



# TANDBERG MPS 200

The TANDBERG Media Processing System (MPS) 200 is a reliable, feature rich multipoint control unit, gateway or hybrid. Its flexible, cost-efficient design makes the MPS 200 ideal for small- to medium-sized enterprises requiring centralized or distributed architecture solutions.



Rear View  
Multiple network interfaces available

#### DESIGN FEATURES

- 19" rack-mountable chassis with display and CompactPCI backplane
- Modular and expandable with dual media processing boards and network interface boards
- Simple to configure, Plug-and-Play technology
- Flexible design as MCU, gateway or hybrid
- Intelligent Native 16:9 view with up to 24 layouts and optional selfview
- Supports HD (720p)

#### APPLICATION FEATURES

- Join up to 40 video and 32 audio sites in one or more conferences
- Supports H.264 with Continuous Presence and Voice Switching
- Supports simultaneous display of presenter and XGA, VGA, and SVGA PC presentations
- Outbound, Inbound, and Caller ID password protection
- Supports widescreen HD resolution (1280x720p)
- Integrated with Microsoft® Office Communicator
- Supports TANDBERG Expressway™ firewall traversal standard

#### PERFORMANCE FEATURES

- Wide range of network and protocol support: SIP, 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
- Downsampling provides protection from network interruptions and maintains the call in progress

GET THE MOST FROM YOUR INVESTMENT. WITH PROFESSIONAL SERVICES, TANDBERG EXPERTS SUPPORT MPS DEPLOYMENT AND TRAINING. VISIT [WWW.TANDBERG.NET](http://WWW.TANDBERG.NET)

#### MAXIMUM SYSTEM CAPACITY

MCU video ports: up to 40  
MCU audio ports: up to 32  
Gateway sessions: up to 20  
Serial Interface ports: up to 64  
ISDN-PRI ports: 16

#### MCU CONFERENCE SCHEDULING

Advanced scheduling (Multiple MCUs) with TMS  
Scheduling using the TANDBERG Scheduler, Microsoft Outlook® or IBM Lotus Notes®  
On-demand conferencing (true ad-hoc)  
Personal conferencing  
Conference initiation using Microsoft Office Communicator (SIP-CX)

#### MCU CONFERENCE MANAGEMENT

Advanced conference monitoring with TMS Conference Control Center  
Centralized management and control via embedded web server  
3rd Party API for external control (XML on HTTPS)  
Live audio and video monitoring & diagnostics  
Dual Snapshot of ongoing conference (JPEG)  
Move participants between conferences  
Waiting room for ad-hoc conferencing  
Conference bandwidth threshold  
Single or Multiple dial-in numbers per conference  
Caller ID conference routing  
Mute audio and video to/from endpoints  
Custom "Welcome" pages (JPEG)  
Customizable conference messages  
Lock participant displays  
Edit conference display text

#### MCU VIDEO FEATURES

Up to 30 fps in Continuous Presence, Voice Switched and presentation mode  
Best Impression — Automatic change of video image layout and resolution  
Automatic Continuous Presence switching  
Standard CP (CP2, CP3, CP4, CP5+1, CP4+3, CP7+1, CP9, CP8+2, CP12+1, CP12+2, CP16/auto)  
Wide Screen CP (wCP2+1, wCP3, wCP3+1, wCP4, wCP4+1, wCP6, wCP8+1, wCP12)  
Voice Switched  
Self-view optional  
Lecture mode  
Embedded site naming with Unicode support  
Active speaker indication in CP mode  
Active speaker indication for telephones

#### MCU CHAIR CONTROL

Embedded control from TMS Conference Control Center and embedded web server  
Endpoint control using H.243 Chair Control on H.320 and H.323  
Multi-language H.243 terminal names

#### MCU AUDIO FEATURES

Mute Audio to/from endpoints  
Automatic gain control  
Audio input level indications  
Custom "welcome" sound (WAV)  
Customizable conference messages (WAV)  
Entry/Exit tones  
Mobile telephone noise suppression  
Telephone echo suppression  
CD-quality audio using MPEG 4 AAC-LD

#### GATEWAY FEATURES (OPTION)

H.323 to/from H.320 (IP to ISDN)  
H.323 to/from H.320 (IP to V35)

#### GATEWAY ISDN CALL ROUTING

Direct Inward Dialing (DID)  
Interactive Voice and Video Response (IVVR)  
Automatic TCS-4 response on ISDN for automated bridging of IP islands  
Any combination of DID, IVVR and TCS-4  
Automatic downspeeding to available ISDN or IP rate

#### GATEWAY H.323 CALL ROUTING TO ISDN

Single prefix dialing  
Selectable 2x64k (H.221) dial-out  
Automatic ISDN restrict  
Automatic downspeed to available ISDN or IP rate  
Load balance control  
Call transfer of the IP side

#### ENDPOINTS SUPPORTED

ISDN (H.320) video endpoints up to 2 Mbps  
V.35 (H.320) video endpoints up to 2 Mbps  
IP (H.323) video endpoints up to 2 Mbps  
IP (SIP) video endpoints up to 2 Mbps  
IP (3G) video phone up to 64 kbps  
Microsoft Office Communicator (SIP-CX)\*  
Analog/IP telephony

#### 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 and DES  
Automatic key generation and exchange  
Mix of DES/AES possible in the same conference

