



TANDBERG
Codian MSE
 8000 Series

High-capacity voice and videoconferencing media services engine. This powerful, fault tolerant solution is ideal for the large scale communication needs of large enterprises and service providers requiring a high-availability, high-performance, scalable solution.



DESIGN FEATURES

- 10-hot swappable option slots
- Redundant and hot-swappable fan trays and power supplies
- Dual 48-volt power option
- Active environmental monitoring
- High speed backplane and management bus

APPLICATION FEATURES

- Multiple and interchangeable functionality, including supervisor, media, recording and gateway blades
- Extends the capabilities of large service providers by providing feature-rich conferencing, recording, ISDN Gateway as well as system management and configuration in an all-in-one device
- Unprecedented capacity — up to 360 ports of multipoint
- Call control and firewall traversal capabilities through the TANDBERG Video Communication Server
- Integrated with TANDBERG Management Suite

PERFORMANCE FEATURES

- More than 1 Gbps of conferencing bandwidth
- Wide range of network and protocol support, including H.323, SIP, H.320
- AES Encryption
- Codian Packet Safe™ technology provides intelligent downspeeding, packet pacing and packet loss concealment to ensure optimum quality
- Extensive approvals and compliance

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

SYSTEM COMPONENTS	DESCRIPTION
MSE 8000 Chassis	10-slot media services engine chassis with high speed backplane
MSE 8010 Fan tray	Hot-swap fan tray (for use in both top and bottom slots) with environmental monitoring
MSE 8025 Single shelf PSU	100-240 VAC single shelf power supply
MSU 8026 Dual shelf PSU	100-240 VAC dual shelf power supply

OPTION BLADES	DESCRIPTION
MSE 8050 Supervisor	Supervisor blade, required for system management and configuration
MSE 8420 Media	40 ports of video plus 40 ports of voice multipoint conferencing
MSE 8220 VCR	10 ports of video recording with streaming server
MSE 8321 ISDN GW	8 E1 or T1 ISDN primary rate interfaces

CHASSIS

10-hot swappable option slots
 Redundant and hot-swappable fan trays and power supplies
 Dual 48-volt power option
 Active environmental monitoring
 High speed backplane and management bus

CAPACITY

More than 1 Gbps of conferencing bandwidth
 Up to 360 ports of multipoint video conferencing
 Up to 72 T1/E1 ISDN primary rate interfaces
 Up to 90 ports of video conference recording
 No loss in port count due to bandwidth, resolution, codec or multipoint conference layout

VIDEO

H.261, H.263, H.263+, H.263++, H.264
 From QCIF up to 720p including interlaced ICIF and ISIF
 Up to 30 frames or 60 fields per second
 Bandwidths from 56 kbps to 4 Mbps
 Universal transcoding and transrating

AUDIO

G.711, G.722, G.723.1, G.728, G.729, MPEG-4 AAC-LC, MPEG-4 AAC-LD, Polycom® Siren14™/G.722.1 Annex C
 Audio transcoding, Automatic gain control, DTMF

PROTOCOLS

H.323 v4, SIP, H.235 (AES), H.239 (dual video), VNC™, FTP, RTP, RTSP, HTTP, DHCP, SNMP, NTP, UDP, TCP, ARP, ICMP

RELIABILITY

Fault-tolerant, high availability chassis
 Hot-swap option blades
 System supervisor

SECURITY FEATURES

Administrator, user and guest accounts
 Password protected conferences, recordings and streaming
 Secure non-PC hardware and operating system
 AES encryption, 128 bit key, H.235
 Video firewall

MULTIPOINT CONFERENCING

H.323/SIP dial in, or dial out from built-in 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 audio participants
 Video association for IP and traditional PBXs

RECORDING

From an H.323 endpoint, MCU or Gateway
 From two H.323 endpoints on a point-to-point call
 H.323 dial in, or dial out from web server
 Data from H.239 (dual video) capable endpoints
 Up to 200 recordings
 Folders for structured storage

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

SYSTEM MANAGEMENT

XML management API
 Management via built-in 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

