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# **Cisco TelePresence MX Series**

# MX200 and MX300 Multipurpose Value Line

# **Product Overview**

The Cisco TelePresence<sup>®</sup> MX Series makes telepresence more accessible to teams everywhere with the MX200 and MX300 value line, featuring ready-to-use simplicity and high quality at value pricing. The 42-inch Cisco TelePresence MX200 and 55-inch Cisco TelePresence MX300 endpoints represent the highly-integrated value line within Cisco's MX Series multipurpose telepresence family. The MX200 and MX300 systems are as easy to install as a television and priced for large-scale deployment, so you can quickly and easily transform any meeting space into a telepresence-enabled team room. Whether you are just getting started with video communications or are planning to video-enable your entire organization, the Cisco TelePresence MX200 and MX300 can meet your needs, delivering 1080p high-definition performance in a simple, intuitive design (Figure 1).



Figure 1. Cisco TelePresence MX300 and MX200 on Floor Stand

Installed in approximately 15 minutes, the Cisco TelePresence MX200 and MX300 endpoints reinvent the team meeting room experience. The systems offer the high-quality, easy-to-use telepresence experience that you have come to expect from Cisco, combined with simple installation, global service, and a price performance that makes broad deployment easier and more affordable than ever.

The Cisco TelePresence portfolio creates an immersive, in-person experience over the network - bridging time and space to facilitate team collaboration like never before. Through a powerful combination of technologies and design innovations, the Cisco TelePresence experience allows you and remote participants to feel like you are all in the same room. The Cisco TelePresence portfolio also offers significant opportunity for productivity gains and process improvements that can transform your business. Many organizations are already using it to manage costs, make decisions faster, improve customer intimacy, scale scarce resources, and speed products to market.

#### Features and Benefits

Figure 2. Cisco TelePresence MX200 in Small Team Room Environment



Figure 3. Cisco TelePresence MX300 in Medium Team Room Environment



- The Cisco TelePresence MX200 and MX300 endpoints are easy to install. The installation includes one piece plus your choice of configuration (floor stand or wall mount) MX200 also offers table stand option.
- The systems are self-configuring; with Cisco<sup>®</sup> Unified Communications Manager (UCM), Cisco TelePresence Video Communication Server (VCS), or Cisco WebEx Telepresence network provisioning, all you need to configure your system is to authenticate your endpoint to the network.
- Cisco TelePresence PrecisionHD Camera with pan, tilt, and 4x optical zoom helps ensure optimal framing and video clarity.
- Dedicated camera presets provide flexibility and easy viewing for any meeting scenario.
- An eight-inch Cisco TelePresence Touch interface offers simple control.
- Simple "one-button-to-push" calling integrates with common calendaring programs.
- Video resolutions of 1080p30 and 720p60 bring the Cisco TelePresence experience to any team meeting room or office.

- The high-quality, 42-inch (MX200) and 55-inch (MX300) displays with clear 1920 x 1080 resolution offer crisp, clear images.
- Collaboration is natural with wide-extended-graphics-array (WXGA), 720p30 content sharing, and transparent one-touch sharing of HD content.
- The systems support H.323 and Session Initiation Protocol (SIP) with bandwidth up to six Mbps point-topoint.
- Two front speakers provide superior, optimized audio.
- The systems are standards-based for immediate connectivity to anyone regardless of system from PC video or immersive telepresence, to a meeting room around the globe.
- The scalable and transparent multipoint capabilities of Cisco TelePresence Multiway feature provide capabilities for large conferences, efficient bandwidth usage, transparent escalation from point-to-point to multipoint (ad-hoc) calls, and a virtual meeting space for scheduled or ad-hoc multipoint conferences.
- Connect and share your PC content at high resolution and frame rate with a touch of your finger.
- Search for your contacts in directories; create and store your own favorites; manually dial out to other Cisco Unified Communications devices; and connect through the network or through firewalls to any device (video or voice) or protocol.