#### LIVE VIDEO RESOLUTIONS

##### NATIVE PAL:

QCIF (176 x 144 pixels)  
CIF (352 x 288 pixels)  
448p (576 x 448 pixels)\*  
4CIF (704 x 576 pixels)

##### NATIVE NTSC:

SIF (352 x 240 pixels)  
400p (528 x 400 pixels)\*  
4SIF (704 x 480 pixels)

##### NATIVE PC RESOLUTIONS:

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

##### NATIVE WIDESCREEN RESOLUTIONS:

w288p (512 x 288 pixels)\*  
w448p (768 x 448 pixels)\*  
w576p (1023 x 576 pixels)\*  
w720p (1280 x 720p)\*

#### TRANSCODING

Optimal Voice-Switched (oVS) Video: Intelligent On-Demand Transcoding  
Network transcoding (IP, ISDN-PRI and V35)  
Audio, video and protocol transcoding  
Optimized picture layout for 3G phones  
Bandwidths from 56 kbps — 2 Mbps in the same conference

#### SECURITY FEATURES

Network authentication (H.235)  
Embedded audio/video encryption (H.235)  
Secure management & control (HTTPS, SSH)  
Participant authentication (password, dial-in number and caller ID)  
IP administration passwords  
Services may be disabled: Telnet, HTTP, HTTPS, SNMR, SSH

#### LIVE PRESENTATIONS

Broadcast of presentations (DuoVideo and H.239) on any network

#### IP NETWORK FEATURES

Expressway NAT and firewall traversal  
Intelligent Packet Loss Recovery (IPLR)  
Automatic call rate adjustments  
URI dialing  
QoS (DiffServ, IP Precedence and ToS)  
H.245 DTMF tones in H.323  
Centralized management via embedded web server using HTTPS, XML, SOAP, SSH and Telnet  
1 x RS-232 for local control and diagnostics  
Endpoints on two different IP networks in the same conference  
Automatic/manual error control

#### ISDN NETWORK FEATURES

ISDN-PRI E1/T1  
ISDN PRI G.703 and E1/T1, Leased Line  
Non-Facilities Associated Signaling (NFAS)  
Automatic downspeeding  
Automatic call rate adjustments  
Advanced diagnostic tools  
Automatic/manual error control

#### NETWORK INTERFACES

2 x LAN/ethernet (RJ-45) 10/100 Mbit on the system controller board  
Up to 2 x LAN/ethernet (RJ-45) 10/100 Mbit for media processing board  
Up to 16 x E1/T1 (RJ-45) for ISDN PRIs and/or G.703  
Up to 64 x V.35/RS-366 ports

#### ETHERNET/INTERNET/INTRANET CONNECTIVITY

TCP/IP, SSL, ARP, Telnet, HTTP, HTTPS, XML, SOAP  
Embedded web server for total conference and call control  
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), Q.931, SIP, H261, H263+, H264, G711, G722, G722.1, G728, MPEG4 AAC-LD

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

#### POWER

100–240 VAC, 50/60 Hz;  
460W max. power consumption

#### UNIT DIMENSIONS

Height 3U/133 mm/5.3"  
Width 444 mm/17.4"  
Depth 371 mm/14.6"  
Net weight 20.9 lbs/9.5 kg  
19" rack-mountable

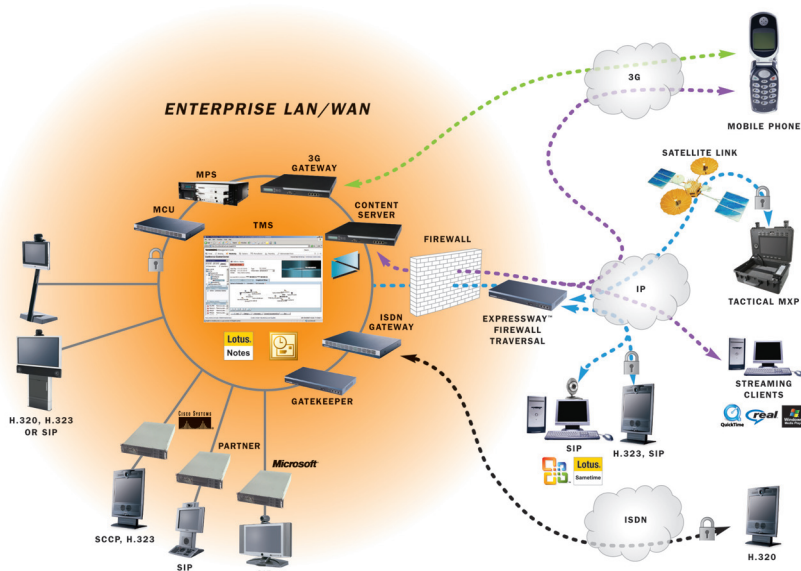
\*MCU only

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

All other trademarks are property of their respective owners.



## TANDBERG

# MPS 200

TANDBERG WORLD HEADQUARTERS  
Phillip Pedersens vei 20  
1366 Lysaker, Norway  
Tel: +47 67 125 125  
Fax: +47 67 125 234  
Video: +47 67 126 126  
E-mail: tandberg@tandberg.net

200 Park Avenue, Suite 2005  
New York, NY U.S.A. 10166  
Tel: +1 212 692 6500  
Tel: +1 800 538 2884 (toll free in the U.S.)  
Fax: +1 212 692 6501  
Video: +1 212 692 6535  
E-mail: tandberg@tandbergusa.com

July 2006