Cisco TelePresence MCU 4200 Series
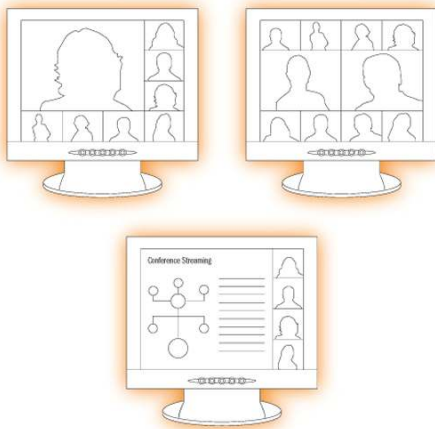
Figure 1.   Cisco TelePresence MCU 4200 Series

Product Overview

The Cisco TelePresence® MCU 4200 Series is the industry's leading standard-definition (SD) multimedia conferencing bridge (Figure 1). It delivers high-quality voice and video with an easy-to-use, versatile management interface. Compatible with all major vendors' endpoints, each model maintains its capacity and performance in every configuration, delivering an excellent experience for each participant, every time.

Figure 2.   Standards-Based and Compatible with All Major Vendors' Endpoints

Features and Benefits

Table 1 summarizes the key features of the Cisco TelePresence MCU 4200 Series, and Table 2 lists the models available.

Table 1.   Cisco TelePresence MCU 4200 Series Feature Summary

Feature	Benefit
Design features	• Standards-based and compatible with all major vendors' endpoints • Easy-to-use, versatile, management interface • Up to 40 video plus 40 voice ports • More than 50 custom layouts • Comprehensive wideband audio support • Support for both Session Initiation Protocol (SIP) and H.323 endpoints • Compact size: One rack unit (1U) tall and 19-in. rack-mountable

Feature	Benefit
Application features	• Supports Cisco TelePresence ConferenceMe for multipoint desktop video • Integrated with Cisco TelePresence Management Suite • Offers full interoperability with ISDN networks using standalone Cisco TelePresence ISDN Gateways • Compatible with Microsoft Office Communications Server • Fully integrated, with built-in gatekeeper and streaming server • Supports Cisco® PacketSafe technology, which minimizes effects of network packet loss • Supports Cisco TelePresence Multiway technology
Performance features	• Cisco TelePresence Universal Port technology, which helps ensure each participant receives an excellent experience • Constant high capacity • Bandwidth per site up to 4 Mbps • Video resolutions: 720p at up to 15 fps, and 480p at up to 30 fps • Standard-definition continuous presence • Latency as low as 60 ms

Table 2.   Cisco TelePresence MCU 4200 Series Models

Model	Continuous Presence Video Participants	Additional Voice Participants	Video Streaming Unicast[1]/Multicast
MCU 4203	6	6	24/unlimited
MCU 4205	12	12	24/unlimited
MCU 4210	20	20	40/unlimited
MCU 4215	30	30	60/unlimited
MCU 4220	40	40	80/unlimited

VFO-4203/VFO-4205/VFO-4200	Video firewall option - enables multipoint-control-unit (MCU) connection to additional networks (for example, the Internet)
HRO-4205/HRO-4210/HRO-4215/HRO-4220	High-resolution option - for resolutions above CIF and up to 720p at 15 fps and 480p at 30 fps
WCO-4203/WCO-4205/WCO-4210/WCO-4215/WCO-4220	Web conferencing option - includes ConferenceMe for multipoint desktop video[2]; alternatively provides content streaming, annotation, and chat capabilities

Using high bandwidth or resolution, H.264 or advanced continuous presence does not reduce the number of sites or conferences supported.
[1] Maximum number of unicast streams depends on network topology. When using the web conferencing option feature, the maximum number of unicast streams supported by the Cisco TelePresence MCU 4215 and MCU 4220 is 50.
[2] Allows up to 12 simultaneous ConferenceMe connections. On Cisco TelePresence MCU 4203 allows up to six simultaneous ConferenceMe connections.