# **Product Specifications**

Table 1 lists the physical specifications. Table 2 lists video and audio specifications. Table 3 lists network, security, and management specifications. Table 4 provides ordering information for the Cisco TelePresence MX Series.

Product compatibility	Fully compatible with standards-compliant telepresence and video systems			
Software	Cisco TelePresence MX200	Cisco TelePresence MX300		
compatibility	Cisco TelePresence Software Version TC 4.2 or later	Cisco TelePresence Software Version TC 5.0 or later		
Components	Fully integrated unit including:			
	Codec			
	• Display			
	<ul> <li>Camera</li> <li>Integrated microphone and loudspeakers</li> <li>Cisco TelePresence MX200 comes standard with one Cisco TelePresence Table Microphone 20; Cisco TelePresence MX300 comes standard with two microphones</li> </ul>			
	Cables including: VGA-to-DVI-I cable, 3.5-mm jack audio cable, LAN cable, and power cable			
Display	Cisco TelePresence MX200	Cisco TelePresence MX300		
	<ul> <li>42-inch LCD monitor</li> </ul>	<ul> <li>55-inch LCD monitor</li> </ul>		
	<ul> <li>Resolution: 1920 x 1200 (16:9)</li> </ul>	• Resolution: 1920 x 1200 (16:9)		
	Contrast ratio: 2500:1	Contrast ratio: 5000:1		
	<ul> <li>Viewing angle: 178°</li> </ul>	<ul> <li>Viewing angle: 178 °</li> </ul>		
	Response time: 8 ms	Response time: 10 ms		
	Brightness: 550cd/m2	Brightness: 450 cd/m2		
PC and second- source video input	DVI-I			
Supported PC input resolutions	SVGA (800 x 600) to 1080p (1920 x 1080)			

 Table 1.
 Product Specifications

Camera	<ul> <li>Cisco TelePresence PrecisionHD Camera: 1080p HDx4</li> <li>Resolutions: 1080p30 and 720p60</li> <li>Auto-focus</li> <li>Wide-angle 72-degree horizontal field of view 4x optical zoom</li> <li>Pan +/-100 degrees</li> <li>Tilt +/-25 degrees</li> </ul>		
Audio system	<ul> <li>Integrated full-range speaker and bass</li> <li>Integrated full-range microphone</li> <li>Bluetooth-ready</li> <li>Support for two Cisco TelePresence Table Microphone 20</li> <li>RCA PC audio input</li> <li>RCA audio output</li> </ul>		
User interface	Eight-inch Cisco TelePresence Touch interface <ul> <li>Eight-inch projected capacitive touch screen</li> <li>Resolution: 800 x 480</li> </ul>		
Language support	English		
Physical dimensions (H x W x D)	Cisco TelePresence MX200 main unit with: • Floor stand: 56.3 x 40.4 x 23.7 in (1429 x 1026 x 602 mm) • Table stand: 30.7 x 40.4 x 10.2 in (781 x 1026 x 259 mm) • Wall-mount: 29.8 x 40.4 x 6.7 in (757 x 1026 x 169 mm)	Cisco TelePresence MX300 main unit with: • Floor stand: 60.0 x 50.4 x 26.4 in (1523 x 1280 x 671 mm) • Table stand: NA • Wall-mount: 37.1 x 50.4 8.5 in (942 x 1280 x 217 mm)	
Weight	Cisco TelePresence MX200 main unit (all weight without packaging): • Floor stand configuration - 89 lb (40.2 kg) • Table stand configuration - 69 lb (31.5 kg) • Wall-mount configuration - 66 lb (30 kg) • Main unit only - 57 lb (26 kg)	Cisco TelePresence MX300 main unit (all weight without packaging): • Floor stand configuration - 113 lb (51.3 kg) • Table stand configuration - NA • Wall-mount configuration - 76 lb (34.4 kg) • Main unit only - 66 lb (30.1 kg)	
Power	Autosensing power supply 100-240 VAC, 50/60 Hz MX200: Power consumption: 160W at maximum and 130W at nominal standardized configuration MX300: Power consumption: 250W at maximum and 200W at nominal standardized configuration		
Temperature range	<ul> <li>Operating temperature and humidity:</li> <li>Ambient temperature: 32 to 95<sup>+</sup> (0 to 35<sup>+</sup>C)</li> <li>Relative humidity (RH): 10 to 90 percent</li> <li>Storage and transport temperature at RH 10-90% (noncondensing): -4 to 140<sup>+</sup> (-20 to 60<sup>+</sup>C)</li> </ul>		
Approvals and compliance	<ul> <li>Directive 2006/95/EC (Low-Voltage Directive) - Standard EN 60950-1</li> <li>Directive 2004/108/EC (EMC Directive) - Standard EN 55022, Class A - Standard EN 55024 - Standard EN 61000-3-2/-3-3</li> <li>Approved according to UL 60950-1 and CSA 60950-1-07</li> <li>Compliance with FCC15B Class A</li> </ul>		

