

# Cisco TelePresence MX700 & MX800

Cisco TelePresence MX700 and MX800 represent the performance line within Cisco's portfolio of integrated video collaboration room systems. They combine beautiful design and powerful functionality into an all-in-one solution for medium-to-large meeting rooms. These multipurpose systems will transform your meeting room into a video collaboration hub - whether for connecting teams across the globe or for local meetings. The MX700 features dual 55-inch LED monitors for a people+people or people+content experience, while the MX800's 70-inch single LED monitor offers a peopled-focused solution.

The MX700 and MX800 systems come standard with a built-in amplifier and speaker system for the ultimate high fidelity sound. You can choose from a powerful single camera or an intelligent dual-camera speaker-tracking solution; both cameras deliver the best possible video imaging with up to1080p60 resolution. Premium resolution and dual display are also standard features on the MX700 and MX800. The intuitive Cisco TelePresence Touch 10 provides an ever so easy-to-use interface for both MX700 and MX800 systems.

Industry standards compliance lets the MX700 and MX800 support calls with any third party, standards-based system. Support for H.264 SVC also means the MX700 and MX800 can interoperate with software-based video conferencing solutions. And, as the industry's only H.265-ready systems, the MX700 and MX800 lay the foundation for future bandwidth efficiencies made possible by the new standard.

Figure 1. Cisco TelePresence MX700 Features Dual 55-inch Screens (Dual Camera Shown is Available as an Option for Both the MX700 and MX800)



Figure 2. Cisco TelePresence MX800 Features a 70-inch Single Screen



## **Product Features**

Table 1 summarizes the key features for the MX700 and MX800 systems.

 Table 1.
 Feature Summary

Feature Summary	
Design features	<ul> <li>One of the most powerful and feature-rich video systems available with the ultimate in video and audio quality</li> <li>The next generation HD video collaboration codec</li> <li>The next generation HD PTZ camera</li> <li>Everything you need in one unit (Screens, speakers, codec, camera, User Interface, Microphones, mounting)</li> <li>Wallmount or Floorstand (2 Floorstand options included: Freestand and wall secured floorstand)</li> <li>Industry first built-in speaker tracking system as option</li> </ul>
Application features	<ul> <li>1080p30 HD embedded Cisco TelePresence MultiSite with individual transcoding</li> <li>Collaborate with four simultaneous video inputs</li> <li>HD collaboration with 1080p60 main and 1080p30 content</li> <li>One button to push (OBTP) to start a meeting</li> <li>Ideal for team-based collaboration, boardrooms, meeting rooms and video centric rooms</li> <li>Dual presentation outside of a call (increase usage of system outside of a call - use the MX700 dual screens to compare 2 presentations/documents)</li> </ul>
Performance features	<ul> <li>Optimal definition up to 1080p60</li> <li>H.323/SIP up to 10 Mbps point-to-point</li> <li>Up to 10 Mbps total MultiSite bandwidth</li> <li>Ability to connect up to four HD sources and 8 microphones directly to the codec</li> <li>Full duplex audio with high-quality stereo sound</li> <li>Full application programming interface (APIs)</li> <li>Ability to take advantage of Cisco TelePresence Total Solution Management, transcoded HD MultiSite, recording and streaming, Ad-hoc Conferencing, and firewall traversal</li> <li>Cisco TelePresence ClearPath packet loss protection technology for optimal experience</li> <li>Cisco Unified Communications Manager native support (requires Cisco Unified Communications Manager version 8.6 or higher)</li> </ul>

## **Product Specifications**

Table 2 lists the product specifications; Table 3 gives video and audio specifications; Table 4 gives network, security, and management specifications; and Table 5 gives ordering information for the Cisco TelePresence MX700 and MX800.

