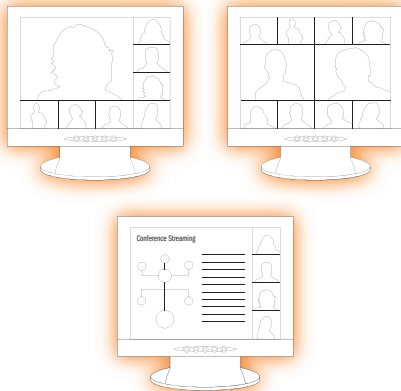




## TANDBERG Codian MCU 4200 Series

The TANDBERG Codian MCU 4200 Series is the industry's leading standard-definition, multimedia conferencing bridge. 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.



#### 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
- Over 50 custom layouts
- Comprehensive wideband audio support
- Support for both SIP and H.323 endpoints
- Compact size: 1U tall and 19" rack mountable

#### APPLICATION FEATURES

- Integrated with TANDBERG Management Suite (TMS)
- Offers full interoperability with ISDN networks using standalone TANDBERG Codian or third party ISDN Gateways
- Compatible with Microsoft Office Communication Server
- Fully integrated, with built-in gatekeeper and streaming server
- PacketSafe™ technology minimizes effects of network packet loss

#### PERFORMANCE FEATURES

- TANDBERG Codian Universal Port™ technology ensures each participant receives an excellent experience
- Constant high capacity
- Bandwidth per site up to 4 Mbps
- Video resolutions: 720p at up to 15fps, 480p at up to 30fps
- Standard Definition Continuous Presence
- Latency below 60ms

GET THE MOST FROM YOUR INVESTMENT. WITH **PROFESSIONAL SERVICES**, TANDBERG EXPERTS SUPPORT TANDBERG CODIAN MCU 4200 SERIES DEPLOYMENT AND TRAINING. VISIT [WWW.TANDBERG.COM](http://WWW.TANDBERG.COM)

MODEL	VIDEO PARTICIPANTS	ADDITIONAL VOICE PARTICIPANTS	VIDEO STREAMING UNICAST/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 MCU connection to additional networks (e.g. 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 — 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  
 \*Maximum number of unicast streams is dependent on network topology. When using the WCO feature, the maximum number of unicast streams supported by the 4215 and 4220 is 50

#### HIGH PERFORMANCE

720p up to 15 fps H.263 continuous presence; 480p up to 30 fps  
 Comprehensive HD audio

#### VIDEO STANDARDS

H.261, H.263, H.263+, H.263++, 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 or 60 fields 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, Polycom® Siren14™/G.722.1 Annex C

#### PROTOCOLS

H.323, SIP, H.235 (AES), SRTP, TLS, H.239 (dual video), VNC™, BFCP, H.243 (chair control), FTP, RTP, RTSP, HTTP, HTTPS, DHCP, SNMP, NTP, NTLM (authentication)

#### 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

#### UNIVERSAL TRANSCODING AND TRANSRATING

Automatic audio/video transcoding and transrating on all calls  
 Any bandwidth, any resolution, any video or audio codec can be used on any video call within the same conference  
 Each participant has their own personal encode  
 Extremely low latency; less than 60 ms

#### STREAMING VIDEO

Built-in streaming server  
 View using Windows Media Player™, RealPlayer™ or QuickTime™  
 Streaming of slides (H.239 and VNC™)  
 Text chat  
 Unicast and multicast  
 UDP, TCP or HTTP  
 Independent choice of bandwidth and codec

#### LOCALIZATION AND CUSTOMIZATION

Custom IVR/auto attendant audio prompts and graphics  
 Uploadable multi language support

#### BUILT-IN GATEKEEPER

Resolution of E.164 numbers  
 Registration of conferences, endpoints and gateways  
 Up to 25 devices can register

