# Cisco TelePresence ISDN GW MSE 8321



Cisco TelePresence MSE 8000 chassis

The Cisco TelePresence™ portfolio creates an immersive, face-to-face experience over the network—empowering you to collaborate with others like never before. Through a powerful combination of technologies and design that allows you and remote participants to feel as if you are all in the same room, the Cisco TelePresence portfolio has the potential to provide great productivity benefits and transform your business. Many organizations are already using it to control costs, make decisions faster, improve customer intimacy, scale scarce resources, and speed products to market.

## Product Overview

The Cisco TelePresence ISDN GW MSE 8321 is a high-capacity and scalable chassis-based gateway that grows with your business demands. It provides seamless integration between IP and ISDN networks with complete feature transparency, including high definition (HD), enabling organizations using ISDN to enjoy the benefits of HD video conferencing.

## Cisco TelePresence ISDN GW MSE 8321

Table 1 summarizes the key features for the Cisco TelePresence GW MSE 8321

| Feature Summary | |
| --- | --- |
| Design Features | • Standards-based and compatible with all major vendors' endpoints<br>• Pay as you grow — buy the capacity you need now and upgrade in the future with a software license<br>• Easily configurable unit<br>• Comprehensive remote Web management |
| Application Features | • Provides seamless integration between IP and ISDN devices<br>• Fully integrated, with built-in gatekeeper<br>• Powerful dial plans ensure that your calls get routed efficiently<br>• H.239 and BFCP for presentation sharing capabilities<br>• Support for automatic load balancing in multiple gateway environments |

| Feature Summary | |
|---|---|
| **Performance Features** | • Video resolutions up to High Definition 720p at 30fps<br>• Supports up to 8 PRI ISDN ports in a single blade<br>• Enables up to 72 PRI ISDN ports in a single chassis<br>• Up to 240 voice calls at 64 Kbps per blade<br>• Up to 120 video calls at 128 Kbps per blade<br>• Bandwidth per call from 56Kbps to 2Mbps<br>• AES encryption |



## Product Capabilities

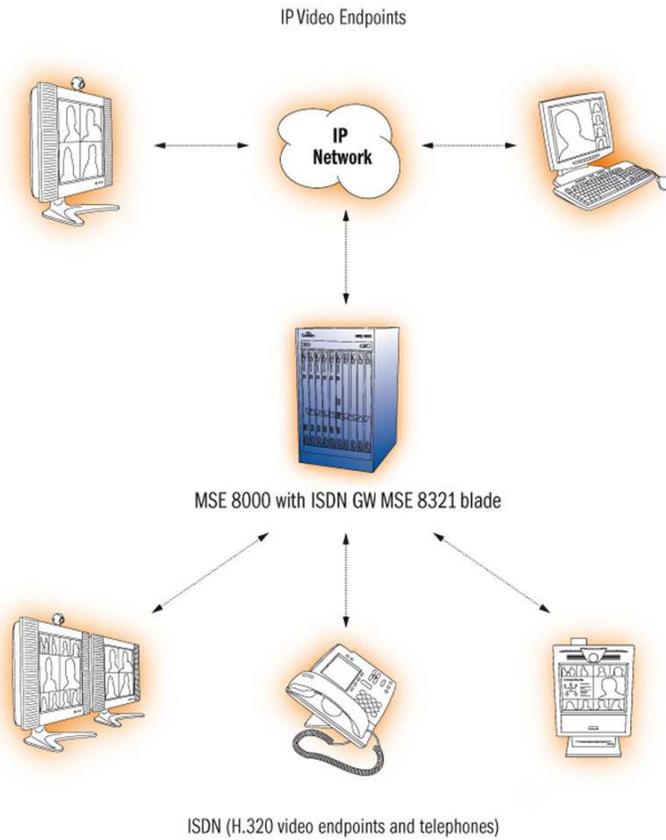Table 2 listing of the product capability specifications for the Cisco TelePresence ISDN GW MSE 8321

| Specification | Description |
|---|---|
| **Endpoints Supported** | • H.323 IP voice and video endpoints<br>• SIP voice and video endpoints<br>• H.320 ISDN voice and video endpoints<br>• PSTN audio only calls (telephones) through ISDN |
| **Video Standards** | • H.261, H.263, H.263+, H.264 |
| **Video Resolution** | • QCIF, QSIF, CIF, SIF, iCIF, iSIF, 288p, 384p, 400p, 448p, VGA, 4CIF, 4SIF, 480p, SVGA, 576p, XGA, 720p |
| **Frame Rates** | • Up to 30 frames per second and 60 fields per second |
| **Audio Standards** | • G.711, G.722, G.728, G.722.1 Annex C |
| **Other Standards** | • H 323, H.320, H.233, H.234, H.235 (AES), H.239 (dual video), H.221, FTP, RTP, HTTP, HTTPS, DHCP, SNMP, NTP |
| **ISDN Signaling** | • Q.931, NFAS, 4ESS, DMS100 support |
| **ISDN Bonding** | • Bonding (ISO 13871)<br>• H.221 aggregation<br>• Automatic downspeeding on loss of ISDN B channels |
| **Bandwidth** | • H.320/H.323/SIP calls supported up to 2 Mbps<br>• Total bandwidth and number of sites supported is limited only by ISDN capacity |
| **Presentation/Data collaboration** | • Data from H.239 (dual video) of BFCP capable endpoints |
| **Call Routing from ISDN (H.320/PSTN)** | • IVR/auto attendant<br>• Direct Inward Dialing (DID)<br>• Default (Operator) extension<br>• Call routing to MCU/multipoint conference bridge<br>• Dialed number digit manipulation<br>• Calling party number digit manipulation<br>• Flexible dial plan<br>• TCS-4 support |
| **Call Routing from IP (H.323/SIP)** | • IVR/auto attendant<br>• Dial by E.164 address<br>• Dialed number digit manipulation<br>• Calling party number digit manipulation<br>• Flexible dial plan<br>• Dial from MCU with and without a gatekeeper |
| **Embedded Web Server** | • Complete configuration, control and monitoring of the system |