 Table 2.
 Product Specifications

Software compatibility	Cisco TelePresence MX700 and MX800 Cisco TelePresence Software Version TC 7.2 or later		
Components	Fully integrated unit including:  Codec  Display  Camera (2 cameras as option)  Loudspeakers  Cisco TelePresence Table Microphone 60 (two microphones are included in base package)  Cables included: DVI-I-to-VGA cable with Euroblock to 3.5-mm jack audio cable, HDMI to HDMI, LAN cable, and power cable		
Display	Cisco TelePresence MX700:  • 2x 55-in. (1.4m) TFT-LCD monitor, edge-lit LED  • Resolution: 1920 x 1080 (16:9)  • Contrast ratio: Typical 4000:1  • Viewing angle: +/-178 deg  • Response time: Typical 8 ms  • Brightness: Typical 450 cd/m2  Cisco TelePresence MX800  • 70-inch TFT-LCD monitor, edge-lit LED  • Resolution: 1920 x 1080 (16:9)  • Contrast ratio: Typical 4000:1  • Viewing angle: +/- 176 deg  • Response time: Typical 8 ms  • Brightness: 350 cd/m2		
PC and second-source video input	DVI-I Two HDMI (if Dual camera option is installed, only one HDMI) One standard definition (composite or S-video)		
Supported PC input resolutions	SVGA (800 x 600) up to 1080p (1920 x 1080)		
Camera overview	Cisco TelePresence MX700 and MX800  • 20x total zoom (10x optical,2x digital zoom)  • Motorized +20°/-20° tilt, +/-90° pan  • 80° horizontal field of view  • 48.8° vertical field of view  • F 1.5		
	Resolutions: 1080p60 and 720p60 Automatic or manual focus, brightness, and white balance Far-end camera control Camera control over Ethernet Focus distance 3.28 ft (1m) to infinity		
Audio system	<ul> <li>Integrated full-range multichannel and bass speakers</li> <li>400W amplifier system</li> <li>See table 3 for codec audio capabilities</li> </ul>		
User interface	Cisco TelePresence Touch 10 interface (Reference Touch 10" DataSheet)  • 10 inch projected capacitive touch screen  • Resolution: 1280 x 800		
Language support	English, Arabic, Catalan, Czech, Danish, Dutch, Finnish, French, German, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese-Brazilian, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish.SW Version TC7		

System management	Support for the Cisco TelePresence Management Suite     Total management via embedded, Telnet, SSH, XML, and SOAP     Remote software upload via web server, SCP, HTTP, and HTTPS     One RS-232 for local control and diagnostics     Support for Cisco Telepresence Touch 10
Directory services	<ul> <li>Support for local directories (My Contacts)</li> <li>Corporate directory (through CUCM and Cisco TMS)</li> <li>Server directory supporting LDAP and H.350 (requires Cisco TelePresence Management Suite)</li> <li>Call History with received, placed and missed calls with date and time</li> </ul>
Power	MX700  • Auto-sensing power supply • 100-120/200-240 VAC, 50/60 Hz • 170 watt maximum for codec and main camera • Standby Power Consumption single cam/dual cam: 129W/140W • Average Power Consumption single cam/dual cam: 504W/525W • Max Power Consumption single cam/dual cam: 548W/573W  MX800 • Auto-sensing power supply • 100-120/200-240 VAC, 50/60 Hz • 170 watt maximum for codec and main camera • Standby Power Consumption single cam/dual cam: 106W/118W • Average Power Consumption single cam/dual cam: 297W/324W • Max Power Consumption single cam/dual cam: 327W/355W
Temperature and humidity range	<ul> <li>0 to 40° (32 to 104° F) ambient temperature</li> <li>10 to 90% relative humidity (RH)</li> <li>Storage and transport temperature at RH 10-90% (noncondensing): -4 to 140°F (-20 to 60°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>Directive 2011/65/EU (RoHS)</li> <li>Approved according to UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07</li> <li>Compliance with FCC15B Class A</li> </ul>

# **Product Capabilities**

Table 3 lists the product capability specifications for the MX codec.

