

# Cisco MCS 7816-I3 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-I3 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 a solution that 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. Formerly known as Cisco Unified CallManager, 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-I3 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-I3 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-I3 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-I3 server.

## **Product Specifications**

Tables 1 and 2 give specifications of the Cisco MCS 7816-I3.

#### Table 1. Product Specifications

Component	Value	
Product part number	MCS7816I3-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         IBM Remote Supervisor Adapter (RSA) II Slimline: Supported but not included	

Component	Value
Product part number	MCS7816l3-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 IBM RSA II Slimline: Supported but not included	

Component	Value
Product part number	MCS7816l3-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	IBM RSA II Slimline: Supported but not included

Component	Value
Product ID	MCS7816I3-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	IBM RSA II Slimline: Supported but not included

 Table 2.
 Specifications of Cisco MCS 7816-I3

Processor at Product Introduction	
Maximum processors	1
Processors installed	1
Basic input/output system (BIOS) type	Flash memory
Memory	
Memory maximum	8 GB
Memory bus clock	667 MHz
Memory technology	PC2-5300 667 MHz DDR2 synchronous dynamic RAM (SDRAM)
Bit-error mitigation	ECC

Redundant Array of Independent Disks         RAID) Controller           Controller model         None           Hard disk         150 MB or second           Hard disk wires seck time         9 ms           Hard disk wires seck time         9 ms           Cold-swappable bays         2           Cold-swappable bays         2           Network Connectivity         Element entwork interface card (NC)         Dual onboard 10/100/1000           Elserner entwork interface card (NC)         Dual onboard 10/100/1000           100BASE-T cable support         EIA Category 3.4, or 5 unrehielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)           100BASE-T cable support         EIA Category 6 UTP (2 pair) up to 328 ft (100m)           100BASE-T cable support         EIA Category 6 UTP (ecommended), 5E UTP, or 5 UTP (2 pair) up to 328 ft (100m)           10red Graphics Array (VGA) ports         1           Security         0           Video Graphics Array (VGA) ports         1           Audio ports         None           Security         1           Audio ports         None           Security         1           Power-on and privileged access pairs         Inceriors that control who has access to the data and server setup program on the server           - A selectable bot sequence that currer una	Total RAM slots	4	
Controller model         None           Hard disk         J50 MB per second           Hard disk werage seek time         9 ms           Hard disk interface type         SATA           Cold-swappable bays         2           Network Connectivity         Dual onboard 10/100/1000           Ethernet network interface card         Dual onboard 10/100/1000           (NC)         Z RJ-45 connectors on raot server           108ASE-T cable support         E1A Category 3, 4, or 5 unshielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)           1000ASE-T cable support         E1A Category 5 UTP (2 pair) up to 321 ft (100m)           1000ASE-T cable support         E1A Category 5 UTP (2 pair) up to 328 ft (100m)           1000ASE-T cable support         1           Secial ports         1           9 Parallel ports         0           Universal-serial-bus (USB) 2.0 ports         4           Keyboard port         1           4.0         None           System management ports         None           System rearrer         None           Security         1           • A selectable boot sequence that camp revene unauthorized installation of software or removal of data from the diskette drive Expansion Optimes           Security         1           • A			
Hard disk           Data-transfer rate (burst)         150 MB per second           Hard disk average seek time         9 ms           Hard disk interface type         SATA           Cold-swappable bays         2           Network Connectivity         Ethernet connectors         2 RJ-45 connectors on rear of server           108ASE-T cable support         EtA Category 3, 4, or 5 unstrielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)           100BASE-T cable support         EtA Category 3, 4, or 5 unstrielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)           100BASE-T cable support         EtA Category 6 UTP (2 pair) up to 328 ft (100m)           100BASE-T cable support         EtA Category 6 UTP (2 pair) up to 328 ft (100m)           100BASE-T cable support         EtA Category 6 UTP (recommended), 5E UTP, or 5 UTP (2 pair) up to 328 ft (100m)           100BASE-T cable support         1           Solid ports         1           Solid ports         1           O         Universal-serial-bus (USB) 2.0 ports           Audio ports         None           System management ports         None           System borts         None           System borts         1           A selectable boot sequence that - prevent unsultwoized installation of software or removal of data from the diskette drive freightheree value wouthorized			
