Cisco MCS 7816-H3 Unified Communications Manager Appliance

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 7816-H3 Unified Communications Manager Appliance is an integral part of a complete entry-level architecture for a new generation of high-quality unified communications solutions that operate on enterprise data networks. This powerful platform is easy to deploy and highly cost-effective, and it delivers the high performance and availability that today's enterprise networks demand. The server appliance is preinstalled with an operating system and the Cisco Unified Communications Manager application. Cisco Unified Communications Manager is fully operational upon startup, requiring entry of just a few configuration variables such as IP address and domain.

Key Features and Benefits

Performance

The Cisco MCS 7816-H3 is a robust, highly available server platform designed to support today's unified communications applications. It uses a single Intel Celeron D 352, 3.2-GHz processor with a 533-MHz front-side bus (FSB).

Serviceability

Serviceable SATA Disk Drives
The Cisco MCS 7816-H3 is configured with one 160-GB Serial Advanced Technology Attachment (SATA) "cold-pluggable" disk drive, which is accessible through openings in the front bezel of the server. If a drive fails, you can schedule server downtime, power down the server, and replace the failed SATA drive by simply removing it (each drive is equipped with a front latch that positively mates the drive to the server) and replacing it with an unconfigured spare drive.

DAT Tape Drive Support
The Cisco MCS 7816-H3 can support a 36/72-GB universal-serial-bus (USB) external Digital Audio Tape (DAT) drive (part number DAT-USB-EXT-72=) or an optional 36 /72-GB USB rack-mount DAT drive (part number DAT-USB-RM-72=). This tape drive connects through one of the USB 2.0 ports provided by the Cisco MCS 7816-H3 server.

Product Specifications

Tables 1 through 9 give various specifications of the Cisco MCS 7816-H3.

Table 1.   Product Specifications

Component	Value
Product part number	MCS7816H3-K9-CMC1
Preload	Cisco Unified Communications Manager 7.0

OS	Included
Processor	Single Intel Celeron D 352
Memory	2-GB (two 1-GB) PC2-5300 error-correcting code (ECC) double-data-rate 2 (DDR2)
Hard disks	One 160-GB SATA 2.5-inch cold-swap drive
Remote management	HP Integrated Lights Out (iLO) Advanced: Supported but not included

Component	Value
Product part number	MCS7816H3-K9-CMB2
Preload	Cisco Unified Communications Manager 6.1
OS	Included
Processor	Single Intel Celeron D 352
Memory	2-GB (two 1-GB) PC2-5300 ECC DDR2
Hard disks	One 160-GB SATA 2.5-inch cold-swap drive
Remote management	HP iLO Advanced: Supported but not included

Component	Value
Product part number	MCS7816H3-K9-CMB1
Preload	Cisco Unified Communications Manager 6.0
OS	Included
Processor	Single Intel Celeron D 352
Memory	2-GB (two 1-GB) PC2-5300 ECC DDR2
Hard disks	One 160-GB SATA 2.5-inch cold-swap drive
Remote management	HP iLO Advanced: Supported but not included

Component	Value
Product ID	MCS7816H3-K9-CMA2
Preload	Cisco Unified Communications Manager 5.1
OS	Included
Processor	Single Intel Celeron D 352
Memory	2-GB (two 1-GB) PC2-5300 ECC DDR2
Hard disks	One 160-GB SATA 2.5-inch cold-swap drive
Remote management	HP iLO Advanced: Supported but not included

Table 2.   Processor Specifications

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

Table 3.   Memory Specifications

Memory maximum	8 GB
Memory bus clock	667 MHz
Memory technology	PC2-5300 667-MHz DDR2 synchronous dynamic RAM (SDRAM)
Total RAM slots	4

Table 4.   RAID Controller Specifications

Controller model	None

Table 5.   Hard Disk Specifications

Cold-swappable bays	2
Hard disk interface type	SATA
Hard disk	7200 rpm
Hard disk average seek time	9 ms
Data transfer rate (burst)	150 MB per second

Table 6.   Network Interface Specifications

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

Table 7.   Interface Port Specifications

Serial ports	1
Parallel ports	0
USB 2.0 ports	4 (1 front, 1 internal, and 2 back)
Keyboard ports	1
Mouse ports	1
Audio ports	None
Video Graphics Array (VGA) ports	1
System management ports	iLO remote

Security capabilities of the Cisco MCS 7816-H3 follow:

- Power-on password
- Keyboard password
- USB port control
- Administrator's password
- Ability to use selectable boot sequence to prevent unauthorized installation of software or removal of data from the diskette drive

The Cisco MCS 7816-H3 meets the following standards compliances:

- ACPI 2.0
- PCI 3.0 compliant
- PXE support
- WOL support
- USB 2.0

Table 8. Expansion Options and Interfaces

Expansion Options	
8x PCI-Express full height, three-quarter length	1
8x PCI-Express low profile, half length	1

