TANDBERG

Codian MCU 4200 Series

Multimedia Conferencing Unit



The High Performance Voice and Video Conferencing Bridge

The Codian MCU 4200 series is a powerful multimedia conferencing bridge, delivering high quality voice and video with an easy-to-use, versatile interface. Codian's hardware MCU provides a rich multimedia experience with audio and visual clarity that makes it easy to communicate, collaborate and share data.

With Codian's Universal Port™ technology, each model maintains its capacity in every configuration – the MCU 4220 delivers 40 video and an additional 40 voice ports every time. Regardless of the size of your enterprise, Codian's solution scales to meet your needs for corporate collaboration, distance learning, virtual trading rooms, telecommuting and more.

With Codian's infrastructure solutions you can conduct business better, every day.







The Codian Difference

Constant High Capacity

Universal Port technology supports any codec, any speed, any resolution and any layout (including over 50 continuous presence layouts) on any port without loss of capacity or capability - greatly simplifying the planning, provisioning and scheduling of your conference.

Best Quality for Each Participant

Delivers a unique video stream for each participant, resulting in optimized audio and video quality for the available bandwidth and endpoint capabilities.

Video performance up to 720p H.263 15fps continuous presence together with comprehensive HD audio support.

Investment Protection

Endpoint agnostic and makes use of the latest capability of each manufacturer's endpoints to deliver the best conferencing experience for each participant.

Standards-based and Compatible

Offers full interoperability with IP and ISDN networks (using the Codian ISDN Gateway), and proven compatibility with all major vendors.

Streaming Video and Content

The only MCU that allows you to stream video, audio and content to any web browser without any additional hardware or software.

Intuitive User Management

Schedule, manage and monitor individual conferences and independently select the continuous presence layout for each user, without the need to install any additional software

Packet Safe™ Technology

Works in conjunction with the unique MCU architecture to ensure that packet loss anywhere on the network will have minimal impact on the quality of your conference and you stay connected.

Enhanced Features

Web Conferencing Option

Add data, such as slides, chat and annotations to standard video and voice streaming, giving each participant an interactive experience regardless of how they connect.

Video Firewall Option

The second Ethernet port allows callers from both inside and outside the network to meet on the bridge, leaving your firewall untouched and your security levels unchanged.

High Resolution Option

Supports enhanced resolutions from 4CIF up to 720p, allowing you to clearly see all participants and content at the same time.

MCU 4200 Series Specifications

Model	Video Participants	Additional Voice Participants	Video Streaming Unicast / Multicast
MCU 4203	6	6	30 / unlimited
MCU 4205	12	12	60 / unlimited
MCU 4210	20	20	100 / unlimited
MCU 4215	30	30	150 / unlimited
MCU 4220	40	40	200 / unlimited

VFO-4203 / VFO-4205 / VFO-4200	Video Firewall Option - allows 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 HD. Not required for H.239	
WCO-4203 / WCO-4205 / WCO-4210 / WCO-4215 / WCO-4220	Web Conferencing Option - provides content streaming, annotation and chat capabilities	
GKO-100 / GKO-300	Gatekeeper Option - increase from 25 to 100 or 300 registrations with built-in H.323 gatekeeper	

Using high bandwidth or resolution, H.264 or advanced continuous presence does not reduce the number of sites or conferences supported.

High Definition 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 up to 720p (1280 x 720) 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.723.1, G.728, G.729, MPEG-4 AAC-LC, MPEG-4 AAC-LD, Polycom® Siren14 $^{\text{TM}}$ / G.722.1 Annex C

Protocols

H.323 v4, SIP, H.235 (AES), H.239 (dual video), VNC TM , FTP, RTSP, HTTP, DHCP, SNMP, NTP

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 80 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 \bullet Uploadable multi language support

Built-in Gatekeeper

Resolution of E.164 numbers • Registration of conferences, endpoints and gateways • Up to 25 devices can register, options to extend this to 100 or 300 devices

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

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

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

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

• 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

TANDBERG WORLD HEADQUARTERS

Philip Pedersens vei 20 1366 Lysaker, Norway Tel: +47 67 125 125 Fax: +47 67 125 234 Video: +47 67 126 126 E-mail: tandberg@tandberg.com 1212 Avenue of the Americas, 24th Floor New York, NY U.S.A. 10036 Tel: +1 212 692 6500 Tel: +1 800 538 2884 (toll free in the U.S.)

Fax: +1 212 692 6501 Video: +1 212 692 6535 E-mail: tandberg@tandberg.com

