

Cisco MCS 7835-H2

Cisco Unified Communications Solutions unify voice, video, data, and mobile applications on fixed and mobile networks enabling easy collaboration every time from any workspace.

Product Overview

The Cisco[®] MCS 7835-H2 is a high-availability server platform for Cisco Unified Communications Solutions. An integral part of a complete, scalable architecture for a new generation of high-quality IP voice solutions that run on enterprise data networks, the Cisco MCS 7835-H2 delivers the high performance and availability demanded by today's enterprise networks and represents an innovative solution that is easy to deploy and highly cost-effective. At only 2 rack units (2RUs) high, the Cisco MCS 7835-H2 offers tremendous power in a low-profile chassis that minimizes rack space.

Supported Applications

The Cisco MCS 7835-H2 can run any of the following Cisco applications:

- Cisco Unified Application Environment
- Cisco Unified Communications Manager: Up to 2500 Cisco Unified IP Phones per server
- Cisco Emergency Responder: Up to 20,000 Cisco Unified IP Phones
- Cisco Unified Presence
- Cisco Unified Intelligent Contact Management Enterprise
- Cisco Unified Intelligent Contact Management Hosted
- Cisco Unified Contact Center Enterprise
- Cisco Unified Contact Center Hosted
- Cisco Unified Contact Center Express
- Cisco Unified Expert Advisor
- Cisco Unified IP IVR
- Cisco Unified MeetingPlace[®] conferencing
- Cisco Unified MeetingPlace Express
- Cisco Unity[®] unified messaging
- Cisco TelePresence Manager
- Cisco Digital Media System (DMS)

Key Features and Benefits

Performance

The Cisco MCS 7835-H2 is a robust, highly available server platform designed to support today's Cisco Unified Communications applications. It uses a Smart Array P400 Controller with a 256-MB cache to provide onboard Redundant Array of Independent Disks (RAID) support. The Cisco MCS 7835-H2 occupies only 2RUs of space while providing the features most requested in a high-availability server platform.

High Availability

High availability on the Cisco MCS 7835-H2 is achieved through the following mechanisms:

- Redundant hot-swap power supplies
- Redundant hot-swap fans
- Hot-swap Serial Attached SCSI (SAS) hard drives configured using RAID 1

Serviceability

System Health LEDs

The Cisco MCS 7835-H2 provides system health LEDs and unit identification lights on the front and back of the server to make pinpointing system problems easier than ever. When an internal component fails, this indication is made on an internal component LED (amber) and on the front panel of the Cisco MCS 7835-H2. If the item is serviceable without removing the server hood, as in the case of a redundant power supply, the external health LED illuminates. If the item is serviceable by removing the hood, as in the case of a fan failure, the internal health LED illuminates. If no failures have occurred, the system health LEDs are green. If a failure has occurred but a redundant feature has enabled the system to continue running, the LED is amber. If the failure is critical and has caused the system to shut down, the LED is red.

Integrated Lights Out 2

The Integrated Lights Out (iLO) 2 Standard and Advanced are included on this server. Combining essential management functions and diagnostics with basic lights-out functions as standard components of the server, iLO 2 is available at no charge. The iLO 2 standard provides fundamental server control and monitoring by integrating essential lights-out technology directly into the Cisco MCS 7835-H2 server architecture.

- Essential lights-out features include remote power control, text-based console, logs, status, and alert forwarding.
- The easy-to-use, dedicated lights-out LAN port is accessible through a browser interface.
- The iLO 2 standard saves a valuable peripheral-component-interconnect (PCI) slot for additional functions and reduces installation and setup time.
- The iLO 2 standard eliminates the need for an external power adapter or any other internal or external cables.
- The iLO 2 standard provides a rich suite of security features, including Secure Sockets Layer (SSL).
- The iLO 2 standard provides a scalable solution by allowing group administration of iLO processors.

DAT Tape Support

The Cisco MCS 7835-H2 can support an optional 36/72-GB universal-serial-bus (USB) external Digital Audio Tape (DAT) drive or an optional USB rack-mount DAT drive. This tape drive connects through one of the 4 USB 2.0 ports provided by the Cisco MCS-7825-H2 server. The external DAT drive is orderable using part number DAT-USB-EXT-72=, and the rack-mounted 36/72-GB DAT drive is orderable using part number DAT-USB-RM-72=.

Product Specifications

Tables 1 and 2 list the configurations of the Cisco MCS 7835-H2.

