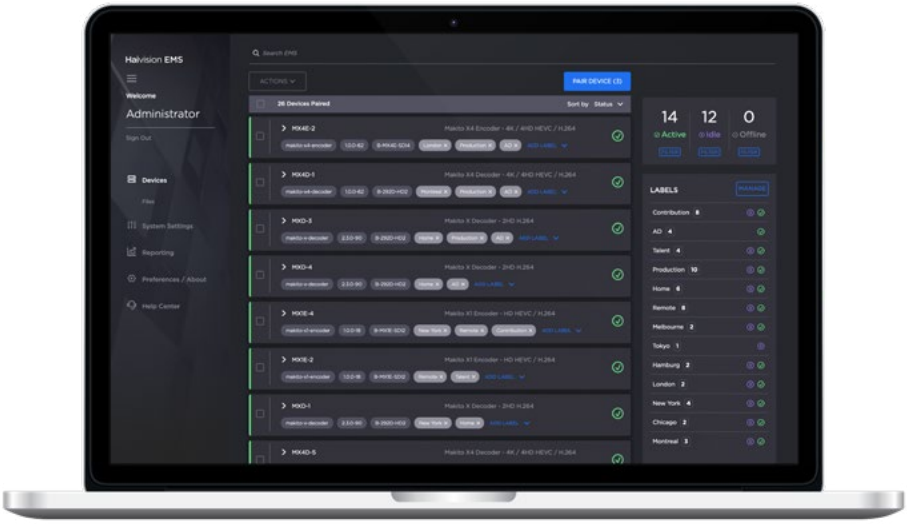


Centralized Management

Haivision EMS is an element management system for broadcast, ISR, and enterprise video applications. It provides broadcast engineers and system administrators with a web-based interface for centrally managing a video streaming ecosystem based on Haivision Makito X, X4, and X1 series of video encoders and decoders, across multiple sites. Haivision EMS provides a significant boost in operational efficiency, troubleshooting, and increased quality of service.

Real-Time Monitoring and Control Keeping a constant watch over all the elements for video capture, encoding, streaming, and decoding can be complex - especially when they are not all located in the same place. Haivision EMS makes it possible for an administrator to easily manage and monitor geographically distributed Haivision Makito endpoints from within a single web-based GUI. Makito X, X4 and X1 devices can be discovered and paired for real-time status monitoring. Haivision EMS can be used to monitor the real time status of any stream being encoded or decoded by a Makito device and remotely start or stop a stream.

Workflow Organization Keeping track of multiple devices and remembering exactly how their inputs and outputs contribute to a workflow can be challenging when the only information available is an IP address. Haivision EMS enables administrators to organize and tag devices into different groups based on workflow function, location, or any other criteria. Multiple tags can be attributed per Makito encoder or decoder providing full visibility into where each element is located and what valuable function it serves.

Centralized Upgrades Haivision software upgrades provide continual enhancements and new features for Makito encoders and decoders. However, the process of upgrading each individual device can be time-consuming when managing dozens of Makitos across different locations. Haivision EMS can verify firmware versions and licenses of all paired devices. It can also perform batch upgrades and deliver license files to multiple devices at once, greatly simplifying the process of keeping all of your Makitos up to date.

FEATURES	BENEFITS
Monitor Devices and Streams	Monitor the real-time status of Makito encoders and decoders as well as streams which can also be remotely stopped or started.
Organization	Label, search, sort and filter devices for managing encoder fleets and workflows.
Device Firmware Upgrade	Centrally upgrade multiple devices at once.
Device Discovery	Find new devices on a network to facilitate pairing to Haivision EMS.
Device Pairing	Establish a secure bi-directional communications link with each device.
Device Data Export	Export data on devices for inventory management.

