



TANDBERG  
**Codian**  
**MSE 8350**  
**IP GW blade**

The TANDBERG Codian MSE 8350 IP GW blade is an innovative, chassis-based, gateway solution to let customers and partners easily call you over the Internet. Compatible with all major vendors' endpoints and capable of high definition, it offers powerful dial plans, an auto attendant and voice/video switchboard operators to route calls to the correct destination.



MSE 8000  
Chassis

GET THE MOST FROM YOUR INVESTMENT. WITH **PROFESSIONAL SERVICES**, TANDBERG EXPERTS SUPPORT TANDBERG CODIAN MSE 8000 SYSTEM DEPLOYMENT AND TRAINING. VISIT [WWW.TANDBERG.COM](http://WWW.TANDBERG.COM)

**DESIGN FEATURES**

- IVR/Auto Attendant, supports up to 32 menus and sub menus
- Live operator switchboard support
- Auto attendant menus support automated video greeting playback (requires IP VCR)
- Compatible with all major vendors' endpoints
- Easy-to-use, versatile, management interface
- Comprehensive wideband audio support
- Support for both SIP and H.323 endpoints
- Pay as you grow — buy the capacity you need now and upgrade in the future with a software license

**APPLICATION FEATURES**

- Flexible dial plans
- Operator hunt group
- Fully integrated, with built-in gatekeeper
- Fully interoperable with TANDBERG Management Suite (TMS)
- PacketSafe™ technology minimizes effects of network packet loss
- Application level gateway with no packet forwarding
- User level access privileges

**PERFORMANCE FEATURES**

- Transcoding and transrating on calls up to 4CIF
- Video resolutions: 720p up to 30fps (non-transcoded)
- Bandwidth per site: H.263 up to 4Mbps, H.264 up to 2Mbps
- Up to 40 simultaneous calls

#### IVR/AUTO ATTENDANT

Individually configurable for each port  
Configurable menu of destinations  
Navigate with FECC or DTMF  
Option to dial IP address by DTMF  
Custom audio prompts  
Uploadable multi-language support  
Supports up to 32 Sub Menus  
Supports recorded video messages on auto attendant menu (requires IP VCR)

#### OPERATOR SUPPORT

Up to 18 Live Operators  
Operator hunt group support  
Hunting by priority, round-robin and try-all

#### CALL ROUTING

Flexible dial plans  
Direct dial by E.164 address  
Redirect failed calls to operator and/or auto attendant  
Register with up to two H.323 gatekeepers  
Register with up to five SIP registrars

#### ENDPOINTS SUPPORTED

H.323 voice and video endpoints  
SIP voice and video endpoints (transcoded)

#### VIDEO STANDARDS

H.261, H.263, H.263+, H.263++ , H.264

#### VIDEO RESOLUTION

From QCIF up to 720p (1280 x 720) including interlaced  
iCIF and iSIF  
4:3 and 16:9 aspect ratios

#### FRAME RATES

Up to 30 frames or 60 fields per second

#### AUDIO STANDARDS

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

#### PROTOCOLS

H.323v4, SIP, FTP, RTP, HTTP, DHCP, SNMP, NTP, H.239  
(dual video), H.235 (AES)

#### BANDWIDTH

H.263 up to 4 Mbps, H.264 up to 2 Mbps

#### UNIVERSAL TRANSCODING AND TRANSTRATING

Automatic audio/video transcoding and transrating possible  
on all calls up to 4CIF  
Any bandwidth, any resolution, any video or audio codec  
can be independently used by each caller  
Each caller has their own personal encode  
Extremely low latency: less than 80 ms

#### SCALABILITY

Multiple IP Gateways can be deployed in large enterprise  
situations

#### BUILT-IN GATEKEEPER

Up to 25 devices can register  
Register service prefixes, H.323 IDs and E.164 aliases  
Round robin calls over common service prefixes for load balancing

#### FIREWALL TRAVERSAL

H.460 18 and 19 compliant

#### DTMF TRANSLATION

DTMF to IP address  
Out-of-band to in-band DTMF

#### CALL FEATURES

H.323 or SIP dial in  
Standalone call routing  
Preconfigured H.323 and SIP endpoints  
Options for H.323 gatekeeper & SIP registrar  
Widescreen (16:9) support  
Far end camera control tunneling using remote control

#### WEB USER INTERFACE

Complete configuration, control and monitoring of the  
system and calls

#### SYSTEM MANAGEMENT

TANDBERG Management Suite (TMS) Support  
Management via embedded 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  
SNMP

#### QUALITY OF SERVICE

Configurable DSCP or TOS/IP precedence

#### NETWORK RESILIENCE

Packet Safe™ technology provides intelligent downspeeding,  
packet pacing and packet loss concealment to ensure  
optimum video and audio quality  
Dynamic jitter buffering

#### SECURITY FEATURES

Three levels of access rights and privileges for users  
Separate dial plans for each network port  
Secure non-PC hardware and operating system  
Application level gateway with no IP packet forwarding

#### INTERFACES

2 x RJ45 Ethernet, 10/100/1000 Mbps full/half duplex,  
manual or auto sensing  
RJ45 serial port  
CompactFlash socket  
39 status LEDs

#### SOFTWARE LICENSE

IP GW call licenses required in MSE 8000 chassis  
to enable IP GW calls

#### ENVIRONMENTAL DATA

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

#### CHASSIS 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, EN61000-3-2, EN61000-3-3,  
EN55024; EN61000-4-2,-3,-4,-5,-6,-11,  
FCC Part 15 class A, VCCI class A, AS/NZ S 3548 (C-Tick),  
CCC Approved: GB4943-2001, GB9254-1998, YD/T993-1998  
NAL Certificate (China)  
RoHS compliant



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

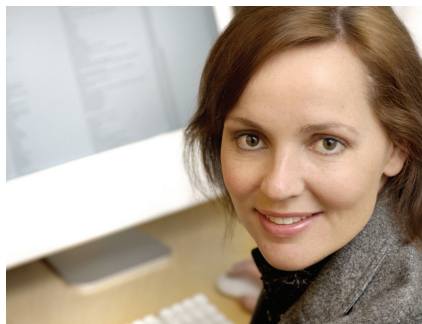
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Automated Attendant



Live Video Operators

#### TANDBERG

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