#### BUILT-IN WEB SERVER

Complete configuration, control and monitoring of the system and conferences

#### MCU FEATURES

H.323 dial in, or dial out from Web server  
 Standalone or using 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 Web pages  
 Over 50 custom layouts  
 Widescreen (16:9) support  
 Active speaker selection using remote control or voice activated  
 Floor assignment through Web page 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  
 Presentation mode: add slides from PC using VNC™  
 Preview of conference and individual camera on Web pages  
 Web Conferencing Option — those without endpoints can still interact  
 Uploadable bitmaps for audio participants  
 Video association for IP and traditional PBXs

#### SYSTEM MANAGEMENT

XML management API  
 Management via 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  
 SNMP

#### NETWORK RESILIENCE

Codian Packet Safe™ technology provides intelligent downspeeding, packet pacing and packet loss concealment to ensure optimum video and audio quality  
 Dynamic jitter buffering  
 Alternate gatekeepers

#### AUDIO FEATURES

Wideband audio mixing  
 Built-in and uploadable auto attendant voice prompts  
 Automatic gain control, adjustable gain, power indication, individual audio mute using Web pages

#### QUALITY OF SERVICE

Configurable DSCP or 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, H.235  
 SIP encryption  
 TLS certificate verification  
 Video Firewall Option using second Ethernet port

#### INTERFACES

2 x RJ45 Ethernet, 10/100/1000 Mbps full/half duplex, manual or auto sensing  
 RJ45 serial port  
 CompactFlash socket  
 39 status LEDs

#### ENVIRONMENTAL DATA

Operating temperature 0°C to 35°C ambient  
 Relative humidity below 95% (non-condensing)

#### PHYSICAL DIMENSIONS

Height 1.73"; 44 mm (1U)  
 Width 17.2"; 437 mm  
 Depth 12.3"; 312 mm  
 Weight 9 lbs, 4kg  
 19" rack mountable (kit supplied) or standalone  
 Power 100–240 VAC, 50/60Hz/110W max power consumption

#### APPROVALS AND COMPLIANCE

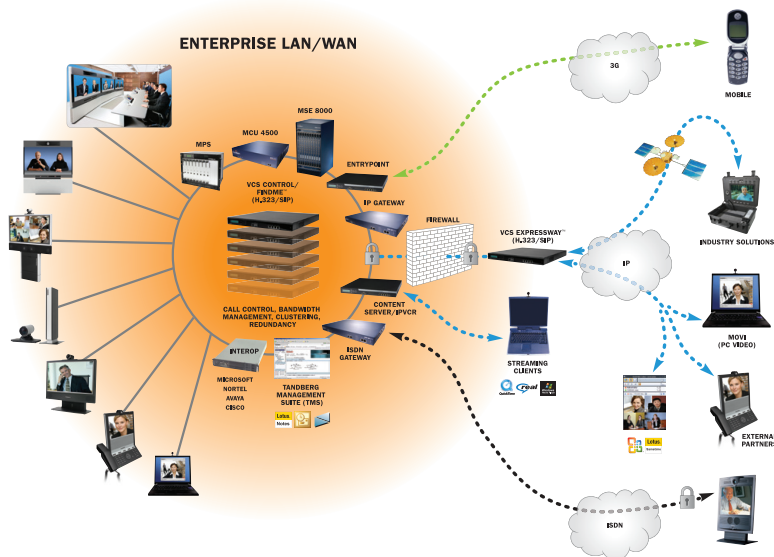
European safety: EN 60950-1:2001  
 USA safety: UL 60950-1 First Edition  
 Canada safety: CSA 60950-1-03  
 CB Scheme certificate, CE Marked  
 EMC: EN55022 class A, EN61000-3-2, EN61000-3-3, EN55024: EN61000-4-2, -3, -4, -5, -6, -11,  
 FCC Part 15 class A, VCCI class A, AS/NZS 3548 (C-Tick),  
 CCC Approved: GB4943-2001, GB9254-1998, YD/T993-1998  
 NAL Certificate (China)  
 RoHS compliant

All specifications subject to change without notice, system specifics may vary.

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October 2008