Cisco MXE 3000 Media Experience Engine Data Sheet

The Cisco® MXE 3000® Media Experience Engine is media-processing device that allows you to create different media experiences that you can share across the network from any source to any video endpoint. This network-based appliance also provides postproduction capabilities such as video composition, authoring, watermarking, and text and image overlays.

Features and Benefits

"Any Media-to-Any Device" Experience

The Cisco MXE 3000 uses market-leading technology to rapidly and reliably repurpose media assets for different media applications. With unparalleled reliability, it automatically ingests content from any source file, preprocesses it for optimal online viewing quality and experience, simultaneously encodes it into any number of web formats, and delivers finished files to servers or content-delivery networks for viewing.

Automated Workflow

The Cisco MXE 3000 automates the critical workflow components for producing video-on-demand (VoD) content and scales in output capacity to provide the first automated enterprise-grade VoD production solution. The Cisco MXE 3000 supports precanned templates that you can apply to transcoding jobs, thereby significantly streamlining the operational overhead traditionally associated with media processing.

Postproduction Capabilities

The graphics capabilities of the Cisco MXE 3000 synchronizes video and metadata with graphic templates during transcoding to produce dynamic multilayered titles, branded graphics, subtitles, captions, and animations. Overlays are suitable for both small- and large-screen applications.

Integration with Cisco Suite of Digital Media Solutions

The Cisco MXE 3000 works transparently with a host of media applications. For example, content produced by the Cisco MXE 3000 integrates with the Cisco Digital Media System (DMS) solution, allowing you to upload and distribute processed content to a variety of endpoints using the Cisco DMS Video Portal. Table 1 summarizes the features and benefits of the Cisco MXE 3000.

Table 1. Features and Benefits of Cisco MXE 3000

Feature	Benefit
Easily deployed appliance	This high-performance, self-contained solution reduces operating overhead for installation and routine maintenance.
Support for most popular web and mobile formats	Industry's widest array of formats is constantly updated, so your media reaches the broadest possible audience.
High-performance batch encoding	The Cisco MXE 3000 dramatically reduces the time to produce time-sensitive media.
Optimized high-quality preprocessing	Proprietary preprocessing architecture creates stunning output quality.
Unified, automated workflow	The profile system boosts production reliability and output consistency; it simultaneously encodes into all popular formats and data rates.
Production system integration	The Cisco MXE 3000 ingests content from Mac- and Windows-based postproduction systems, broadcast servers, or asset-management systems.
Cisco MXE 3000 Folder Attendant	Folder Attendant automates file and metadata submission for any system.
Metadata preservation	The solution carries valuable metadata through the production process for simplified media labeling, categorization, archive, and search.
Extensible to custom environment	Application programming interfaces (APIs) let you extend automation to other parts of your unique workflow.
Transparent integration with Cisco DMS	You can view processed media on the Cisco DMS Video Portal, and you can systematically catalogue video content libraries to improve search capabilities.
Advanced graphics overlays	• Automated workflow for creating on-demand graphics replaces manual, nonlinear editor-based graphics production, freeing systems and personnel for other tasks. • You can target overlay content to specific audiences for branding and advertising. • The solution scales to provide automated graphics capability to new and existing Cisco MXE systems. • Extensible features and capabilities are easily added to existing Cisco MXE deployments. • You can produce multiple brands of programs that share identical video and metadata simultaneously, saving both time and money.

Product Specifications

Table 2 summarizes the specifications of the Cisco MXE 3000.

Table 2. Product Specifications

Supported input formats	• Editing systems • Avid • Final Cut Pro • Adobe Premiere AVI • DVD VoB files • QuickTime: All supported formats • MPEG-1: Elementary Stream, System Stream, and Layer II • Audio MPEG-2: Elementary, Program, and Transport Stream; and PCM Audio, Layer II Audio, and AC3 Audio • MPEG-4: Third-Generation Partnership Project (3GPP) and 3GPP2 • AVI: All supported formats • DirectShow: All supported formats • WAV • Windows Media • VC-1 • H.264