 Table 3.
 Product Specifications

Specification	Description		
Product delivered complete with	One mounting option, single or dual camera option, Cisco Touch 10, MX Codec, complete audio system, 2x Cisco Mic 60, 2 presentation cables.		
Bandwidth	H.323/SIP up to 10 Mbps point-to-point     Up to 10 Mbps total MultiSite bandwidth		
Minimum bandwidth for resolution/frame rate (H.264)	<ul> <li>720p30 from 768 kbps</li> <li>720p60 from 1152 kbps</li> <li>1080p30 from 1472 kbps</li> <li>1080p60 from 2560 kbps</li> </ul>		
Firewall traversal	Cisco Expressway technology     H.460.18 and H.460.19 firewall traversal		
Video standards	H.261, H.263, H.263+, H.264 and H.265 (SIP only for H.265)		
Video features	Advanced screen layouts     Custom video layouts     Local auto layout		

Specification	Description
Video inputs (five	Three HDMI Inputs; supported formats:
inputs)	• 1920 x 1080@60 and 59.94 Hz (1080p60)
	• 1920 x 1080@50 Hz (1080p50)
	• 1920 x 1080@30 and 29.97 Hz (1080p30)
	• 1920 x 1080@25 Hz (1080p25)
	• 1920 x 1080@24, and 23.97 Hz (1080p24)
	• 1280 x 720@60, and 59.94 Hz (720p60)
	• 1280 x 720@50 Hz (720p50)
	• 720 x 480@60, and 59.94 Hz (480p60)
	• 640 x 480@60 Hz (480p60)
	• 1280 x 1024@60, and 75 Hz (SXGA)
	• 1024 x 768@60, 70, 75, and 85 Hz (XGA)
	• 800 x 600@56, 60, 72, 75, and 85 Hz (SVGA)
	• 1680 x 1050@60 Hz (WSXGA+)
	• 1440 X 900@60 Hz (WXGA+)
	• 1280 x 768@60 Hz (WXGA)
	One DVI-I Input; supported formats:
	Analog (VGA):
	• 1920 x 1080@60 Hz (1080p)
	• 1280 x 720@60 Hz (720p)
	• 1280 x 1024@60 and 75 Hz (SXGA)
	• 1280 x 960@60 Hz
	• 1024 x 768@60, 70, 75, and 85 Hz (XGA)
	• 1680 x 1050@60 Hz (WSXGA+)
	• 1440 x 900@60 Hz (WXGA+)
	• 1280 x 800@60 Hz (WXGA)
	• 1280 x 768@60 Hz (WXGA)
	Digital (DVI-D):
	• 1920 x 1080@60, 59.94 Hz (1080p60)
	• 1920 x 1080@50 Hz (1080p50)
	• 1920 x 1080@30, 29.97 Hz (1080p30)
	• 1920 x 1080@25 Hz (1080p25)
	• 1920 x 1080@24, 23.97 Hz (1080p24)
	• 1280 x 720@60, 59.94 Hz (720p60)
	• 1280 x 720 @ 50, 55.54 112 (120 poo)
	• 720 x 480@60, 59.94 Hz (480p60)
	• 640 x 480@60 Hz (480p60)
	• 1280 x 1024@60, 75 Hz (SXGA)
	• 1024 x 768@60, 70, 75, 85 Hz (XGA)
	• 800 x 600@56, 60, 72, 75, 85 Hz (SVGA)
	• 1680 x 1050@60 Hz (WSXGA+)
	• 1440 X 900@60 Hz (WXGA+)
	• 1280 x 768 @ 60 Hz (WXGA)
	One Composite/S-video Input (BNC Connectors)
	PAL/NTSC
	HDMI input 1 is used for Main Camera (included in base package)
	HDMI input 2 is used in addition if Speaker Track Option (2 <sup>nd</sup> camera) is installed
	Extended Display Identification Data (EDID)
	Exicitive Display (defitilitioation)

