Cisco TelePresence MCU 5300 Series

Product Overview
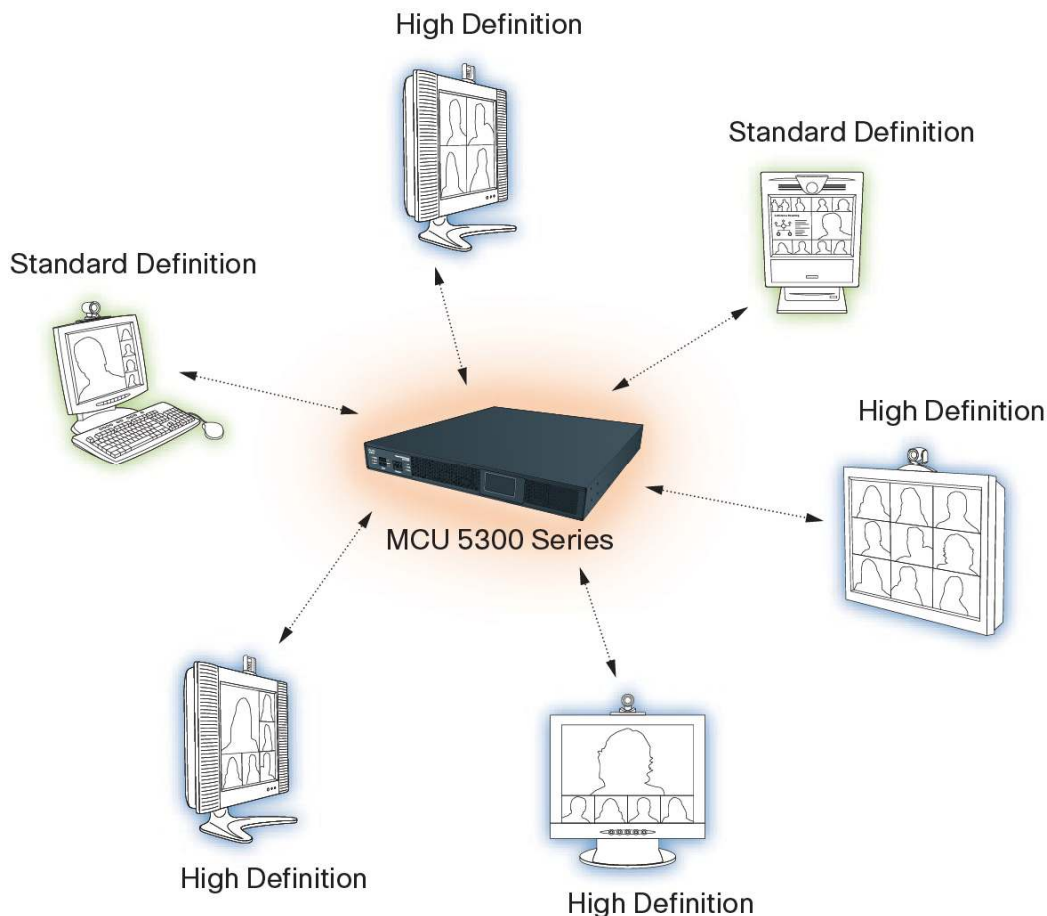
The Cisco TelePresence® MCU 5300 Series is a range of state-of-the-art multipoint control units (MCUs) that can grow with your business' video usage over the long term (Figures 1 and 2). As the industry's first stackable MCU, it provides an entry-level appliance and flexible port that enables your video deployment to grow as your telepresence usage accelerates. Compatible with all major vendors' standard- and high-definition (SD and HD, respectively) endpoints, it delivers the best experience for each participant, every time.

Cisco TelePresence MCU is WebEx enabled, allowing customers to enjoy fully integrated, scalable conference involving callers from WebEx clients and telepresence endpoints.

Figure 1.   Cisco TelePresence MCU 5300 Series

Figure 2. Cisco TelePresence MCU 5300 Series Is Standards-Based and Compatible with All Major Vendors' Endpoints

Features and Benefits

Table 1 summarizes the key features of the Cisco TelePresence MCU 5300 Series, and Table 2 gives information about the models in the Cisco TelePresence MCU 5300 Series.

