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.

**TANDBERG**

Codian MSE 8000 Series

**DESIGN FEATURES**
- 10 hot-swappable option slots
- High Definition conferencing, recording and gateway capabilities
- Redundant and hot-swappable fan trays and power supplies
- Dual 48-volt power option
- Active environmental monitoring
- High-speed backplane
- Standards-based and compatible with all major vendors’ endpoints
- Easy-to-use, versatile, management interface

**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
- Integrated with TANDBERG Management Suite

**PERFORMANCE FEATURES**
- Up to 180 ports of HD multipoint
- Unprecedented capacity
- Up to 360 ports of SD multipoint
- Up to 72 ISDN primary rate interfaces
- More than 1 Gbps of conferencing bandwidth
- Wide range of protocols supported including H.323, SIP and H.320
- AES encryption
- Extensive approvals and compliance

GET THE MOST FROM YOUR INVESTMENT. WITH PROFESSIONAL SERVICES, TANDBERG EXPERTS SUPPORT TANDBERG CODIAN MSE 8000 SERIES DEPLOYMENT AND TRAINING. VISIT WWW.TANDBERG.COM
**SYSTEM COMPONENTS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSE 8000 Chassis</td>
<td>10 slot media services engine chassis with high-speed plane</td>
</tr>
<tr>
<td>MSE 8010 Fan tray</td>
<td>Hot-swap fan tray (for use in both top and bottom slots) with environmental monitoring</td>
</tr>
<tr>
<td>MSE 8025 Single-shelf PSU</td>
<td>100–240 VAC single-shelf power supply</td>
</tr>
<tr>
<td>MSE 8026 Dual-shelf PSU</td>
<td>100–240 VAC dual-shelf power supply</td>
</tr>
</tbody>
</table>

**OPTION BLADES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSE 8510 Media2</td>
<td>20 ports of HD video plus 20 ports of voice multipoint conferencing</td>
</tr>
<tr>
<td>MSE 8420 Media</td>
<td>40 ports of SD video plus 40 ports of voice multipoint conferencing</td>
</tr>
<tr>
<td>MSE 8350 IP GW</td>
<td>20 transcoding and 20 non-transcoding video calls</td>
</tr>
<tr>
<td>MSE 8321 ISDN GW</td>
<td>8 E1 or T1 ISDN primary rate interfaces</td>
</tr>
<tr>
<td>MSE 8220 VCR</td>
<td>10 ports of video recording with streaming server</td>
</tr>
<tr>
<td>MSE 8050 Supervisor</td>
<td>Supervisor blade, required for system management and configuration</td>
</tr>
</tbody>
</table>

**CHASSIS**

- 50 hot swap 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 180 ports of HD multipoint videoconferencing
- Up to 360 ports of SD multipoint videoconferencing
- Up to 72 T1/E1 ISDN primary rate interfaces
- Up to 90 ports of videoconferencing recording
- No loss in port count due to bandwidth, resolution, codec or multipoint conference layout

**VIDEO**

- H.261, H.263, H.263+, H.264
- From QIFC up to 720p including interlaced CIF and ISIF
- Up to 30 frames or 60 fields per second

**AUDIO**

- Audio transcoding, Automatic gain control, DTMF

**PROTOCOLS**

- H.323, SIP, H.235 (AES), SRTTP, TLS, H.239 (dual video), VPC
- BFCP, H.243 (chair control), RTP, RTSP, HTTP, HTTPS, DHCP, SNMP, NTP, NTLM (authentication), UDPP, 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
- SIP encryption
- TLS certificate verification
- Video firewall

**NETWORK RESILIENCE**

- Codian Packet Safe™ technology provides intelligent downspeeding, packet pacing and packet loss concealment to ensure optimum quality
- Dynamic jitter buffering
- Alternate gatekeepers
- Multipoint conferencing
- Secure upgrades through Ethernet or CompactFlash
- Configuration backup to network
- Configurable event logs and full H.323 and SIP decoding
- Management via built-in web server
- XML management API

**MULTIPLEXING**

- Multiplexing based on H.233/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
- Wide-screen (16:9) support
- Active speaker selection using remote control or voice activated
- Floor assignment through web page or management application
- End-end 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

**RECORDED VIDEO**

- Recording from an H.323 endpoint, MCU or Gateway
- Recording to a file on an H.323 endpoint on a point-to-point call
- H.323 data 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.241 aggregation
- Automatic downspeeding on loss of ISDN B channels
- IVR/auto attendant
- Automatic downspeeding on loss of ISDN B channels
- Standard (Operator) extension
- Call routing to MCU
- Digit manipulation
- Flexible dial plan
- Dial by E.164 address
- Dial from MCU with and without a gatekeeper

**ENVIRONMENTAL DATA**

- Operating temperature: 0°C to 35°C ambient
- Relative humidity below 95% (non-condensing)

**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
- CSA: UL 60950-1:2001
- CE Scheme certificate, CE Marked

**TELECOMS:**

- China: CB Scheme certificate, CE Marked

**TESTS:**

- USA Telecommunications: 10/100BaseT, 10/100BaseTX, 1000BaseT, 10GBaseT
- China: NM Certificate RoHS compliant

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