Specification	Description
Video outputs (three outputs	Two HDMI Outputs and one DVI-I Output; supported formats:  • 1920 x 1080@60 Hz (1080p60)  • 1920 x 1080@50 Hz (1080p50)  • 1280 x 720@60 Hz (720p60)  • 1280 x 720@50 Hz (720p50)  MX700: HDMI output 1 & 2 are in use with the 2 screens  MX800: HDMI output 1 is in use with the screen  VESA Monitor Power Management  Extended Display Identification Data (EDID)
Live video resolutions (encode and decode)	<ul> <li>176 x 144@30 frames per second (fps) (QCIF)</li> <li>352 x 288@30 fps (CIF)</li> <li>512 x 288@30 fps (w288p)</li> <li>576 x 448@30 fps (448p)</li> <li>768 x 448@30 fps (w448p)</li> <li>704 x 576@30 fps (w476p)</li> <li>1024 x 576@30 fps (w576p)</li> <li>1280 x 720@30 fps (720p30)</li> <li>1920 x 1080@30 fps (1080p30)</li> <li>640 x 480@30 fps (VGA)</li> <li>800 x 600@30 fps (SVGA)</li> <li>1024 x 768@30 fps (XGA)</li> <li>1280 x 1024@30 fps (SXGA)</li> <li>1280 x 768@30 fps (WXGA)</li> <li>1280 x 768@30 fps (WXGA+)</li> <li>1680 x 1050@30 fps (WXGA+)</li> <li>1680 x 1050@30 fps (WXGA+)</li> <li>512 x 288@60 fps (w288p60)</li> <li>768 x 448@60 fps (w448p60)</li> <li>1024 x 576@60 fps (w576p60)</li> <li>1280 x 720@60 fps (720p60)</li> <li>1920 x 1080@60 fps (1080p60)</li> </ul>
Audio standards	G.711, G.722, G.722.1, G.729AB, 64 kbps and 128 kbps MPEG4 AAC-LD mono and stereo
Audio features	CD-quality 20 kHz mono and stereo Eight separate acoustic echo cancellers Eight-port audio mixer Automatic Gain Control (AGC) Automatic noise reduction Active lip synchronization
Audio inputs (fifteen inputs)	<ul> <li>Eight microphones, 48V phantom powered, Euroblock connector, each with separate echo cancellers and noise reduction; all microphones can be set for balanced line level (2 Microphones included in base package)</li> <li>Four balanced line level inputs, Euroblock connector (one balanced line level input used when VGA-DVI presentation cable is used)</li> <li>Three HDMI, digital: stereo PC/DVD input (one HDMI audio input used when HDMI-HDMI presentation cable is used)</li> </ul>
Audio outputs (eight outputs)	<ul> <li>Six balanced line level outputs, Euroblock connector</li> <li>Two HDMI outputs (MX700: Both HDMI audio outputs are used for the 2 screens. MX800: One HDMI audio output is used for the screen)</li> </ul>
Dual stream	<ul> <li>H.239 (H.323) dual stream</li> <li>BFCP (SIP) dual stream</li> <li>Support for resolutions up to 1080p30/WUXGA, and independent of main stream resolution</li> </ul>
MultiPoint support	<ul> <li>Five way embedded SIP/H.323 MultiPoint (reference MultiSite)</li> <li>Cisco Ad-Hoc Conferencing (requires CUCM, Cisco TelePresence Server and Conductor)</li> <li>Cisco Conferencing Active Control</li> </ul>