Product Specifications

Table 3 lists the product specifications; Table 4 gives video and audio specifications; Table 5 gives network, security, and management specifications; and Table 6 lists the physical specifications for the Cisco TelePresence MCU 4200 Series.

Table 3.   Product Specifications

Product compatibility	• Standards-based and compatible with all major vendors' endpoints
Universal transcoding and transrating	• All calls are automatically audio and video transcoded and transrated • Any bandwidth, any resolution, or any video or audio codec can be used on any video call within the same conference • All participants have their own personal encodes • The series offers extremely low latency, at less than 60 ms

Streaming video	• Built-in streaming server
	• Ability to view using Windows Media Player, RealPlayer, or QuickTime
	• Streaming of slides (H.239 and Virtual Network Computing [VNC])
	• Text chat
	• Unicast and multicast
	• User Datagram Protocol (UDP), TCP, or HTTP
	• Independent choice of bandwidth and codec
Localization and customization	• Custom interactive voice response (IVR)/auto attendant audio prompts and graphics
	• Uploadable multilanguage support
Built-in gatekeeper	• Resolution of E.164 numbers
	• Registration of conferences, endpoints, and gateways
	• Ability to register up to 25 devices
Built-in web server	• Complete configuration, control, and monitoring of the system and conferences
Multipoint-control-unit (MCU) features	• H.323 dial in, or dial out from web server
	• Standalone or with gatekeeper
	• Configurable audio and video auto attendant
	• Advanced continuous presence as standard on all ports
	• Automatic selection of best layout
	• Individual layout selection using remote control or webpages
	• More than 50 custom layouts
	• Active speaker selection using remote control or voice activated
	• Floor assignment through webpage or management application
	• Far-end camera control tunneling using remote control or web
	• Text identification of sites
	• On-screen text messaging to individual or all sites
	• Built-in conference scheduling and reservation
	• On-demand and ad hoc conferences
	• Dual video using H.239
	• Automatic lecture mode
	• Preview of conference and individual camera on webpages
	• Web conferencing option - those without endpoints can still interact
	• Uploadable bitmaps for audio participants
	• Video association for IP and traditional private branch exchanges (PBXs)
	• Automatic connection to audio conferences
	• Cisco TelePresence Multiway technology, which enables many Cisco video endpoints to initiate ad hoc multiparty calls
Content features	• Presentation mode: You can add slides from your PC using VNC
	• Automatic content handover
	• Widescreen (16:9) support
Cisco TelePresence ConferenceMe	• Video, audio, and content sharing
	• Multiple layouts
	• Firewall friendly
	• Independent transcode per participant
	• Up to 12 simultaneous connections
High performance	• 720p up to 15 fps H.263 continuous presence; 480p up to 30 fps
	• Comprehensive HD audio
Language	• English as standard, but alternative language packs can be loaded onto the system

Table 4.   Video and Audio Specifications

Bandwidth	• H.263 up to 4 Mbps, H.264 up to 2 Mbps for each site in all conference modes, including advanced (symmetric) continuous presence
Video standards	• H.261, H.263, H.263+, H.263++, and H.264
Video resolution	• From QCIF to 480p at up to 30 fps and 720p (1280 x 720) at up to 15 fps, including interlaced iCIF and iSIF
	• 4:3 and 16:9 aspect ratios
Frame rates	• Up to 30 frames per second

Audio standards	• G.711, G.722, G.722.1, G.723.1, G.728, G.729, MPEG-4 AAC-LC, MPEG-4 AAC-LD, and Polycom Siren14/G.722.1 Annex C
Audio features	• Wideband audio mixing • Built-in and uploadable auto attendant voice prompts • Automatic gain control, adjustable gain, power indication, and individual audio mute using webpages