Table 1. Cisco TelePresence MCU 5300 Series Feature Summary

Feature	Benefit
Design features	• Standards-based and compatible with all major vendors' endpoints • Software selectable between HD or SD video ports • Upgradable unit capacity using software port licenses • Ability to stack two units together for increased capacity • Easy-to-use, versatile management interface • More than 50 custom layouts • Comprehensive wideband audio support • Support for both Session Initiation Protocol (SIP) and H.323 endpoints • Cisco TelePresence PacketSafe technology, which minimizes effects of network packet loss • Compact size: One rack unit (1RU) tall and 19-in. rack-mountable
Application features	• Upscale SD resolution using Cisco TelePresence ClearVision technology • Integrated with Cisco TelePresence Management Suite • Integrated with Cisco Unified Communications Manager (v8.6 or later) for ad-hoc conferencing • Integrated with Cisco TelePresence Conductor

Feature	Benefit
	• Full interoperability with ISDN networks using standalone Cisco TelePresence ISDN gateways • Support for Cisco TelePresence Multiway technology
Performance features	• Continuous presence on every port • Cisco TelePresence Universal Port technology, which helps ensure each participant receives the best possible experience • Predictable port capacity • Bandwidth per site up to 4 Mbps • Video resolutions up to 1080p, 30 frames per second (fps)

Table 2.   Cisco TelePresence MCU 5300 Series Models

Model	Continuous Presence Video Participants (Symmetric)	Additional Voice Participants
MCU 5310 **(with maximum numbers of port licenses)**	10 x 720p30 HD ports 5 x 1080p30 or 720p60 Full HD ports 20 x w448p30 SD ports 24 x w360p30 nHD ports	10 5 None None
MCU 5320 **(with maximum numbers of port licenses)**	20 x 720p30 HD ports 10 x 1080p30 or 720p60 Full HD ports 40 x w448p30 SD ports 48 x w360p30 nHD ports	20 10 None None
Stack of two MCU 5320s **(both with maximum numbers of port licenses)**	40 x 720p30 HD ports 20 x 1080p30 or 720p60 Full HD ports 80 x w448p30 SD ports 96 x w360p30 nHD ports	40 20 None None
Cisco TelePresence MCU 5300 Video Firewall Option (VFO-5300)	Video firewall option, which enables second Ethernet connection to additional networks (for example, to a management network)	

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 gives physical specifications for the Cisco TelePresence MCU 5300 Series.

Table 3.   Product Specifications

Product compatibility	• The product is standards-based and compatible with all major vendors' endpoints.
Universal transcoding and transrating	• HD and SD can be combined within the same conference. • All calls are automatically transcoded and transrated for audio and video. • Any bandwidth, any resolution, any video, or any audio codec can be used on any video call within the same conference. • All participants have their own personal encodes.
Localization and customization	• The MCU offers custom interactive voice response (IVR))/Auto-Attendant audio prompts and video titles. • The MCU provides unicode conference and site names for on-screen display. • The MCU provides custom web interface welcome messages.
Built-in web server	• You can configure, control, and monitor the system and conferences.

MCU features	• You can dial in or dial out through web server.
	• You can use the MCU standalone or with an H.323 gatekeeper or SIP registrar or proxy.
	• The MCU offers a configurable audio and video Auto-Attendant.
	• Advanced continuous presence is standard on all ports.
	• Selection of the best layout is automatic.
	• You can select individual layouts using remote control or webpages.
	• More than 50 custom layouts are available.
	• You can select the active speaker using remote control or voice activation.
	• You can make floor assignments through the webpage or management application.
	• Far-end camera control tunneling is performed using remote control or the webpage.
	• Sites are identified through text overlays.
	• On-screen text messaging to individual or all sites is possible.
	• Conference scheduling and reservation is built into the MCU application.
	• You can have both on-demand and ad-hoc conferences.
	• The MCU offers an automatic lecture mode.
	• You can preview the conference and individual cameras on webpages.
	• Connections to audio conferences can be automatic.
	• Integration with Cisco Unified Communications Manager v8.6 or later ad-hoc conferencing features allows Cisco video IP phones to initiate impromptu multiparty calls with other Cisco TelePresence endpoints.
	• Linked voice and video calls
	• Automatic redialing
Content features	• Dual video is available using H.239 or Binary Floor Control Protocol (BFCP).
	• Content handover can be automatic or co-operative.
	• Widescreen (16:9) is supported as well as 4:3 aspect ratio content.
	• Options for content pass-through maximize capacity.
	• Options for content transcoding maximize interoperability.
	• Participants with no content support can receive transcoded content in the main video.
	• The MCU offers H.239 and BFCP content sharing:
	◦ Up to 1080p in H.264
	◦ Up to 720p in H.263
High-definition performance	• Up to 1080p, 30 fps and 720p, 60 fps H.264 4-Mbps continuous presence.
	• HD audio is comprehensive.
	• Dual video H.239 up to 1080p.
Language	• English is standard, with the option to load alternative language packs onto the system.

