Cisco TelePresence MSE 8000

Figure 1. Cisco TelePresence MSE 8000

Cisco TelePresence MSE 8000

Product Overview

The Cisco TelePresence® MSE 8000 (MSE 8000) is a high-capacity voice and video conferencing 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.

Features and Benefits

The super robust Cisco TelePresence MSE 8000 is a high-capacity, carrier-class, voice and video conferencing chassis and has a system supervisor; hot-swap feature blades; and redundant, monitored power supplies and cooling system with the features listed in Table 1. Table 2 lists the components of the Cisco TelePresence MSE 8000.

Table 1. Cisco TelePresence MSE 8000 Feature Summary

Feature	Benefit
Design features	• Ten hot-swappable option slots • High-definition (HD) conferencing and gateway capabilities • Redundant and hot-swappable fan trays and power supplies • Dual 48-volt power option • Active environmental monitoring • High-speed backplane to create multiple multiblade multipoint control units (MCUs) and telepresence servers • Supervisor blade for system management and configuration • Extensive approvals and compliance
Application features	• Offers multiple and interchangeable functions, including media and gateway blades • Extends the capabilities of large service providers by providing feature-rich conferencing, Serial and ISDN gateway, as well as system management and configuration in an all-in-one device • Integrated with Cisco TelePresence Management Suite

Feature	Benefit
Support capabilities[*]	• Up to 180 ports of HD 1080p multipoint • Up to 720 ports of standard-definition (SD) multipoint • Up to 72 ISDN Primary Rate Interface (PRI) instances • Up to 144 serial ports in a single chassis • Up to 216 HD 720p30 ports of TelePresence • More than 1 Gbps of conferencing bandwidth • Wide range of protocols supported, including H.323, Session Initiation Protocol (SIP), and H.320 • Advanced Encryption Standard (AES) encryption • Standards-based and compatible with all major vendors' endpoints • Support for Cisco TelePresence Multiway technology

* Optional feature blades required

Table 2.   Cisco TelePresence MSE 8000 Components

System Components	Description
Cisco TelePresence MSE 8000	• 10-slot media services engine chassis with high-speed backplane
Cisco TelePresence MSE 8010 fan tray	• Hot-swap fan tray (for use in both top and bottom slots) with environmental monitoring
Cisco TelePresence AC Power Option	• Dual redundant 100-240 VAC power supply shelves • NIC power shelf management module units • 1-kW AC/DC rectifier modules
Cisco TelePresence Supervisor MSE 8050	• Supervisor blade, required for system management and configuration

Licensing

Software licenses are required in the Cisco TelePresence MSE 8000 chassis to enable the functions of individual blades. Refer to Table 3 for details.

Table 3.   Cisco TelePresence MSE 8000 Software License

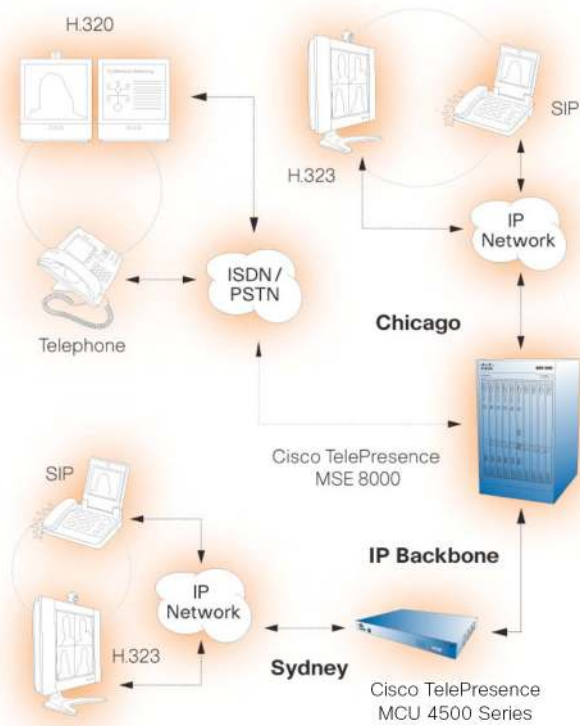| Chassis Software Licenses	Description
TelePresence Server (TS) screen license	• Required in Cisco TelePresence MSE 8000 chassis to enable one 1080p30 TelePresence screen or 2 x 720p30 TelePresence screen when allocated to the Cisco TelePresence Server MSE 8710
MCU (Media) port license	• Four required in Cisco TelePresence MSE 8000 chassis to enable one Full HD 1080p30 video port and one additional audio port when allocated to the Cisco TelePresence MCU MSE 8510 • Two required in Cisco TelePresence MSE 8000 chassis to enable one HD 720p30 video port and one additional audio port when allocated to the Cisco TelePresence MCU MSE 8510 • Required in Cisco TelePresence MSE 8000 chassis to enable one SD w448p30 video port and no additional audio ports when allocated to the Cisco TelePresence MCU MSE 8510 • Required in Cisco TelePresence MSE 8000 chassis to enable two nHD w360p30 video ports and no additional audio ports when allocated to the Cisco TelePresence MCU MSE 8510 • Required in Cisco TelePresence MSE 8000 chassis to enable one SD video port and one additional audio port when allocated to the Cisco TelePresence MCU MSE 8420
PRI port license	• Required in Cisco TelePresence MSE 8000 chassis to enable one ISDN PRI port when allocated to the Cisco TelePresence ISDN GW MSE 8321
Serial port license	• Required in Cisco TelePresence MSE 8000 chassis to enable one Serial GW port when allocated to the Cisco TelePresence Serial GW MSE 8330
TelePresence Screen Migration Option	• Required in Cisco TelePresence MSE 8000 chassis to enable the conversion of MCU (Media) port licences to TelePresence Server (TS) screen licences