Table 1. Currently Shipping Configuration

Component	Value
Product part numbers	MCS-7835-H2-CCE2 MCS-7835-H2-CCX2 MCS-7835-H2-ECS2 MCS-7835-H2-IPC2 MCS-7835-H2-RC2
Preload	None
OS included	None
Processor	Single Intel 5140 2.33GHz 4M L2
Memory	PC2-5300 667-MHz DDR2 synchronous dynamic RAM (SDRAM) Fully Buffered DIMMs
Hard disks	Two 146-GB SAS 2.5-in. hot-swap
Remote management	HP iLO Advanced License

Table 2. Previous Shipping Configuration

Component	Value
Product part numbers	MCS-7835-H2-CCE1 MCS-7835-H2-CCX1 MCS-7835-H2-ECS1 MCS-7835-H2-IPC1 MCS-7835-H2-RC1 MCS-7835-H2-UC1
Preload	None
OS included	None
Processor	Single Intel 5140 2.33-GHz 4M L2
Memory	2-GB (two 1-GB) PC2-5300R
Hard disks	Two 72-GB SAS 2.5-in. hot-swap
Remote management	HP iLO Advanced License

Tables 3 through 8 give specification and compliance information about the Cisco MCS 7835-H2.

Table 3. Processor Specifications

Maximum processors	2
Processors installed	1
Basic input/output system (BIOS) type	Flash

Table 4. Memory Specifications

Memory maximum	32 GB
Memory bus clock	667 MHz
Memory technology	PC2-5300 667-MHz DDR2 synchronous dynamic RAM (SDRAM) Fully Buffered DIMMs
Multibit error mitigation	Advanced Error Checking and Correcting (AECC)
Total RAM slots	8

Table 5. RAID Controller Specifications

Controller model	HP Smart Array P400 Controller
Interface	PCI Express
Cache	256 MB
Battery-backed write cache	Yes
RAID levels supported	1

Table 6. Hard Disk Specifications

Hot-swappable bays	8
Hard disk interface type	SAS
Hard disk revolutions per minute (rpm)	10,000
Hard disk average seek time	4 ms
Data-transfer rate	300 MB per second

Table 7. Network Interface Specifications

Network interface card (NIC)	Dual onboard 10/100/1000
Connector	Two RJ-45 connectors on back of server
10BASE-T cable support	Category 3, 4, or 5 unshielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)
100BASE-TX cable support	Category 5 UTP (2 pair) up to 328 ft (100m)
1000BASE-T cable support	Category 5 UTP, 5E UTP, 6 UTP (2 pair) up to 328 ft (100m)

Table 8. Interface Port Specifications

Serial ports	1
Parallel ports	0
USB 2.0 ports	5 (2 front, 2 back, and 1 inside)
Keyboard ports	1 PS2
Mouse ports	1 PS2
Audio ports	None
System management ports	RJ-45 for HP iLO 2
Video Graphics Array (VGA) ports	1 front and 1 back

Security Capabilities

<ul style="list-style-type: none"> • Power-on password • Keyboard password • Selectable boot device • Diskette drive control • QuickLock, network server mode • Serial interface control • Administrator's password • Disk configuration lock

Standards Compliance

- Advanced configuration and power interface (ACPI) 2.0 compliant
- PCI 2.2 compliant
- Wake-on-LAN (WoL) support
- Microsoft Logo certifications
- USB 2.0 support

Table 9 gives expansion options and interfaces, and Table 10 gives unit specifications for the Cisco MCS 7835-I2.

Table 9. Expansion Options and Interfaces

PCIe non-hot plug slots	1
PCI-X non-hot plug 133-MHz, 64-bit slots	2

Table 10. System Unit Specifications

Dimensions (H x W x D)	3.38 x 17.54 x 26.01 in.	8.59 x 44.54 x 66.07 cm
Weight	60 lb	27.22 kg
Input requirements (per power supply)	Rated line voltage	100–132 VAC and 200–240 VAC
	Rated input current	10A (100 VAC), 10A (120 VAC), and 6.1A (200 VAC)
	Rated input frequency	50–60 Hz
	Rated input power	1000, 1056, and 1205W
BTU rating	BTU/hr	3490, 3680, and 4150
Power supply output power	Rated steady-state power	800, 850, and 1000W
Temperature range	Operating	<ul style="list-style-type: none"> • 50 to 95°F (10 to 35°C) at sea level with an altitude de-rating of 1.8°F per 1000 ft (1.0°C per 304.8m) to 10,000 ft (3048m) • No direct sunlight allowed • Maximum rate of change: 18°F/hr (10°C/hr) • Upper operating limit: 10,000 ft (3,048m) or 70 Kpa/10.1 psia • System performance may be reduced if operating with a fan fault or above 30°F (??°C) [[pls supply number]]
	Nonoperating	<ul style="list-style-type: none"> • 22 to 140°F (–30 to 60°C) • Maximum rate of change: 36°F/hr (20°C/hr) • Upper nonoperating limit: 30,000 ft (9,144m) or 30.3 KPa/4.4 psia
Maximum wet-bulb temperature	101.7°F	38.7°C
Relative humidity (noncondensing)	Operating	10 to 90% relative humidity (RH); 28°C maximum wet bulb temperature
Relative humidity (noncondensing)	Nonoperating	5 to 95% RH; 38.7°C maximum wet bulb temperature
Acoustic noise	Idle minimum (fixed disk drives spinning)	L WAd (bels) 6.4 L pAm (dBA) 47
	Operating minimum (random seeks to fixed disks)	L WAd (bels) 6.6 L pAm (dBA) 49

Ordering Information

To place an order, visit the [Cisco Ordering Home Page](#) and refer to Tables 11 through 13.

