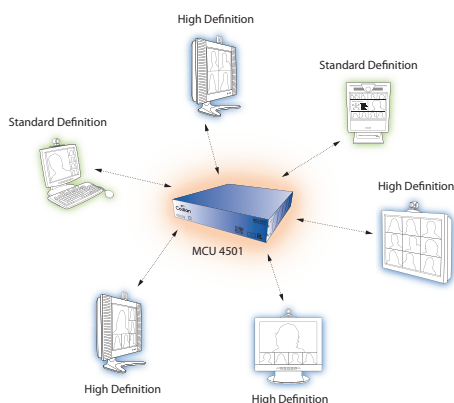




TANDBERG Codian MCU 4501

The TANDBERG Codian MCU 4501 is the industry's leading entry-sized, high-definition conferencing bridge. It offers organizations a low-risk, cost-effective solution for HD multipoint video conferencing. For those organizations with an existing SD video environment, it provides a seamless transition path to HD. Compatible with all major vendors' SD and HD endpoints, it delivers the best experience for each participant every time.



DESIGN FEATURES

- Standards-based and compatible with all major vendors' endpoints
- Selectable between 6 HD or 12 SD video ports
- Easy-to-use, versatile, management interface
- 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

- Upscales SD resolution 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

PERFORMANCE FEATURES

- Continuous Presence on every port
- TANDBERG Codian Universal Port™ technology ensures each participant receives the best possible experience
- Predictable port capacity
- Bandwidth per site up to 5 Mbps
- Video resolutions up to 720p at 30fps
- Future proofed for 1080p and 60fps
- Latency below 30 ms

GET THE MOST FROM YOUR INVESTMENT. WITH **PROFESSIONAL SERVICES**, TANDBERG EXPERTS SUPPORT TANDBERG CODIAN MCU 4501 DEPLOYMENT AND TRAINING. VISIT WWW.TANDBERG.COM

MODEL	VIDEO PARTICIPANTS	ADDITIONAL VOICE PARTICIPANTS	VIDEO STREAMING UNICAST/MULTICAST
MCU 4501	6 HD ports 12 SD ports	6 12	12/unlimited
VFO-4500		Video Firewall Option — enables MCU connection to additional networks (e.g. Internet)	

*Maximum number of unicast streams is dependent on network topology.

HIGH-DEFINITION PERFORMANCE

720p 30 fps H.264 5 Mbps continuous presence
Future options will allow 1080p 30 fps and 720p 60fps
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 720p (1280 x 720) 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.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 5 Mbps with both H.263 and H.264, for each site
in all conference modes including advanced (symmetric)
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
Extremely low latency; less than 30 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
Unicode conference and site names

QUALITY OF SERVICE

Configurable DSCP or TOS/IP precedence

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

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

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
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 3.43"; 87 mm (2U)
Width 17.4"; 442 mm
Depth 19.25"; 489 mm
Weight 22 lbs, 15 kg
19" rack mountable (kit supplied) or standalone
Power 100–240 VAC, 50/60Hz
600W maximum power consumption

APPROVALS AND COMPLIANCE

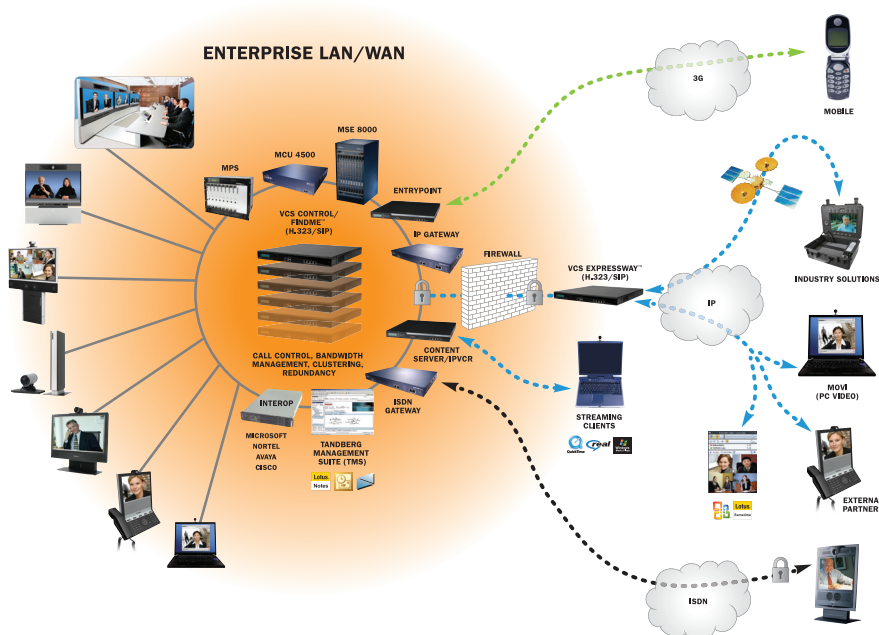
European safety: EN 60950-1:2001
USA safety: UL 60950-1 First Edition
Canada safety: CSA 60950-1-03
CB Scheme certificate, CE Marked
EMC:
EN55022 class A,
EN61000-3-2, EN61000-3-3,
EN55024: EN61000-4-2,-3,-4,-5,-6,-11,
FCC Part 15 class A,
VCCI class A,
AS/NZS 3548 (C-Tick),
CCC Approved: GB4943-2001,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

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

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