Data-transfor rate (burst)         150 MB per second           Hard disk interface type         SATA           Cold-swappable bays         2           Network Connectivity         Ethernet connectors           Ethernet network interface card (NC)         Dual onboard 10/100/1000           Ethernet connectors         2 RJ-45 connectors on rear of server           10BASE-T cable support         EtA Category 3, 4, or 5 unshielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)           10BDASE-TY cable support         EtA Category 6 UTP (2 pair) up to 328 ft (100m)           10BDASE-T able support         EtA Category 6 UTP (2 pair) up to 328 ft (100m)           10BDASE-T able support         EtA Category 6 UTP (2 pair) up to 328 ft (100m)           10BDASE-T able support         1           Serial ports         0           10rerase Part Specifications         1           Vieleo Graphices Array (VCA) ports         1           Mouse port         1           Audio ports         None           System management ports         None           System server         > A selectable boot sequence that array rever unauthorized installation of software or removal of data from the disketed diverse part server           A selectable boot sequence that array rever unauthorized installation of software or removal of data from the disketed diverse part server			
Hard disk average seek time     9 ms       Hard disk interface type     SATA       Cold-swappable bays     2       Network Connectivity     Dual onboard 10/100/1000       Ethernet entwork interface card     Dual onboard 10/100/1000       (Nic)     Dual onboard 10/100/1000       (Nic)     Dual onboard 10/100/1000       (Nic)     Ethernet entwork interface card       (DidSAE-Tr cable support     EtA Category 3, 4, or 5 unshielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)       1000BASE-Tr cable support     EtA Category 5 UTP (2 pair) up to 328 ft (100m)       1000BASE-Tr cable support     EtA Category 5 UTP (2 pair) up to 328 ft (100m)       1000BASE-Tr cable support     1       Serial ports     1       9 Parallel ports     0       Universal-serial-bus (USB) 2.0 ports     4       Keyboard port     1       1     Mouse port       1     Audio ports       System management ports     None       System management ports     None       System management ports     1       2     PO-Express full height, three quiter menty and 200 to 240 VAC       Weater functions     1       Power-     100 127 VAC and 200 to 240 VAC       Exply: Rated input current     6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)       Rated input current     6		150 MB per second	
Hard disk interface type         SATA           Cold-swappable bays         2           Network Connectivity         Dual onboard 10/1000           Ethernet network interface card (NiC)         Dual onboard 10/100/1000           Ethernet connectors         2 RJ-45 connectors on rear of server           10BASE-T cable support         EIA Category 3, 4, or 5 unshelded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)           100BASE-T cable support         EIA Category 5 UTP (2 pair) up to 328 ft (100m)           100BASE-T cable support         EIA Category 5 UTP (2 pair) up to 328 ft (100m)           100BASE-T cable support         EIA Category 5 UTP (2 pair) up to 328 ft (100m)           Interface Port Specifications         1           Video Graphics Array (VGA) ports         1           Parallel ports         0           Universal-serial-bus (USB) 2.0 ports         4           Keyboard port         1           Audio ports         None           Security         -           Power on and privileged access passwort functions that control who has access to the data and server setup program on the server           Power on and privileged access passwort functions that control who has access to the data and server setup program on the server           Rotectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive Expansion Optio	. ,	· ·	
Cold-swappable bays     2       Network Connectivity     2       Ethernet network interface card (NiC)     Dual onboard 10/100/1000       Ethernet connectors     2 RJ-45 connectors on rear of server       10BASE-T cable support     EtA Category 3, 4, or 5 unshielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)       100BASE-T cable support     EtA Category 5 UTP (2 pair) up to 328 ft (100m)       100BASE-T cable support     EtA Category 6 UTP (recommended), 5E UTP, or 5 UTP (2 pair) up to 328 ft (100m)       100BASE-T cable support     EtA Category 6 UTP (recommended), 5E UTP, or 5 UTP (2 pair) up to 328 ft (100m)       100BASE-T cable support     1       100BaSE-T cable support     0       Universal-serial-bus (USB) 2.0 ports     1       4     Keyboard port     1       Mouse port     1       Audio ports     None       System management ports     None       Security     • Power-on and privileged access password functions that control who has access to the data and server setup program on the server       • A seletable boot sequence that can prevent unauthorized installation of software or removal of data from the disketed drive Expansion Options       8x PCI-Express full height, three- quarter length     1       8x PCI-Express full height, three- quarter length     100 to 127 VAC and 200 to 240 VAC       Supply: Rated line voltage     351W       Input requiments (foor power			