Table 11. Ordering Information

Product Name	Part Number
Cisco Unified Application Environment	See Cisco Unified Application Environment data sheet
Cisco Unified Communications Manager 4.3	CALLMANAGER-4.3
Cisco Emergency Responder	See Emergency Responder datasheet
Cisco Unified Presence	See Unified Presence datasheet
Cisco Unified Intelligent Contact Management Enterprise	ICM-BUNDLE
Cisco Unified Intelligent Contact Management Hosted	HOSTED-BUNDLE
Cisco Unified Contact Center Enterprise	IPC-BUNDLE
Cisco Unified Contact Center Hosted	HOSTED-BUNDLE
Cisco Unified Contact Center Express	CCX-50-STANDARD CCX-50-ENHANCED CCX-50-PREMIUM CCX-60-STANDARD CCX-60-ENHANCED CCX-60-PREMIUM CCX-70-NEW
Cisco Unified Expert Advisor	EA-BUNDLE
Cisco Unified IP IVR	IVR-5.0-NEW IVR-6.0-NEW IVR-70-NEW-BUNDLE
Cisco Unified MeetingPlace conferencing	See Unified MeetingPlace datasheet
Cisco Unified MeetingPlace Express	See Unified MeetingPlace Express datasheet
Cisco Unity	See Server Spares below
Cisco TelePresence Manager	CTS-MAN1.0
Cisco Digital Media System (DMS)	Refer to Digital Media System datasheet

Server Spares

Table 12. Ordering Information for Spare Servers by Application

Application	Spare Part Number
Cisco Unified Application Environment	MCS-7835-H2-IPC2
Cisco Unified Communications Manager	MCS-7835-H2-IPC2
Cisco Emergency Responder	MCS-7835-H2-IPC2
Cisco Unified Presence	MCS-7835-H2-IPC2
Cisco Unified Intelligent Contact Management Enterprise	MCS-7835-H2-CCE2
Cisco Unified Intelligent Contact Management Hosted	MCS-7835-H2-CCE2
Cisco Unified Contact Center Enterprise	MCS-7835-H2-CCE2
Cisco Unified Contact Center Hosted	MCS-7835-H2-CCE2
Cisco Unified Contact Center Express	MCS-7835-H2-CCX2
Cisco Unified Expert Advisor	MCS-7835-H2-CCE2
Cisco Unified IP IVR	MCS-7835-H2-CCX2
Cisco Unified MeetingPlace conferencing	MCS-7835-H2-RC2
Cisco Unified MeetingPlace Express	MCS-7835-H2-RC2
Cisco Unified IP Queue Manager	MCS-7835-H2-CCX2
Cisco Unity	MCS-7835-H2-ECS2

Cisco TelePresence Manager	MCS-7835-H2-CTS1
Cisco Digital Media System	MCS-7835-H2-DM21

Field Replaceable Spares

Table 13. Ordering Information for Server Spare Parts

Description	Spare Part Number
Spare 1024-MB SDRAM DIMM for Cisco MCS 7835-H2	MEM-7835-H2-1GB=
Spare 72-GB SAS drive for Cisco MCS 7835-H2	HDD-7835-H2-72=
Spare 146-GB SAS drive for Cisco MCS 7835-H2	HDD-7835-H2-146=
Spare 800W power supply for Cisco MCS 7835-H2	PWR-7835-H2=
Spare fan for Cisco MCS 7835-H2	FAN-7835-H2=

Replacement Part Numbers

With the introduction of the new configurations using 146-GB disks in place of 72-GB disks, the orderability of the old configuration was terminated. Table 14 provides the replacement part numbers for those products that are no longer orderable.

Table 14. Replacement Part Numbers

Old Part Number	Replacement Part Number
MCS-7835-H2-CCE1	MCS-7835-H2-CCE2
MCS-7835-H2-CCX1	MCS-7835-H2-CCX2
MCS-7835-H2-ECS1	MCS-7835-H2-ECS2
MCS-7835-H2-IPC1	MCS-7835-H2-IPC2
MCS-7835-H2-RC1	MCS-7835-H2-RC2
MCS-7835-H2-UC1	NA

Warranty Information

Cisco offers a 1-year limited hardware warranty on Cisco Media Convergence Servers. For terms and conditions of this warranty, refer to

http://www.cisco.com/univercd/cc/td/doc/es_inpk/1y1cen_.htm.

Cisco Unified Communications Services

Cisco Unified Communications Services allows you to accelerate cost savings and productivity gains associated with deploying a secure, resilient Cisco Unified Communications solution. Delivered by Cisco and our certified partners, our portfolio of services is based on proven methodologies for unifying voice, video, data, and mobile applications on fixed and mobile networks. Our unique lifecycle approach to services enhances your technology experience to accelerate true business advantage.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

CCDE, CCENT, Cisco Eos, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn is a service mark; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0805R)