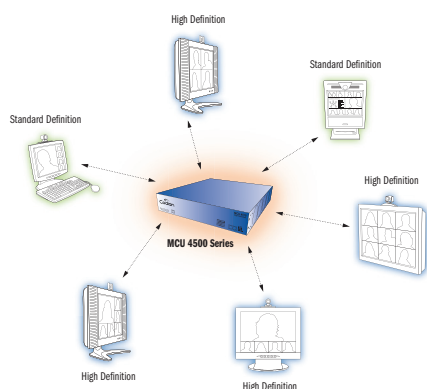




## TANDBERG Codian MCU 4500 Series

The TANDBERG Codian MCU 4500 Series is the industry's leading full high-definition multimedia conferencing bridge. It delivers superior video and voice 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 the best experience for each participant, every time.



GET THE MOST FROM YOUR INVESTMENT. WITH **PROFESSIONAL SERVICES**, TANDBERG EXPERTS SUPPORT TANDBERG CODIAN MCU 4500 SERIES DEPLOYMENT AND TRAINING. VISIT [WWW.TANDBERG.COM](http://WWW.TANDBERG.COM)

### 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
- PacketSafe™ technology minimizes effects of network packet loss
- Compact size: 2U tall and 19" rack mountable

### APPLICATION FEATURES

- TANDBERG Codian ConferenceMe™ for multipoint desktop video
- Enables transition from SD to HD using TANDBERG Codian ClearVision™
- Integrated with TANDBERG Management Suite (TMS)
- Offers full interoperability with ISDN networks using stand-alone TANDBERG Codian or third party ISDN gateways
- Compatible with Microsoft Office Communication Server
- Fully integrated, with built-in gatekeeper and streaming server
- Multiway™

### PERFORMANCE FEATURES

- High Definition Continuous Presence on every port
- TANDBERG Codian Universal Port™ technology ensures each participant receives the best possible experience
- Constant high capacity
- Bandwidth per site up to 4 Mbps
- Video resolutions up to 1080p 30fps

MODEL	VIDEO PARTICIPANTS	WITH 1080P CAPACITY UPGRADE OPTION	ADDITIONAL VOICE PARTICIPANTS	VIDEO STREAMING UNICAST/MULTICAST
MCU 4505	12 x 720p 6 x 1080p	12 x 1080p	12	24/unlimited
MCU 4510	20 x 720p 10 x 1080p	20 x 1080p	20	40/unlimited
MCU 4515	30 x 720p 15 x 1080p	30 x 1080p	30	60/unlimited
MCU 4520	40 x 720p 20 x 1080p	40 x 1080p	40	80/unlimited

VFO-4500	Video Firewall Option — enables second Ethernet connection to additional networks (e.g. Internet)
WCO-4505/WCO-4510/WCO-4515/WCO-4520	Web Conferencing Option — includes TANDBERG Codian ConferenceMe™ for multipoint desktop video; alternatively provides content streaming, annotation and chat capabilities
MHD-4505/MHD-4510/MHD-4515/MHD-4520	1080p Capacity Upgrade Option — enables maximum HD port count at 1080p

\*Maximum number of unicast streams is dependent on network topology. When using the WCO feature, the maximum number of unicast streams supported by the 4515 and 4520 is 50.

#### HIGH-DEFINITION PERFORMANCE

Up to 1080p 30 fps H.264 4 Mbps continuous presence  
Comprehensive HD audio  
Dual video H.239

#### VIDEO STANDARDS

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

#### VIDEO RESOLUTION

From QCIF up to 1080p (1920 x 1080) including interlaced  
iCIF and iSIF  
4:3 and 16:9 aspect ratios

#### FRAME RATES

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

Up to 4 Mbps with both H.263 and H.264, for each site  
in all conference modes including advanced continuous  
presence

#### UNIVERSAL TRANSCODING AND TRANSRATING

Combine HD and SD within the same conference  
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

#### 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  
Unicode conference and site names

#### MCU FEATURES

Dial in or dial out via 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 voice participants  
Video association for IP and traditional PBXs  
Automatic connection to audio conferences  
Multiway™ — enables TANDBERG video endpoints to initiate  
ad hoc multiparty calls

#### TANDBERG CODIAN CONFERENCE™

Content Sharing  
Multiple layouts  
Firewall friendly  
Independent transcode per participant  
Up to 12 simultaneous connections  
Client computer requirements:  
Refer to the list of verified PCs and Webcams under  
the support section of the TANDBERG website

#### 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

#### BUILT-IN WEB SERVER

Complete configuration, control and monitoring of the  
system and conferences

#### BUILT-IN GATEKEEPER

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

#### 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 and SIP decoding  
Configuration backup to network  
Secure upgrades through Ethernet or CompactFlash  
Call Detail Records  
SNMP

#### QUALITY OF SERVICE

Configurable DSCP or TOS/IP precedence

#### 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

#### SECURITY FEATURES

Seven levels of access rights and privileges for users  
Strong password policy  
Pin-protected conferences  
Conference locking  
Secure non-PC hardware and operating system  
AES encryption, 128 bit key, H.235  
SIP encryption  
TLS certificate verification  
VFO — second Ethernet port  
Audit log

#### INTERFACES

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 3.43'; 87 mm (2U)  
Width 17.4'; 442 mm  
Depth 19.25'; 489 mm  
Weight 33 lbs, 15 kg  
19" rack mountable (kit supplied) or standalone  
Power 100–240 VAC, 50/60Hz  
600W maximum power consumption

#### APPROVALS AND COMPLIANCE

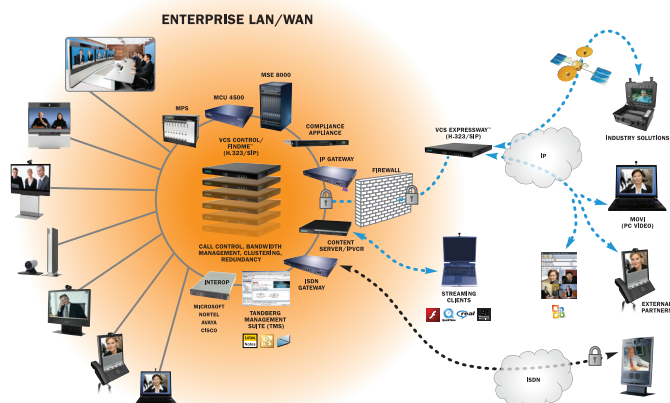
European safety: EN 60950-1:2001  
USA safety: UL 60950-1 First Edition  
Canada safety: CSA 60950-1-03  
CB Scheme certificate, CE Marked  
EMC:  
EN55022 class A,  
EN61000-3-2, EN61000-3-3,  
EN55024: EN61000-4-2, -3, -4, -5, -6, -11,  
FCC Part 15 class A,  
VCCI class A,  
AS/NZS 3548 (C-Tick),  
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.

All images in these materials are for representational  
purposes only, actual products may differ.

TANDBERG and Codian are registered trademarks or trademarks  
of TANDBERG in the U.S. and other countries.

All other trademarks are property of their respective owners.



## TANDBERG

# Codian MCU 4500 Series

#### 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  
tandberg@tandberg.com

1212 Avenue of the Americas,  
24th Floor  
New York, NY USA 10036  
Tel: +1 212 692 6500  
Fax: +1 212 692 6501  
Video: +1 212 692 6535  
tandberg@tandberg.com

April 2010