Product Specifications

Table 4 lists the product specifications for the Cisco TelePresence MSE 8000.

Table 4. Product Specifications

Feature	Specification
Product compatibility	• Standards-based and compatible with all major vendors' endpoints
Software licenses	• The port licensing model offers added flexibility. • Port licenses are purchased for the Cisco TelePresence MSE 8000 to enable screen and port functions. • Port licenses are stored in the chassis, and the Cisco TelePresence Supervisor MSE 8050 can allocate licenses to slots. • Optional feature blades must be inserted into slots to use software licenses.
Chassis	• Fault-tolerant, high-availability chassis • Ten hot-swappable option slots • Redundant power inputs and hot-swappable fan trays • Dual independent 48-volt DC power inputs • Active environmental monitoring • High-speed backplane and management bus
AC power supply	• Two independent AC power shelves convert power for the two DC power inputs of the chassis • Each shelf has multiple redundant hot-swap rectifier modules • Each rectifier has its own independent AC inlet
Cisco TelePresence Supervisor MSE 8050	• Actively monitors and manages the chassis and blades • Hot-swappable without affecting feature blade operation • Configures blades and monitors the status of blades, fans, air filters, power feeds, and AC power supply shelves • Alert generation • Standard telco alarm connector • Management through built-in web server • RS-232 for local control and diagnostics • Strong password policy • Syslog for diagnostics • Configuration backup over network • Secure upgrades through Ethernet or CompactFlash • Supports Simple Network Management Protocol (SNMP) • Certificate-based login with OCSP certificate checking • Audit log

Optional feature blades	• The following feature blades can be slotted into a powered Cisco TelePresence MSE 8000 chassis:
	  ◦ Cisco TelePresence Server MSE 8710: Up to 24 screens of HD telepresence conferencing
	  ◦ Cisco TelePresence MCU MSE 8510: Up to 20 ports of HD video plus 20 ports of voice multipoint conferencing, or up to 80 ports of SD video multipoint conferencing
	  ◦ Cisco TelePresence MCU MSE 8420: Up to 40 ports of SD video plus 40 ports of voice multipoint conferencing
	  ◦ Cisco TelePresence ISDN GW MSE 8321: Up to 8 E1 or T1 ISDN primary rate interfaces
	  ◦ Cisco TelePresence Serial GW MSE 8330: Up to 16 serial ports
	Note: Refer to individual data sheets for detailed description of blades.

