



TANDBERG Multipoint Control Unit

The first Multipoint Control Unit (MCU) designed specifically for the enterprise. Connect multiple audio and video sites in one or more ISDN, IP and mixed ISDN and IP conferences. Easily deployable and scalable.



DESIGN FEATURES

- Fully integrated, easily configurable unit
- Compact size: 1U tall and 19" rack mountable
- 24 LEDs show operational status
- Custom audio welcome and on-screen messaging

APPLICATION FEATURES

- Join up to 16 video and 16 audio sites in one or more conferences
- Supports network and videoconferencing equipment from multiple vendors
- Supports H.264 with IP and ISDN, and with Continuous Presence
- Support for XGA, VGA and SVGA PC presentations
- Automatic layout and resolution switching with Best Impression
- DuoVideo support for simultaneous display of presenter and presentation material
- Ad hoc multipoint calls with dial in / dial out capability

PERFORMANCE FEATURES

- Easy to use, Plug-and-Play technology
- Bandwidth Per Call: from 56 kbps – 2 Mbps
- Supports network and video equipment from multiple vendors
- Highest level of standards-based embedded encryption
- Downsampling provides protection from network interruptions and maintains the call in progress

PROTECT YOUR TECHNOLOGY INVESTMENT. EXTEND THE LIFETIME OF YOUR PRODUCTS. TANDBERG's Constant Care Services fulfill customers' support needs from decision through deployment and beyond.

MAXIMUM SYSTEM CAPACITY

Number of video conferencing endpoints: 16
Number of audio only endpoints: 16

ENDPOINTS SUPPORTED

ISDN (H.320) videoconferencing endpoints
IP (H.323) videoconferencing endpoints
Analog / IP telephony

BANDWIDTH

H.320 up to 2 Mbps
H.323 up to 2 Mbps

VIDEO STANDARDS

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

AUDIO STANDARDS

G.711, G.722, G.722.1, G.728

LIVE VIDEO RESOLUTIONS

NATIVE PAL:

QCIF (176 x 144 pixels)
CIF (352 x 288 pixels)
4CIF (704 x 576 pixels)

NATIVE NTSC:

SIF (352 x 240 pixels)
4SIF (704 x 480 pixels)

NATIVE PC RESOLUTIONS:

VGA (640 x 480 pixels)
SVGA (800 x 600 pixels)
XGA (1024 x 768 pixels)

TRANSCODING

Restricted/unrestricted interfaces and bandwidths from
56 kbps - 2 Mbps in the same conference

NETWORK INTERFACES

4 x E1 / T1 G.703 (RJ-45) for ISDN PRI
1 x LAN / Ethernet (RJ-45) 10/100 Mbit
1 x LAN / Ethernet (RJ-45) 10/100 Mbit (future use)

ETHERNET / INTERNET / INTRANET CONNECTIVITY

TCP/IP, DHCP, SSL, ARP, FTP, Telnet, HTTP, HTTPS, SNMP
Embedded WEB server
10/100 Mbps full / half duplex (manual or auto
detect selection)

OTHER SUPPORTED STANDARDS

H.221, H.231, H.241, H.242, H.243, H.245, H.320,
H.323, BONDING (ISO 13871), Q.931

MCU FEATURES

Dial in / dial out capabilities
ISDN & IP Downspeeding
Automatic Continuous Presence switching
(CP4 / CP9 / CP16 / CP5+1 / C7+1 / auto),
Voice Switched
Best Impression – Automatic change of video image layout
and resolution dependent on the number of participants
Supports two-level distribution of MCUs, with automatic
Master/Slave negotiation on IP and ISDN
H.243 Terminal Names
Request Floor from endpoints
Assign Floor to endpoint
Mute Audio from endpoints
Mute Video from endpoints

IP

4 sites at 2 Mbps, 10 sites at 768 kbps, 16 sites at 384 kbps
+ telephone calls

E1 PRI

4 sites at 2 Mbps, 8 sites at 768 kbps, 16 sites at 384 kbps
+ telephone calls

T1 PRI

4 sites at 1.5 Mbps, 7 sites at 768 kbps, 15 sites at
+ telephone calls

EMBEDDED ENCRYPTION

Standards based on ISDN, IP and mixed ISDN / IP: H.233,
H.234, DES 56 bit key, AES 128 bit key
NIST-validated AES
NIST-validated DES
Automatic key generation and exchange
Mix of DES / AES possible in the same conference

AUDIO FEATURES

Automatic Gain Control
Custom "Welcome" Sound (WAV)
Custom "Password" Sound (WAV)
Entry / Exit tones
Mobile telephone noise suppression

VIDEO FEATURES

Custom "Welcome" Pictures (JPEG)
Custom "Password" Pictures (JPEG)
Snapshot of ongoing conference (JPEG)
Snapshot of ongoing DuoVideo presentation (JPEG)
Separate welcome page for encrypted conferences

FRAME RATES

Up to 30 fps in Continuous Presence, Voice Switched and
presentation mode

SECURITY FEATURES

IP Administration passwords
DTMF Password
Management via HTTPS
IP password
Password protected conference (H.243)
Services may be disabled: FTP, Telnet, HTTP, HTTPS,
H.323, SNMP

IP NETWORK FEATURES

DiffServ
IP Precedence
TOS
RSP
Intelligent Packet Loss Recovery (IPLR)

LIVE PRESENTATIONS

Broadcast of a site's presentation (all supported
video resolutions)
Supported in Continuous Presence and Voice Switched mode
Support for People+Content™ on H.320

SYSTEM MANAGEMENT

Total management via embedded web server using HTTPS,
SNMP, Telnet and FTP
1 x RS-232 for local control and diagnostics
Conference scheduling via the TANDBERG Scheduler,
Microsoft® Outlook® or IBM Lotus Notes®
Support for the TANDBERG Management Suite

EMBEDDED WEB SERVER

Total Conference and call control
System diagnostics and configuration
Snapshot of ongoing conference

APPROVALS

Directive 73/23/EEC (Low Voltage Directive)
-Standard EN 60950
Directive 89/336/EEC (EMC Directive)
-Standard EN 55022, Class A
-Standard EN 55024
-Standard EN 61000-3-2/-3-3
Directive 1999/5/EEC (R&TTE Directive)
-Standard TBR4
Approved according to UL 60950
and CAN/CSA C22.2 No. 60950
Complies with FCC15B Class A

ENVIRONMENTAL DATA

OPERATING TEMPERATURE:

0°C to 35°C (32°F to 95°F) ambient temperature

RELATIVE HUMIDITY (RH):

10% to 90%

STORAGE AND TRANSPORT TEMPERATURE:

-20°C to 60°C (-4°F to 140°F) at RH 10 - 90%
(non-condensing)

POWER

Power 100-240 VAC, 50 / 60 Hz
90W max. power consumption

PHYSICAL DIMENSIONS

Height 1.7" / 4.4 cm
Width 17.4" / 44.2 cm
Depth 12.5" / 31.8 cm
Net weight 11.3 lbs / 5.15 kg
19" rack mountable

*System features vary depending on network selection
and software package. All specifications subject to
change without notice.*

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may differ based upon component availability.*

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contact your TANDBERG reseller for more information.*



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