

Codian MSE 8000

Media Services Engine



Large Scale Voice and Video Communications Platform

The Codian MSE 8000 is a high capacity, carrier-class, voice and video conferencing chassis. This powerful, fault tolerant solution is ideal for the large scale communication needs of services providers and commercial enterprises requiring a high availability, high performance and scalable solution.

The MSE 8000 represents another way in which Codian's video conferencing infrastructure solutions help you conduct business better, every day.

The Codian Difference

High Definition Performance

Crystal clear, full-motion, high definition conferencing, recording and gateway capabilities available on feature blades, limited only by the capabilities of the endpoint and network.

Mission Critical Conferencing

Designed to meet the tough requirements of ETSI/NEBS 3, this fault tolerant chassis has a system supervisor, hot-swap feature blades and redundant, monitored power supplies and cooling.

Flexibility

Provides between 40 and 360 ports of multipoint voice and video, up to 72 T1/E1 ISDN primary rate interfaces, or up to 90 ports of conference recording in a single chassis. With bandwidths of up to 4 Mbps per port this adds up to more than 1 Gbps of video conferencing.

Constant High Capacity

Universal Port™ technology supports any codec, any speed, any resolution and any layout (including over 50 continuous presence multipoint layouts) on any port without loss of capacity or capability - greatly simplifying the planning, provisioning and scheduling of your conferences.

Standards-Based and Compatible

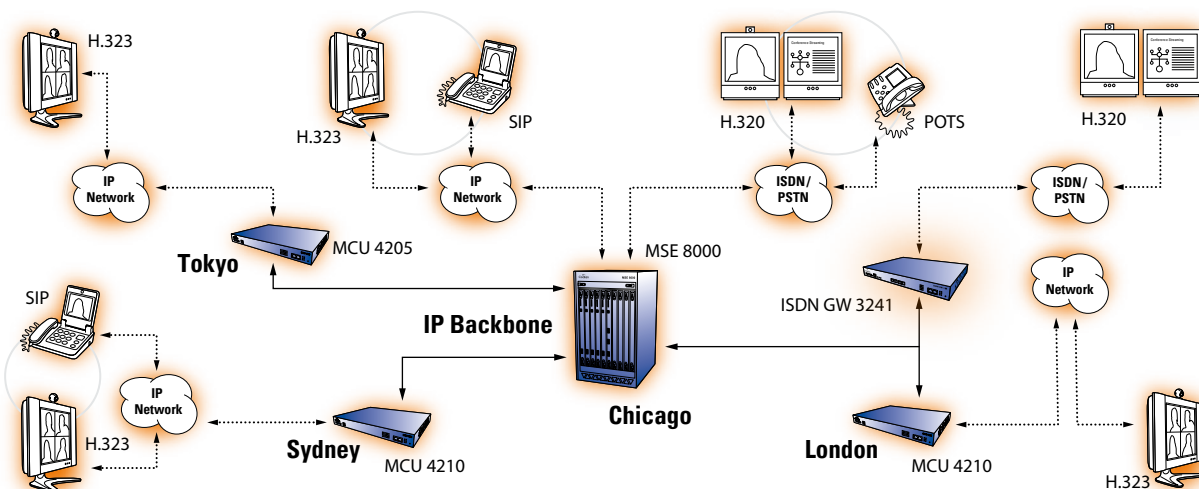
Offers full interoperability with IP and ISDN networks, and proven compatibility with all major vendors, giving the flexibility to choose the best conferencing equipment for your environment and ensuring you connect every time.

Unrivalled Quality

Delivers a unique video stream for each participant resulting in the best possible audio and video quality for the bandwidth and endpoint capabilities - resolutions up to 720p HD and the latest audio technology deliver exceptional voice and video clarity.

Scalable to Meet Future Needs

Latest chassis architecture allows upgrades and enhancements by installing new feature blades to give higher capacity, capabilities and support for future applications.



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 8510 Media2	20 ports of HD video plus 20 ports of voice multipoint conferencing
MSE 8420 Media	40 ports of SD video plus 40 ports of voice multipoint conferencing
MSE 8321 ISDN GW	8 E1 or T1 ISDN primary rate interfaces
MSE 8220 VCR	10 ports of video recording with streaming server
MSE 8050 Supervisor	Supervisor blade, required for system management and configuration

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 180 ports of HD multipoint video conferencing
 Up to 360 ports of SD 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, 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 downspeeding, 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 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
 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

Codian Inc

1570 The Alameda #216
 San Jose CA 95126 USA
 Toll-free: 1-888-CODIAN-0
 (1-888-263-4260)
 Tel: (408) 938 2300
 Fax: (408) 287 6630

Codian Ltd

14 Waterside Drive
 Langley
 Slough SL3 6EZ
 United Kingdom
 Tel: +44 (0)1753 548 333
 Fax: +44 (0)1753 548 303

Codian (Asia Pacific) Ltd

Suite 1606, Saxon Tower
 7 Cheung Shun Street
 Cheung Sha Wan
 Kowloon, Hong Kong
 Tel: +852 3583 1430
 Fax: +852 3583 1055