Language	• English as standard; alternative language packs can be loaded onto the system
Physical dimensions (H x W x D)	• Physical dimensions: 33.25 x 17.2 x 20.5 in. (842 x 437 x 520 mm) (19 rack units [19RU]) • 19-in. rack-mountable (kit supplied)
Weight	• 110 lbs (50 kg)
Power	• -48 VDC, 100-240 VAC 50/60 Hz

Feature	Specification
Environmental data	• Operating temperature: (0 to 35°C) ambient • Relative humidity below 95% (noncondensing)

Approvals and compliance	• European safety: EN 60950-1
	• USA/Canada safety: UL 60950-1
	• CB, CE
	• 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
	  ○ CCC - GB4943, GB9254
	  ○ YD/T993
	• Telecoms:
	  ○ USA: 47 CFR Part 68,
	  ○ Canada: IC CS-03, Issue 9, Part VI
	  ○ Europe: ETS 300 046-3, TBR 4
	  ○ Japan: Ordinance of MPT No 31
	  ○ Australia - S038
	  ○ China: NAL
	• RoHS compliant

Figure 2.   Example of endpoints and network supported by Cisco TelePresence MCUs

Warranty Information

Find warranty information on Cisco.com at the Product Warranties page.

Ordering Information

To place an order, visit the Cisco® Ordering Home Page and refer to Table 5 or contact your local Cisco representative. To download software, visit the Cisco Software Center.

Table 5. Ordering Information

Product Name	Part Number
Cisco TelePresence MSE 8000	**CTI-8000-MSECH-K9**
Comes with: Cisco TelePresence MSE 8000 Chassis, Cisco TelePresence Supervisor MSE 8050 and dual redundant AC/DC power shelves for AC powered option. Need to order at least one Cisco TelePresence MSE 8000 blade option and screen or port license options to make a functional system.	
Cisco TelePresence MSE 8000 blade options – order at least one blade for a functional system:	
Cisco TelePresence Server MSE 8710 blade Multi-screen Interoperability Option for MSE 8710 blade AES and HTTPS Encryption Option for MSE 8710 blade	CTI-8710-TS-K9 LIC-8710-TPI LIC-AESCDN7-K9
Cisco TelePresence MCU MSE 8510 blade Conference Director Option for MSE 8510 blade AES and HTTPS Encryption Option for MSE 8510 blade	CTI-8510-MED2-K9 LIC-8510-CCD LIC-AESCDN7-K9
Cisco TelePresence MCU MSE 8420 blade Conference Director Option for MSE 8420 blade AES and HTTPS Encryption Option for MSE 8420 blade	CTI-8420-MED-K9 LIC-8420-CCD LIC-AESCDN7-K9
Cisco TelePresence ISDN GW MSE 8321 blade AES and HTTPS Encryption Option for MSE 8321 blade	CTI-8321-GWISDNK9 LIC-AESCDN7-K9
Cisco TelePresence Serial GW MSE 8330 blade - up to 16 ports Cisco TelePresence Serial GW 16 DB26 Rack Mount Bracket Kit Cisco TelePresence Serial GW Y Cable to 2 DB26 connectors AES and HTTPS Encryption Option for MSE 8330 blade	CTI-8330-GWS-K9 CTI-GWS-16DB-BRK CTI-GWS-CAB-2DB26 LIC-AESCDN7-K9
Port license options for Cisco TelePresence MSE 8000 chassis – Use these part numbers when placing an initial order: must order at least one port (screen) license for each blade that you order:	
1 TS screen license for use with Cisco TS MSE 8710	LIC-8710-1SL
1 HD 720p or 2 SD MCU (media) port licenses for use with MCU MSE 8510	LIC-8420-2PL
2 SD MCU (media) port licenses for use with MCU MSE 8420	LIC-8420-2PL
4 Serial Port Licenses for use with MSE 8330	LIC-8330-4PL
1 PRI port license for use with ISDN GW MSE 8321	LIC-8310-1PL
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 options listed below:	
1 TS screen license for use with Cisco TS MSE 8710	L-8710-1SL
1 HD 720p or 2 SD MCU (media) port licenses for use with MCU MSE 8510	L-8420-2PL
2 SD MCU (media) port licenses for use with MCU MSE 8420	L-8420-2PL
4 Serial Port Licenses for use with MSE 8330	L-8330-4PL
1 PRI ISDN port license for use with ISDN GW MSE 8321	L-8310-1PL
TelePresence Screen Migration Option	L-8000-TSMO
AES and HTTPS Encryption Option for MSE 8050 blade for post sales upgrade	**L-AESCDN7-K9=**
Air filter consumables kit for MSE 8000 chassis, 4 air filters	**CTI-8000-4AIRF=**
1kW AC/DC power shelf rectifier module	**CTI-8000-VALRCTF=**

Cisco Services

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 MSE 8000, 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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