Table 5. Network, Security, and Management Specifications

Protocols	• H.323, SIP, H.235 (Advanced Encryption Standard [AES]), Secure Real-Time Transport Protocol (SRTP), Transport Layer Security (TLS), H.239 (dual video), VNC, Binary Floor Control Protocol (BFCP), H.243 (chair control), FTP, Real-Time Transport Protocol (RTP), (Real-Time Streaming Protocol (RTSP), HTTP, Secure HTTP (HTTPS), Dynamic Host Configuration Protocol (DHCP), Simple Network Management Protocol (SNMP), Network Time Protocol (NTP), NT LAN Manager (NTLM) (authentication), IPv4, and IPv6
Quality of service (QoS)	• Configurable differentiated services code point (DSCP) or type of service (ToS)/IP Precedence
Security features	• Seven levels of access rights and privileges for users • Password-protected conferences • Secure non-PC hardware and operating system • AES encryption, 128-bit key, and H.235 • SIP encryption • TLS certificate verification • Video firewall option - second Ethernet port
Interfaces	• Two RJ-45 Ethernet, 10-/100-/1000-Mbps full and half duplex, manual or autosensing • RJ-45 serial port • CompactFlash socket • Thirty-nine status LEDs
System management	• XML management application programming interface (API) • Management through built-in web server • RS-232 for local control and diagnostics • Syslog for diagnostics • Configurable event logs and full H.323 and SIP decoding • Configuration backup to network • Secure upgrades through Ethernet or CompactFlash • Call detail records (CDRs) • SNMP
Network resilience	• Cisco TelePresence PacketSafe technology, which provides intelligent down-speeding, packet pacing, and packet-loss concealment to ensure optimum video and audio quality • Dynamic jitter buffering • Alternate gatekeepers

Table 6. Physical specification

Physical dimensions (H x W x D)	• Physical dimensions: 1.73 x 17.2 x 12.3 in. (44 x 437 x 312 mm) (1U) • 19-in. rack-mountable (kit supplied) or standalone
Weight	• 9 lb (4 kg)
Power	• 100-240 VAC, 50/60 Hz, 110W maximum power consumption
Environmental data	• Operating temperature: 0 to 35°C) ambient • Relative humidity below 95% (noncondensing)
Approvals and compliance	• European safety: EN 60950-1 • USA/Canada safety: UL 60950-1 • CB, CE • EMC: EN55022 class A, EN61000-3-2, EN61000-3-3, EN55024: EN61000-4-2,-3,-4,-5,-6,-11, FCC Part 15 class A, VCCI class A, AS/NZS 3548, CCC: GB4943, GB9254, YD/T993 • NAL Certificate (China) • RoHS compliant

Warranty Information

Find warranty information on Cisco.com at the [Product Warranties](#) page.

Ordering Information

To place an order, visit the Cisco Ordering Home Page and refer to Table 7 or contact your local Cisco representative. To download software, visit the Cisco Software Center.

Table 7. Ordering Information

Product Name	Part Number
Cisco TelePresence MCU 4203	CTI-4203-MCU-K9
Cisco TelePresence MCU 4205	CTI-4205-MCU-K9
Cisco TelePresence MCU 4210	CTI-4210-MCU-K9
Cisco TelePresence MCU 4215	CTI-4215-MCU-K9
Cisco TelePresence MCU 4220	CTI-4220-MCU-K9

Cisco Services

Cisco and our partners provide a broad portfolio of intelligent, personalized services and support that can help you realize the full value of your Cisco TelePresence investment by increasing business agility and network availability. This portfolio of services accelerates business innovation through a network-based collaboration platform that enables businesses to collaborate anywhere, anytime. For more information about these services, please visit: http://www.cisco.com/go/telepresenceservices.

For More Information

For more information about the Cisco TelePresence MCU 4200 Series, please visit http://www.cisco.com/go/telepresence or contact your local Cisco account representative or authorized Cisco partner. Product specifications are estimates and subject to change without notice.