| Specification | Description |
|---|---|
| Built-in Gatekeeper | • Resolution of E.164 numbers<br>• Registration of endpoints and gateways<br>• Up to 25 devices can register |
| System Management | • Management via embedded Web server<br>• Status through Cisco TelePresence Management Suite<br>• XML API<br>• RS-232 for local control and diagnostics<br>• Syslog for diagnostics<br>• Configurable event logs and full H.323 decoding<br>• Configuration backup to network<br>• Secure upgrades through Ethernet or CompactFlash<br>• Call Detail Records downloadable as XML<br>• SNMP |
| Quality of Service | • Configurable DSCP or TOS/IP precedence<br>• H.323 flow control<br>• Dynamic jitter buffers<br>• ECAN for PSTN audio only telephone calls |
| Security Features | • Two levels of access rights and privileges for users<br>• Strong password policy<br>• Secure management via HTTPS<br>• Dial plan system controls which destinations are reachable<br>• Services may be disabled: HTTP, HTTPS, FTP, H.323, SNMP, H.323 GK<br>• H.235 authentication for Gatekeeper registration<br>• Secure non-PC hardware and operating system<br>• AES encryption, 128 bit key, H.233, H.234, H.235<br>• TLS certificate verification<br>• Certificate-based login with OCSP certificate checking<br>• SRTP encryption<br>• Second Ethernet port<br>• Audit log |
| Embedded Encryption | • Standards based on ISDN, IP and mixed ISDN/IP: H.233, H.234, H.235, AES 128 bit key<br>• Automatic key generation and exchange<br>• Transparent encryption |
| Interfaces | • RJ45 ISDN PRI ports<br>• 2 x RJ45 Ethernet, 10/100/1000 Mbps full/half duplex, manual or auto sensing<br>• RJ45 serial port<br>• CompactFlash socket<br>• Up to 39 status LEDs |
| Software License | • ISDN PRI port licenses required in Cisco TelePresence MSE 8000 chassis to enable ISDN PRI ports |
| Environmental Data | • Operating temperature 0℃ to 35℃ ambient<br>• Relative humidity below 95% (non-condensing) |
| Chassis Physical Dimensions | • Height 33.25", 842 mm (19U)<br>• Width 17.2", 437 mm<br>• Depth 20.5", 520 mm<br>• 19" rack mountable (kit supplied)<br>• Power -48 VDC, 100–240 VAC 50/60 Hz |

## Regulatory Compliance

- European safety: EN 60950-1:2001
- USA safety: UL 60950-1 First Edition
- Canada safety: CSA 60950-1-03
- 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/NZS 3548 (C-Tick)
    - CCC Approved: 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
    - China: NAL Certificate
- RoHS compliant

IP Video Endpoints

IP Network

MSE 8000 with ISDN GW MSE 8321 blade

ISDN (H.320 video endpoints and telephones)

## Ordering Information

To place an order, visit the Cisco® Ordering Home Page and refer to Table 3 or contact your local Cisco representative. To download software, visit the Cisco Software Center.

Table 3. Ordering Information

| Product Name | Part Number |
|---|---|
| **Cisco TelePresence MSE 8000** | **CTI-8000-MSECH-K9** |
| **Start with CTI-8000-MSECH-K9 in order to view the options listed below:** | |
| Cisco TelePresence ISDN GW MSE 8321 blade<br>AES and HTTPS Encryption Option for MSE 8321 blade | CTI-8321-GWISDNK9<br>LIC-AESCDN7-K9 |
| **Cisco TelePresence ISDN MSE 8321 blade for post sales upgrade** | **CTI-8321-GWISDNK9=** |
| **Start with CTI-8321-GWISDNK9= in order to view the options listed below:** | |
| AES and HTTPS Encryption Option for ISDN GW MSE 8321 blade | LIC-AESCDN7-K9 |
| **Cisco TelePresence MSE 8000 chassis port license PAK (Product Authorization Key) for post sale upgrades** | **L-8000-CHLIC-PAK** |
| **Start with L-8000-CHLIC-PAK in order to view the option listed below:** | |
| 1 PRI ISDN port license for use with ISDN GW MSE 8321 | LIC-8310-1PL |
| **AES and HTTPS Encryption Option for ISDN GW MSE 8321 blade for post sales upgrade** | **LIC-AESCDN7-K9=** |

## Service and Support

Cisco and our partners provide a broad portfolio of intelligent, personalized services and support that can help you realize the full value of your Cisco TelePresence investment by increasing business agility and network availability. This portfolio of services accelerates business innovation through a network-based collaboration platform that enables businesses to collaborate anywhere, anytime. For more information about these services, please visit: http://www.cisco.com/go/telepresenceservices.

## For More Information

For more information about the Cisco TelePresence ISDN GW MSE 8321, please visit http://www.cisco.com/go/telepresence or contact your local Cisco account representative or authorized Cisco partner. Product specifications are estimates and subject to change without notice.

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