# Codian MCU 4200 Series

## **Multimedia Conferencing Unit**



# The High Performance Voice and Video Conferencing Bridge

The Codian Multimedia Conferencing Unit (MCU) 4200 series is the most powerful conferencing bridge available, delivering the highest quality voice and video with an easy-to-use, versatile interface. Codian's Universal Port technology means each model maintains its capacity at all times. The 40-port MCU 4220 delivers 40 ports of video and audio, with 40 additional ports of audio every time. Codian's hardware MCU provides a rich multimedia experience with exceptional audio and visual clarity that makes it easy to communicate and share data effortlessly. Regardless of the size of your enterprise, Codian's solution can be expanded easily 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, everyday.

#### **Over 50 Custom Layouts**







## 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 the best possible audio and video quality for your participant's bandwidth and endpoint capabilities.

#### **Investment Protection**

Endpoint agnostic, making use of the latest capability of each manufacturer's endpoints to deliver the best conferencing experience for each user.

## **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 management software.

### **Packet Safe Technology**

Works in conjunction with the unique MCU architecture to ensure that packet loss anywhere on the network will have little or no impact on the quality of your conference.

## **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 HD, allowing multiple sites to be viewed simultaneously with no loss of clarity — you can clearly see all participants and content at the same time.



# **MCU 4200 Series Specifications**

#### **Enterprise IP MCU Models**

Model	Video Participants Up to 2 Mbit/s per site	Additional Voice Participants	Video Streaming Unicast / Multicast
MCU-4205	12	12	60 / unlimited
MCU-4210	20	20	100 / unlimited
MCU-4215	30	30	150 / unlimited
MCU-4220	40	40	200 / unlimited

## **Software Options**

VFO-4200	Video Firewall Option- Allows MCU connection to additional networks (e.g. Internet)	
HRO-4205 / HRO-4210 / HRO-4215 / HRO-4420	High Resolution Option - For resolutions above CIF and up to 720p HD. Not required for H.239	
WCO-4205 / WCO-4210 / WCO-4215 / WCO-4220	Web Conferencing Option - Provides streaming, annotation and chat capabilities	

Using high bandwidth, 4CIF / 4SIF, H.264 or Advanced (symmetric) Continuous Presence does not reduce the number of sites supported.

#### **Video Standards**

H.261, H.263, H.263+, H.263++, H.264

#### **Video Resolution**

QCIF, QSIF, CIF, SIF, iCIF, iSIF, 4CIF, 4SIF, VGA, SVGA, XGA, 720p

#### **Frame Rates**

Up to 30 frames or 60 fields per second in all conference modes

#### **Audio Standards**

G.711, G.722, G.728, G.729, G.723.1, Polycom<sup>®</sup> Siren14 <sup>™</sup>/ G.722.1 Annex C. AAC

#### **Protocols**

H.323 v4, H.235 (AES), H.239 (dual video), VNC<sup>™</sup>, ftp, RTP, RTSP, HTTP, DHCP, SIP

#### **Bandwidth**

H.263 up to 4 Mbit/s, H.264 up to 2 Mbit/s for each site in all conference modes including Advanced (symmetric)

#### **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 gets their own personal encode • Extremely low latency; less than 80 ms

### Streaming Video

Embedded streaming server; unicast and multicast 

Independent choice of bandwidth and codec 

View using Windows Media Player™ or QuickTime™ 

Streaming of slides (H.239 and VNC™) 

Text chat

## **Localization and Customization**

Custom IVR / AA audio prompts and graphics Uploadable multi language support

#### **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 tunnelling using remote control or Web • Text identification of sites • On-screen text messaging to individual or all sites • Embedded conference scheduling and reservation • On-demand and ad hoc conferences • Dual video using H.239 • Presentation mode: add slides from PC using VNC<sup>™</sup> • Preview of conference and individual camera on Web pages • Web Conferencing Option -those without end points can still interact • Uploadable bitmaps for audio participants • Video association for IP and traditional PBXs

#### **Embedded Web Server**

Complete configuration, control and monitoring of the system and conferences

#### **Audio Features**

Audio mixing at wide band 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 embedded Web server
RS-232 for local control and diagnostics
Syslog for diagnostics
Configurable event logs and full H.323 decoding
Configuration backup to network
Secure upgrades through Ethernet or
Compact Flash
Call Detail Records. SNMP

## **Quality of Service**

Configurable DSCP or IP precedence

#### **Network Resiliency**

Intelligent downspeeding, packet pacing and packet loss concealment ensure optimum video and audio quality whatever the nature of the network

#### **Security Features**

Seven levels of access rights and privileges for users Password protected conferences Secure non PC hardware and operating system Hardware AES encryption, 128 bit key, H.235 Video Firewall Option using second Ethernet port

#### Interfaces

2 x RJ45 Ethernet, 10/100/1000 Mbit/s full/half duplex, manual or auto sensing RJ45 serial port, Compact Flash socket 39 status LEDs

#### **Environmental Data**

Operating temperature 0°C to 35°C ambient Relative humidity below 90%

#### **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 stand-alone 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 EMC: EN55022 class B, EN55024, EN61000-3-2,-3 EN61000-4-2,-3,-4,-5,-6,-11, FCC Part 15 class A CE marked



## www.codian.com

#### **Codian Inc**

1570 The Alameda #216 San Jose CA 95126 USA Toll-free: 1-888-CODIAN-0 (1-888-263-4260) Tel: (408) 938 2300

#### **Codian Ltd**

14 Waterside Drive Langley Slough SL3 6EZ United Kingdom Tel: +44 (0)1753 548 333

Fax: +44 (0)1753 548 303

#### Codian (Asia Pacific) Ltd

Suite 1606, Saxon Tower 7 Cheung Shun Street Cheung Sha Wan Kowloon Hong Kong Tel: +852 3583 1430

Fax: +852 3583 1055



Fax: (408) 287 6630