Table 9. System Unit Specifications

Dimensions (H x W x D)	1.70 x 16.78 x 24.0 in.	43.2 x 426.2 x 609.6 mm
Weight (maximum)	27 lb	12.27 kg
Input requirements (per power supply)	Rated line voltage	100–120 VAC and 220–240 VAC
	Rated input current	6A (100–120 VAC) 3A (220–240 VAC)
	Rated input frequency	47–63 Hz
BTU rating (maximum)	BTU/hr	1710
Power supply output power	Rated steady-state power	420W
Temperature range	Operating	50 to 95°F (10 to 35°C)
	Nonoperating	−22 to 140°F (−30 to 60°C)
	Shipment	−22 to 140°F (−30 to 60°C)
Relative humidity (RH; noncondensing)	Operating	10 to 90%
Acoustic noise	Operating minimum (random seeks to fixed disks)	L WAd (bels) 6.3

Equipment approvals and safety compliances of the Cisco MCS 7816-H3 follow:

- FCC: Verified to comply with Part 15 of the FCC Rules, Class A
- CISPR 22 Class A
- EN 55022 (1998) + A1 + A2 Class B
- EN 55024 (1998) + A1 + A2
- IEC 61000-3-2 (2000) / EN 61000-3-2 (2000)
- IEC EN 61000-3-3 (1995) + A1 (2001) / EN 61000-3-3 (1995) + A1 (2001)
- KN 22 Class B (MIC Notice 2001-115) MIC certification
- KN 24 (MIC Notice 2001-116) MIC certification
- CNS 13438 (BSMI certification)
- GB 9254 Class B (CCC certification)
- VCCI Class B (VCCI certification)
- CSA C22.2 No. 60950-1-03 Information Technology Equipment – Safety- Part 1: General Requirements
- UL 60950-1 Information Technology Equipment – Safety- Part 1: General Requirements
- IEC 60950-1 Information Technology Equipment – Safety- Part 1: General Requirements + CB report covering national deviations for intended markets.
- ACA AS/ACIF S004:2001
- CCC - China Certificate for China Compulsory Product Certification
- EK1-ITB2000 (2006)
- DIN EN ISO 12100-2 (2004)
- DIN EN ISO 7779 (2001)
- EN 60951-1 (2001) + A11 (2004)
- CE Mark (Low Voltage Directive 73/23/EEC, EMC Directive 89/336/EEC)
- WEEE

Ordering Information

To order this product, visit the Cisco Ordering Home Page and refer to Tables 10 and 11.

You can order the appliance in one of two ways. You can enter UNIFIED-CM-7.0 or UNIFIED-CM-6.1 or UNIFIED-CM-6.0 or CALLMANAGER-5.1 into the Dynamic Configuration tool on Cisco.com to view a list of Cisco Unified Communications Manager appliances and their associated licenses. You can also order the components individually using the following product part numbers:

- MCS7816H3-K9-CMC1 (preloaded with Cisco Unified Communications Manager 7.0)
- MCS7816H3-K9-CMB2 (preloaded with Cisco Unified Communications Manager 6.1)
- MCS7816H3-K9-CMB1 (preloaded with Cisco Unified Communications Manager 6.0)
- MCS7816H3-K9-CMA2 (preloaded with Cisco Unified Communications Manager 5.1)
- LIC-CM7.0-7816=
- LIC-CM6.0-7816=
- LIC-CM5.1-7816=
- KEY-CCM-ADMIN-K9= (order a minimum quantity of 2)
- DAT-USB-EXT-72= (optional external USB DAT tape drive)
- DAT-USB-RM-72= (optional rack-mount USB DAT tape drive)
- DAT-USB-ADPT= (required if you are using DAT-USB-EXT-72= or DAT-USB-RM-72=)
- MOH-USB-AUDIO= (USB music-on-hold adapter)

Appliance Spares

To order spare appliances, refer to Table 10.

Table 10. Ordering Information for Spare Appliances

Application	Spare Part Number
Cisco Unified Communications Manager 7.0	MCS7816H3-K9-CMC1
Cisco Unified Communications Manager 6.1	MCS7816H3-K9-CMB2
Cisco Unified Communications Manager 6.0	MCS7816-H3-K9-CMB1
Cisco Unified Communications Manager 5.1	MCS7816-H3-K9-CMA2

Field-Replaceable Spares

Table 11 gives ordering information for server spare parts.

Table 11. Ordering Information for Server Spare Parts

Spare-Part Number	Description
MEM-7816-H3-1GB=	Spare pair 1-GB SDRAM dual in-line memory module (DIMM) for Cisco MCS 7816-H3 server
HDD-7816-H3-160=	Spare 80-GB SATA hard disk drive, cold-pluggable
DAT-USB-EXT-72=	Spare external USB 36-/72-GB DAT drive
DAT-USB-RM-72=	Spare rack-mount USB 36-/73-GB DAT drive

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_inpck/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.

Printed in USA

C78-394234-03   07/08