Supported output formats	• Windows Media: V7, V8, V9, MPEG-4V3, and ISO-MPEG4-V1 • Windows Media Audio: V2, V7, V8, ACELP.net, RealVideo10, RealVideo 9, RealVideo 8, RealAudio 10, and RealAudio 8 • QuickTime: All supported codecs • MPEG-4 • on2 Flash 8 • MP3 • WAV
Preprocessing and media preparation	• Video: Blur, bumpers and trailers, color space conversion, contrast enhancement, cropping, de-interlacing and interlacing, fade in, and fade out • In and out trimming: Field frame control, gamma correction, hue rotation, inverse telecine, noise reduction, saturation, support for 16 x 9 and other aspect ratios, add and remove letter boxing and curtaining, temporal smoothing, video frame rate conversion and resizing with antialias filtering watermarking, automated, and thumbnail extraction
Workflow automation	Job submission • Profile building: An automated system that allows you to quickly apply customized processing settings to new jobs • Monitoring: A summary screen that provides insight into the status of queued jobs • Automated Folder Attendant : A program that facilitates integration between external systems and the Cisco MXE 3000 platform
System features	• Auto job restart • File distribution • Status notification

Environmental Operating Ranges

Table 3 gives environmental properties of the Cisco MXE 3000.

Table 3. Environmental Properties

Operating Ranges	
Temperature	50 to 95℉ (10 to 35℃)
Relative humidity	10 to 90% relative humidity (RH), 82.4℉ (28℃) maxi mum wet bulb temperature, noncondensing
Altitude	10,000 ft (3000m); this value may be limited by the type and number of options installed; maximum allowable altitude change rate is 1500 ft/min (457m/min)
Shock	2 G's
Vibration	Random vibration at 0.000075 G^2/Hz, 10 to 300 Hz, (0.15 G's nominal)
Acoustic noise	40 dBA
Nonoperating Ranges	
Temperature	-40 to 158℉ (-40 to 70℃)
Relative humidity	5 to 95% RH, 101.7℉ (38.7℃) maximum wet bulb temp erature, noncondensing
Altitude	30,000 ft (9000m) maximum allowable altitude change rate: 1500 ft/min (457m/min)
Shock	15 G's
Vibration	Random vibration at 0.0005 G^2/Hz, 10 to 500 Hz, (0.5 G's nominal)
Acoustic noise	40 dBA
Power Input (per power supply)	
Range line voltage	90 to 264 VAC
Normal line voltage	110 to 240 VAC
Current	6A (110V); 3A (220V)
Frequency	47 to 63 Hz
Range line voltage	90 to 264 VAC
Normal line voltage	110 to 240 VAC

Output (per power supply)	
Steady state	400W (at 100 VAC and 200 VAC)
Maximum peak	400W (at 100 VAC and 200 VAC)
Maximum heat dissipation	1836 BTU/hr (at 100 VAC); 1706 BTU/hr (at 200 VAC)
Physical Specification	
Form factor	1 rack unit (1RU) – Rack-mount
Dimensions (H x W x D)	1.70 x 17.64 x 26.85 in. (4.32 x 44.80 x 68.19 cm)
Weight	33.50 lb (15.20 kg)
Interfaces	
Ethernet	Dual 10/100/1000
USB	4, total
Regulatory and Standards Compliance	
Safety	UL 60950-1, 1st Edition, 2006-07-07 Part1, CSA C22.2 No.60950-1-03, 1st Edition, 2006-07 Part1
Electromagnetic Compliance (EMC)	CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; and GB9254

Ordering Information

To place an order, visit the Cisco Ordering Home Page and refer to Table 4. To download software, visit the Cisco Software Center.

Table 4. Ordering Information

Product Name	Part Number
Cisco MXE 3000 Media Experience Engine Appliance (hardware only)	MXE-3000
Cisco MXE 3000 Media Experience Engine Software Version 2.0 (software only)	MXE-3000-LIC

Service and Support

Using the Cisco Lifecycle Services approach, Cisco and our partners provide a broad portfolio of end-to-end services and support that can help increase the business value of your network and your return on investment. This approach defines the minimum set of activities needed, by technology and by network complexity, to help you successfully deploy and operate Cisco technologies and optimize their performance throughout the lifecycle of your network.

For More Information

For more information about the Cisco MXE 3000, visit http://www.cisco.com/go/mxe.

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