HAIVISION EMS SPECIFICATIONS

Standard Features:
- Web-based admin & management including:
  - Device Discovery
  - Device Pairing
  - Monitor Device States
  - Monitor Stream States
  - Individual Stream Control
  - Organization & Custom Labels
  - Device Firmware Upgrade
  - Device License Management
  - Device Data Export

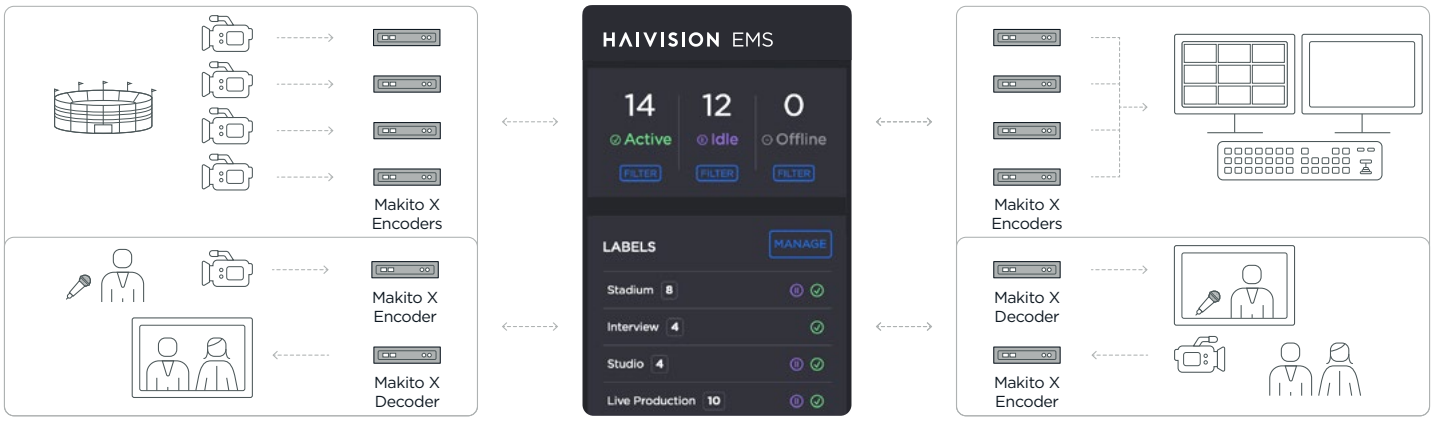
Supported Devices:
- Makito X Video Encoder
- Makito X Video Decoder
- Makito X HEVC Video Encoder
- Makito X HEVC Video Decoder
- Makito X4 Video Encoder
- Makito X4 Video Decoder
- Makito X4 Rugged Video Encoder
- Makito X1 Rugged Video Encoder

Server:
- Rack mountable
- Secure Linux Intel Xeon
- Dual redundant 350W hot-swappable power supplies
- 2x HDD RAID-1
- 2x GigE Base-T NIC
- 100-240 VAC

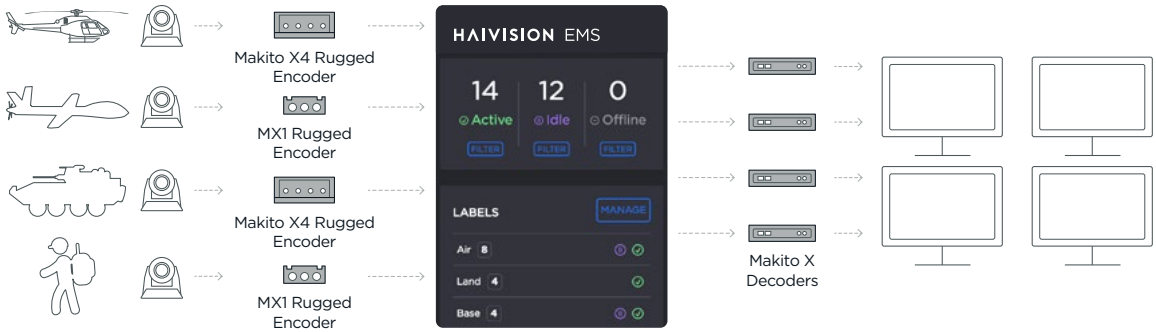
Weight and Dimensions (1RU):
- 13.73 kg / 30.28 lbs
- 42.8H x 434.0W x 570.23D (mm)
- 1.7H x 17.09W x 22.44D (in)

Virtual Machine:
- VMware
- VSphere ESXi v6.0.0 and above

Broadcast Use Case



ISR Use Case



Haivision EMS Product Portfolio & Ordering Information **

Haivision EMS Server	S-EMS-BASE-100	Base Edition Server – up to 100 devices
Haivision EMS Virtual Machine	VM-EMS-BASE-100	Base Edition ESXi VM – up to 100 devices

** For complete pricing and ordering, contact us at sales@haivision.com or your certified Haivision reseller.