



TANDBERG MCU: scalability.

TANDBERG MCU 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

TANDBERG MCU 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^{TF}
- DuoVideo^{TF} support for simultaneous display of presenter and presentation material
- Ad hoc multipoint calls with dial in / dial out capability

TANDBERG MCU Performance features

- Easy to use, Plug-and-Play technology
- Bandwidth: from 56 kbps – 2 Mbps
- Highest level of standards-based embedded encryption
- Downsampling^{TF} provides protection from network interruptions and maintains the call in progress



MCU front



MCU back

Plug-and-play technology and mixed IP / ISDN conferencing capability make the TANDBERG MCU ideal for enterprises.

The first Multipoint Control Unit (MCU) designed specifically for the enterprise market. Connect multiple audio and video sites in one or more simultaneous conferences. Easily deployable and scalable, the TANDBERG MCU supports mixed ISDN and IP video calls, and supports H.264 to provide the optimal video experience. For larger organizations, deploying multiple TANDBERG MCUs builds highly-scalable distributed architecture into a video network.

TANDBERG MCU SYSTEM CAPACITY

Number of video conferencing endpoints: 16
 Number of audio only endpoints: 16
 Up to 3 simultaneous conferences
 Supports H.264 at 768kbps, 30fps, CIF

ENDPOINTS SUPPORTED

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

TANDBERG MCU BANDWIDTH

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

TANDBERG MCU VIDEO STANDARDS

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

TANDBERG MCU 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)

TANDBERG MCU TRANSCODING

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

TANDBERG MCU NETWORK INTERFACES

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

**ETHERNET / INTERNET / INTRANET
CONNECTIVITY**

TCP/IP, DHCP, SSL, ARP, FTP, Telnet, HTTP, HTTPS
 SNMP Enterprise Management
 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)

TANDBERG MCU FEATURES

Dial in / dial out capabilities
 ISDN & IP Downspeeding^{TF}
 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 and up to 240 participants
 at 384kbps

E1 PRI

4 sites at 2 Mbps, 10 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 384 kbps
 (+telephone calls)

IP

4 sites at 2 Mbps, 10 sites at 768 kbps, 16 sites at 384 kbps
 (+ ISDN telephone calls)
 H.243 Terminal Names
 Request Floor from endpoints
 Assign Floor to endpoint

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

TANDBERG MCU AUDIO FEATURES

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

TANDBERG MCU VIDEO FEATURES

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

TANDBERG MCU FRAME RATES

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

TANDBERG MCU SECURITY FEATURES

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

H.323 NETWORK FEATURES

DiffServ
 IP Precedence
 TOS
 RSVP
 IPLR^{TF}

DUOVIDEO^{TF}

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

SYSTEM MANAGEMENT

Total management via embedded web server using HTTPS,
 SNMP, Telnet and FTP
 1 x RS-232 for local software upgrades, local control
 and diagnostics
 Conference scheduling via the TANDBERG Scheduler
 Support for the TANDBERG Management Suite

EMBEDDED WEB SERVER

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

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)

TANDBERG MCU 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
 Power 100-240 VAC, 50 / 60 Hz
 90W max. power consumption
 19" rack mountable

TF indicates a TANDBERG First

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

People+ContentTM is a trademark of Polycom, Inc.