ISDN

Calls up to 2 Mbps
 Total bandwidth and number of sites supported is limited only by ISDN capacity
 BONDING (ISO 13871)
 H.221 aggregation
 Automatic downspeeding on loss of ISDN B channels
 IVR/auto attendant
 Direct Inward Dialing (DID)
 Default (Operator) extension
 Call routing to MCU
 Digit manipulation
 Flexible dial plan
 Dial by E.164 address
 Dial from MCU with and without a gatekeeper
 Data from H.239 (dual video) capable endpoints
 ECAN

NETWORK RESILIENCE

Codian Packet Safe™ technology provides intelligent down-speeding, packet pacing and packet loss concealment to ensure optimum quality
 Dynamic jitter buffering

ENVIRONMENTAL DATA

Operating temperature 0°C to 35°C ambient
 Relative humidity below 90%

PHYSICAL DIMENSIONS

Height 33.25", 842 mm (19U)
 Width 17.2", 437 mm
 Depth 20.5", 520 mm
 19" rack mountable (kit supplied)
 Power -48 VDC, 100-240 VAC 50/60 Hz

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, ETS EN300 386, 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 - GB4943-2001, GB9254-1998, YD/T993-1998
 Telecoms: USA TIA-968-A: October 2002, 47 CFR Part 68: October 2004
 Canada: IC CS-03, Issue 9, Part VI,
 Europe: ETS 300 046-3,
 Japan: Ordinance of MPT No 31, 1984
 NAL Certificate (China), RoHS compliant

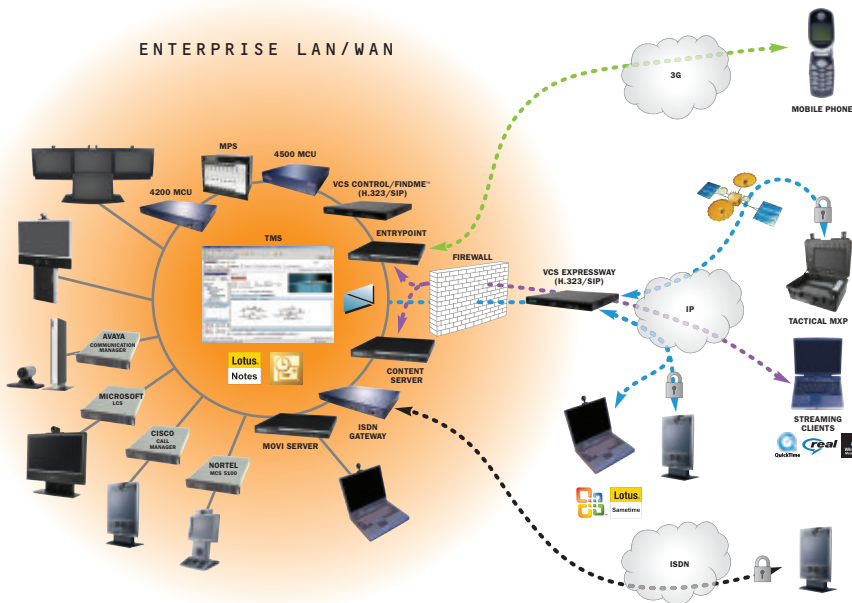
All specifications subject to change without notice, system specifics may vary.

All images in these materials are for representational purposes only, actual products may differ.

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

All other trademarks are property of their respective owners.

ENTERPRISE LAN/WAN



TANDBERG

Codian MSE 8000 Series

TANDBERG WORLD HEADQUARTERS
 Philip Pedersens vei 20
 1366 Lysaker, Norway
 Tel: +47 67 125 125
 Fax: +47 67 125 234
 Video: +47 67 126 126
 tandberg@tandberg.com

1212 Avenue of the Americas,
 24th Floor
 New York, NY USA 10036
 Tel: +1 212 692 6500
 Fax: +1 212 692 6501
 Video: +1 212 692 6535
 tandberg@tandberg.com

January 2008