#### Table 2. Video and Audio Specifications

Bandwidth	H.323 and SIP up to 6 Mbps point-to-point	
Video standards	<ul> <li>H.261</li> <li>H.263</li> <li>H.263+</li> <li>H.264</li> </ul>	
Video features	<ul> <li>Widescreen: 16:9</li> <li>Advanced screen layouts</li> <li>Intelligent video management</li> <li>Local auto-layout</li> </ul>	

Live video	• 176 x 144 @ 30 fps (QCIF)	• 1280 x 768 @ 30 fps (WXGA)	
resolutions	<ul> <li>352 x 288 @ 30 fps (CIF)</li> </ul>	<ul> <li>1920 x 1080 @ 30 fps (1080p30)<sup>*</sup></li> </ul>	
(encode/ decode)	<ul> <li>512 x 288 @ 30 fps (w288p)</li> </ul>	• 1440 x 900 @ 30 fps (WXGA+) <sup>*</sup>	
,	<ul> <li>576 x 448 @ 30 fps (448p)</li> </ul>	<ul> <li>1680 x 1050 @ 30 fps (WSXGA+)<sup>*</sup></li> </ul>	
	<ul> <li>768 x 448 @ 30 fps (w448p)</li> </ul>	<ul> <li>1600 x 1200 @ 30 fps (UXGA)<sup>*</sup></li> </ul>	
	<ul> <li>704 x 576 @ 30 fps (4CIF)</li> </ul>	<ul> <li>512 x 288 @ 60 fps (w288p60)<sup>*</sup></li> </ul>	
	<ul> <li>1024 x 576 @ 30 fps (w576p)</li> </ul>	<ul> <li>768 x 448 @ 60 fps (w448p60)<sup>*</sup></li> </ul>	
	<ul> <li>640 x 480 @ 30 fps (VGA)</li> </ul>	<ul> <li>1024 x 576 @ 60 fps (w576p60)<sup>*</sup></li> </ul>	
	<ul> <li>800 x 600 @ 30 fps (SVGA)</li> </ul>	• 1280 x 720 @ 60 fps (720p60)	
	<ul> <li>1024 x 768 @ 30 fps (XGA)</li> </ul>	* Requires premium resolution option	
	• 1280 x 1024 @ 30 fps (SXGA)		
	<ul> <li>1280 x 720 @ 30 fps (720p30)</li> </ul>		
Audio standards	• G.711		
	• G.722		
	• G.722.1		
	<ul> <li>64/128 kbps MPEG4 AAC-LD</li> </ul>		
Audio features	<ul> <li>CD-quality 20-kHz stereo</li> </ul>		
	Acoustic echo canceling		
	Automatic gain control		
	Automatic noise reduction		
	<ul> <li>Active lip synchronization</li> </ul>		
Dual stream	<ul> <li>H.239 (H.323) dual stream</li> </ul>		
	BFCP (SIP) dual stream		
<ul> <li>Support for resolutions up to 720p30 in both main stream and dual stream simultaneously</li> </ul>			