Table 4.   Video and Audio Specifications

Bandwidth	• Up to 4 Mbps with both H.263 and H.264 for each site in all conference modes, including advanced continuous presence
Video standards	• H.261, H.263, H.263+, H.263++, and H.264
Video resolution	• From QCIF up to 1080p (1920 x 1080)
	• 4:3 and 16:9 aspect ratios
Frame rates	• Up to 60 fps
Audio standards	• G.711, G.722, G.722.1, 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), BFCP, H.243 (chair control), Real-Time Transport Protocol (RTP), HTTP, Secure HTTP (HTTPS), Dynamic Host Configuration Protocol (DHCP), Simple Network Management Protocol (SNMP), Network Time Protocol (NTP), 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 • Strong password policy • Personal identification number (PIN)-protected conferences • Conference locking • 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 • Audit log • Static ARP • Certificate-based login with OCSP certificate checking
Interfaces	• RJ-45 Ethernet, 10-/100-/1000-Mbps full and half duplex, manual or autosensing • RJ-45 serial port • Status LCD
System management	• XML management application programming interface (API) • Management through embedded 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 • DNS SRV failover for SIP

Table 6. Physical Specifications

Physical dimensions	• (H x W x D): 1.75 x 17.4 x 16.7 in. (44.5 x 442 x 423 mm) (1RU) • 19-in. rack-mountable (kit supplied) or standalone
Weight	• 17.6 lb (8 kg)
Power	• 100-240 VAC, 50-60 Hz • 1177 BTU/h (345W) maximum heat dissipation
Environmental data	• Operating temperature: 32 to 95°F (0 to 35°C) ambie nt • Relative humidity below 95% (noncondensing)
Approvals and compliance	• European safety: EN 60950-1:2005 • USA safety: UL 60950-1 Second edition • Canada safety: CSA 60950-1-07 • CB Scheme certificate, CE Marked • 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 CISPR 22, CCC: GB4943, GB9254, YD/T993 • RoHS compliant • Regulatory Approval Certification completed under Compliance Model Number: AD1A

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 5310	CTI-5310-MCU-K9
Comes with: MCU 5310 -MCU, rack kit and cables—ports must be enabled with optional port licenses	
Software License Options for Cisco TelePresence MCU 5310	
1 Full HD/2 HD/4 SD/8 nHD ports on MCU 5310 (max of 5 with this option (3 used for nHD))	LIC-5300-4PL
Second Ethernet port option (VFO) for MCU 5310	LIC-5300-VFO
AES and HTTPS Enable Option for MCU 5310	LIC-AESMCU53-K9
Hardware Options for Cisco TelePresence MCU 5310	
Cisco TelePresence MCU 5300 Series Stacking Cable	CTI-5300-CAB2MCU
Cisco TelePresence MCU 5320	CTI-5320-MCU-K9
Comes with: MCU 5320 -MCU, rack kit and cables—ports must be enabled with optional port licenses	
Software License Options for Cisco TelePresence MCU 5320	
1 Full HD/2 HD/4 SD/8 nHD ports on MCU 5320 (max of 10 with this option (6 used for nHD))	LIC-5300-4PL
Second Ethernet port option (VFO) for MCU 5320	LIC-5300-VFO
AES and HTTPS Enable Option for MCU 5320	LIC-AESMCU53-K9
Hardware Options for Cisco TelePresence MCU 5320	
Cisco TelePresence MCU 5300 Series Stacking Cable	CTI-5300-CAB2MCU
Cisco TelePresence MCU 5300 Series license PAK (Product Authorization Key) for post sale upgrades	L-MCU5300-UPG-PAK
Start with L-MCU5300-UPG-PAK in order to obtain post sales upgrades for the options above apart from LIC-AESMCU53-K9	
AES and HTTPS Encryption Option for MCU 5300 Series post sales upgrade	L-AESMCU53-K9=
Hardware Spares for Cisco TelePresence MCU 5300 Series	
Cisco TelePresence MCU 5300 Series 1RU accessory kit spare	CTI-KM1U-ACC-KIT=
Comes with: spare DB9-RJ45 serial cable, rack mount ears and screws	
Cisco TelePresence MCU 5300 Series Stacking Cable spare	CTI-5300-CAB2MCU =

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/mcu.

For More Information

For more information about the Cisco TelePresence MCU 5300 Series, please visit http://www.cisco.com/go/mcu or contact your local Cisco account representative or authorized Cisco partner. Product specifications are estimates and subject to change without notice.