TANDBERG

Media Processing System

The TANDBERG Media Processing System (MPS) is a reliable, scalable multipoint control unit. Low life cycle costs and feature-rich support for video endpoints make MPS ideal for enterprise, public sector and education organizations as well as for service providers.

DESIGN FEATURES

- 19" rack mountable chassis with display and CompactPCI backplane
- Modular and expandable with multiple media processing boards and network interface boards
- Simple to configure, Plug-and-Play technology

APPLICATION FEATURES

- Join up to 48 video and 48 audio sites in one or more conferences
- Supports H.264 with Continuous Presence and Voice Switching
- Support for XGA, VGA and SVGA PC presentations
- Support for automatic layout and resolution switching
- DuoVideo/H.239 support for simultaneous display of presenter and presentation material
- Port count independent of features used
- Support for standards based CD-quality audio

PERFORMANCE FEATURES

- Choice of networks: IP, ISDN and V.35
- Bandwidth: from 56 kbps – 2 Mbps
- Supports network and video equipment from multiple vendors
- Highest level of standards-based embedded encryption
- Downspeeding provides protection from network interruptions and maintains the call in progress

TANDBERG

SYSTEM CAPACITY
Number of video endpoints: 48
Number of audio only endpoints: 48

ENDPOINTS SUPPORTED
ISDN (H.320) video endpoints*
V.35 (H.320) video endpoints*
IP (H.323) video 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, MPEG 4 AAC-LD

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
Bandwidths from 56 kbps – 2 Mbps in the same conference

NETWORK INTERFACES
2 x LAN / Ethernet (RJ-45) 10/100 Mbit on the System
  Controller board
1 x LAN / Ethernet (RJ-45) 10/100 Mbit on each Media
  Processing board
Endpoints on two different IP networks in the same conference
8 x E1 / T1 G.703 (RJ-45) for ISDN PRI on each PRI
  network board*
32 V.35 and RS-366 ports on each V.35 network board*

ETHERNET / INTERNET / INTRANET CONNECTIVITY
TCP/IP, DHCP, SSL, ARP, FTP, Telnet, HTTP,
  HTTPS, XML, SOAP
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.239
  H.323, BONDING (ISO 13871)

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
9 sites at 2 Mbps, 24 sites at 768 kbps, 48 sites at
  384 kbps (+telephone calls)
*E1 PRI**
9 sites at 2 Mbps, 24 sites at 768 kbps, 48 sites at
  384 kbps (+telephone calls)
*T1 PRI**
12 sites at 1.5 Mbps, 24 sites at 768 kbps, 48 sites at
  384 kbps (+telephone calls)
*V.35**
9 sites at 2 Mbps, 24 sites at 768 kbps, 48 sites at 384 kbps

EMBEDDED ENCRYPTION
Standards based on ISDN, IP and mixed ISDN / IP: H.233,
H.234, H.235 v2&v3, 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
CD-quality audio using MPEG 4 AAC-LD

VIDEO FEATURES
Custom "Welcome" pictures (JPEG)
Custom "Password" pictures (JPEG)
Snapshot of ongoing conference (JPEG)
Snapshot of ongoing DuoVideo/H.239 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

H.323 NETWORK FEATURES
DiffServ
IP Precedence
TOS
RSVP
Intelligent Packet Loss Recovery (IPLR)

LIVE PRESENTATIONS
Broadcast of a site's presentation (all supported video
  resolutions) using DuoVideo or H.239
Supported in Continuous Presence and Voice Switched
Support for mix of H.239 and DuoVideo in same conference
  on any network

SYSTEM MANAGEMENT
Total management via embedded web server using HTTPS,
  XML, SOAP, 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

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
100-240 VAC, 50 / 60 Hz
800W max. power consumption

UNIT DIMENSIONS
Height 9U / 399mm / 15.7"
Width 444mm / 17.4"
Depth 371mm / 14.6"
Net weight 20.0 kg
19" rack mountable

* ISDN and V.35 available from Q4 2004

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

*TANDBERG is a registered trademark or trademark of
TANDBERG in the U.S. and other countries.*

*Microsoft, Outlook and Windows are either registered
trademarks or trademarks of Microsoft Corporation in
the United States and/or other countries.*

*Lotus and Domino are trademarks or registered trademarks
of Lotus Development Corporation.*

*IBM is a trademark of International Business Machines
Corporation in the United States, other countries, or both.*

All other trademarks are property of their respective owners.

TANDBERG

Media Processing System

TANDBERG