#### Table 3. Network, Security, and Management Specifications

Protocols	<ul> <li>H.323</li> <li>SIP</li> <li>ISDN (requires Cisco TelePresence ISDN Link)</li> </ul>
Network interfaces	One LAN or Ethernet (RJ-45) 10/100/1000 Mbps for LAN
Other interfaces	<ul> <li>Bluetooth for future applications</li> <li>RJ-45 for service</li> </ul>
IP network features	<ul> <li>Domain Name System (DNS) lookup for service configuration</li> <li>Differentiated Services (quality of service [QoS])</li> <li>IP adaptive bandwidth management (including flow control)</li> <li>Auto-gatekeeper discovery</li> <li>Dynamic playout and lip-sync buffering</li> <li>H.245 dual-tone multifrequency (DTMF) tones in H.323</li> <li>Date and time support with Network Time Protocol (NTP)</li> <li>Packet loss-based downspeeding</li> <li>DNS-based URI dialing</li> <li>TCP/IP</li> <li>Dynamic Host Configuration Protocol (DHCP)</li> <li>IEEE 802.1x network authentication</li> <li>IEEE 802.1q VLAN</li> <li>Medianet: Mediatrace and Metadata</li> </ul>
Firewall traversal	<ul> <li>Cisco TelePresence VCS Expressway technology</li> <li>H.460.18 and H.460.19 firewall traversal</li> </ul>
Embedded encryption	<ul> <li>H.323 and SIP point-to-point</li> <li>Standards-based: H.235v3 and Advanced Encryption Standard (AES)</li> <li>Automatic key generation and exchange</li> <li>Support in dual stream</li> </ul>

<ul> <li>Management through Secure HTTP (HTTPS) and Secure Shell (SSH) Protocol</li> <li>IP administration password</li> <li>Menu administration password</li> <li>Disable IP services</li> <li>Network settings protection</li> </ul>
<ul> <li>Multiway conferencing helps enable video endpoint users to introduce a third party into an existing call utilizing a Cisco TelePresence MCU</li> </ul>
<ul> <li>Support for the Cisco TelePresence Management Suite (TMS) and Cisco TelePresence Multipoint Switch (with software release TC 5.0 or later)</li> <li>Total management through embedded Simple Network Management Protocol (SNMP), Telnet, SSH, XML, and Simple Object Access Protocol (SOAP)</li> <li>Remote software upload: Through web server, Secure Copy Protocol, HTTP, and HTTPS</li> </ul>
<ul> <li>Support for local directories (My Contacts)</li> <li>Corporate directory</li> <li>Unlimited entries using server directory supporting</li> <li>Lightweight Directory Access Protocol (LDAP) and H.350</li> <li>Unlimited number for corporate directory (available with Cisco TelePresence Management Suite)</li> <li>Local directory: 200 numbers</li> <li>Received calls</li> <li>Placed calls</li> <li>Missed calls with date and time</li> </ul>

# **Ordering Information**

To place an order, please contact your local Cisco representative and refer to Table 4.

#### Table 4. Ordering Information

Product Name	Part Number	Compliance Model Number
Cisco TelePresence MX300	CTS-MX300-55-K9	TTC60-16
MX300 Premium Resolution Option	LIC-MX300-55-PR	
Cisco TelePresence MX200	CTS-MX200-42-K9	TTC60-15
MX200 Premium Resolution Option	LIC-MX200-42-PR	

# **Cisco Service and Support**

Cisco and our partners provide a broad portfolio of smart, personalized services and support that can help you realize the full business value of your Cisco TelePresence investment by increasing business agility and network availability. This portfolio of services accelerates business innovation by harnessing the network as a powerful business platform. For more information about these services, please visit: http://www.cisco.com/go/telepresenceservices.

#### For More Information

For more information about the Cisco TelePresence MX Series, visit <u>http://www.cisco.com/go/telepresence</u> or contact your local Cisco account representative.



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