Specification	Description
MultiSite features (embedded MultiPoint)	<ul> <li>Five way 720p30 High Definition, three or four way 1080p30.</li> <li>Full individual audio and video transcoding</li> <li>Individual layouts in MultiSite continuous presence</li> <li>H.323/SIP/VoIP in the same conference</li> <li>Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15</li> <li>H.264, encryption, and dual stream from any site</li> <li>IP downspeeding</li> <li>Dial in and dial out</li> <li>Conference rates up to 10 Mbps</li> </ul>
Protocols	<ul> <li>H.323</li> <li>SIP</li> <li>Single call stack support, either H323 or SIP registration</li> <li>ISDN (requires Cisco TelePresence ISDN Link)</li> </ul>
Embedded encryption	<ul> <li>H.323/SIP point-to-point and MultiSite</li> <li>Standards-based: H.235 v3 and Advanced Encryption Standard (AES)</li> <li>Automatic key generation and exchange</li> <li>Supported in dual stream</li> </ul>
IP network features	<ul> <li>DNS lookup for service configuration</li> <li>Differentiated Services (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 DTMF tones in H.323</li> <li>Date and Time support via NTP</li> <li>Packet Loss based downspeeding</li> <li>URI Dialing</li> <li>TCP/IP</li> <li>DHCP</li> <li>802.1x Network authentication</li> <li>802.1Q Virtual LAN</li> <li>802.1p (QoS and class of service [CoS])</li> <li>ClearPath</li> <li>Medianet: Mediatrace and Metadata</li> </ul>
Cisco Unified Communications Manager (requires Cisco Unified Communications Manager Version 8.6 or later)	<ul> <li>Native registration with Cisco Unified Communications Manager</li> <li>Basic Cisco Unified Communication Manager provisioning</li> <li>Firmware upgrade from Cisco Unified Communications Manager</li> <li>Cisco Discovery Protocol and DHCP option 150 support</li> <li>Basic telephony features such as hold, resume, transfer, and corporate directory lookup</li> </ul>
IPv6 network support	<ul> <li>Dual-stack IPv4 and IPv6 for DHCP, Secure Shell (SSH), HTTP, Secure HTTP (HTTPS), DNS, and Differentiated Services (DiffServ)</li> <li>Support for both static and autoconfiguration (stateless address auto configuration)</li> </ul>
Security features	<ul> <li>Management through HTTPS and SSH</li> <li>IP administration password</li> <li>Menu administration password</li> <li>Disable IP services</li> <li>Network settings protection</li> </ul>
Network interfaces	<ul> <li>One LAN/Ethernet (RJ-45) 10/100/1000 Mbit</li> <li>Two LAN/Ethernet (RJ-45) interfaces to be used for Cisco TelePresence Peripherals</li> </ul>
Other interfaces	Two USB host for future usage GPIO

<sup>\*</sup> Requires option

### **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 MX700 dual 55", single camera option (comes with Cisco Touch 10, 2 microphones, 2 presentation cables, HDMI and VGA, and power cable)	CTS-MX700D-1CAM-K9	TTC60-17/TTC60-18		
Cisco TelePresence MX700 dual 55", dual camera option (comes with Cisco Touch 10, 2 microphones, 2 presentation cables, HDMI and VGA, and power cable)	CTS-MX700D-2CAM-K9	TTC60-17/TTC60-18		
Ordering Options for the Cisco TelePresence MX700				
Cisco MX800 70" Single Screen Floor Stand Kit freestand or secured to the wall (both options included)	CTS-MX700-D-FSK			
Cisco MX800 Dual Screen Wall Mount Kit - hangs on wall	CTS-MX700-D-WMK			
MX700 MultiSite Software Option	LIC-MX700-MS			
Product Name				
Cisco TelePresence MX800 single 70", single camera option (comes with Cisco Touch 10, 2 microphones, 2 presentation cables, HDMI and VGA, and power cable)	CTS-MX800S-1CAM-K9	TTC60-17/TTC60-18		
Cisco TelePresence MX800 single 70", dual camera option (comes with Cisco Touch 10, 2 microphones, 2 presentation cables, HDMI and VGA, and power cable)	CTS-MX800S-2CAM-K9	TTC60-17/TTC60-18		
Ordering Options for the Cisco TelePresence MX800				
Cisco MX800 70" Single Screen Floor Stand Kit freestand or secured to the wall (both options included)	CTS-MX800-S-FSK			
Cisco MX800 Single Screen Wall Mount Kit - hangs on wall	CTS-MX800-S-WMK			
MX800 MultiSite Software Option	LIC-MX800-MS			

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