Network Connectivity           Ethernet network interface card NIC)         Dual onboard 10/100/1000           Ethernet network interface card NIC)         Dual onboard 10/100/1000           Ethernet connectors         2 RJ-45 connectors on rear of server           10BASE-T cable support         EtA Category 3, 4, or 5 unshielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)           100BASE-T cable support         EtA Category 6 UTP (2 pair) up to 328 ft (100m)           1000BASE-T cable support         EtA Category 6 UTP (recommended), SE UTP, or 5 UTP (2 pair) up to 328 ft (100m)           Interface Port Specifications         Video Graphics Array (VGA) ports         1           Serial ports         0         0         Universal-serial-bus (USB) 2.0 ports         4           Keyboard port         1         1         Mouse port         1           Audio ports         None         Security         • None           System management ports         None         Security         • A selectable bot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive           Experies full height, three- quarter length         1         1           Sk PCI-Express full height, half length         1         1           Power         50 to 60 Hz         1         1           Foresupply output power			
Ethernet network interface card (NC)         Dual onboard 10/100/1000           Ethernet connectors         2 RJ-45 connectors on rear of server           Ethernet connectors         2 RJ-45 connectors on rear of server           IDBASE-T cable support         EtA Category 3, 4, or 5 unshielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)           10008-SE-Tx cable support         EtA Category 6 UTP (recommended), SE UTP, or 5 UTP (2 pair) up to 328 ft (100m)           10008-SE-Tx cable support         EtA Category 6 UTP (recommended), SE UTP, or 5 UTP (2 pair) up to 328 ft (100m)           Interface Port Specifications         0           Universal-serial-bus (USB) 2.0 ports         1           Audio ports         0           Universal-serial-bus (USB) 2.0 ports         4           Keyboard port         1           Audio ports         None           System management ports         None           Security         -           Verver-on and privileged access password functions that control who has access to the data and server setup program on the server           - A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive           Experison Options         StitV           Sk PCI-Express full height, three- quarter length         1           StitDV         Input requirements (per power      <			
IDBASE-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, or 5 UTP (2 pair) up to 328 ft (100m)           Interface Port Specifications         I           Video Graphics Array (VGA) ports         1           Berial ports         0         Outpression           Universal-serial-bus (USB) 2.0 ports         4           Keyboard port         1           Mouse port         1           Audio ports         None           Security         •           • Power-on and privileged access pass-word functions that control who has access to the data and server setup program on the server on the server on to 100 to 127 VAC and 200 to 240 VAC	Ethernet network interface card (NIC)	Dual onboard 10/100/1000	
Bit State         State           100BASE-TX cable support         EIA Category S UTP (2 pair) up to 328 ft (100m)           1000BASE-T cable support         EIA Category S UTP (recommended), SE UTP, or 5 UTP (2 pair) up to 328 ft (100m)           Interface Port Specifications         1           Serial ports         1           Parallel ports         0           Universal-serial-bus (USB) 2.0 ports         4           Keyboard port         1           Audio ports         None           System management ports         None           Security         •           • Power-on and privileged access password functions that control who has access to the data and server setup program on the server           • A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive           Expansion Options         8x PCI-Express full height, three- quarter length         1           Rever         1         100 to 127 VAC and 200 to 240 VAC           Supply): Rated line voltage         100 to 127 VAC and 200 to 240 VAC           Supply: Rated line voltage         50 to 60 Hz           Environmental         6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)           Rated input trequirements (per power supply): Rated line voltage         50 to 89.6F (10 to 35C) at 0 to 3000 ft (0 to 914.4 m)	Ethernet connectors	2 RJ-45 connectors on rear of server	
Bit State         State           100BASE-TX cable support         EIA Category S UTP (2 pair) up to 328 ft (100m)           1000BASE-T cable support         EIA Category S UTP (recommended), SE UTP, or 5 UTP (2 pair) up to 328 ft (100m)           Interface Port Specifications         1           Serial ports         1           Parallel ports         0           Universal-serial-bus (USB) 2.0 ports         4           Keyboard port         1           Audio ports         None           System management ports         None           Security         •           • Power-on and privileged access password functions that control who has access to the data and server setup program on the server           • A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive           Expansion Options         8x PCI-Express full height, three- quarter length         1           Rever         1         100 to 127 VAC and 200 to 240 VAC           Supply): Rated line voltage         100 to 127 VAC and 200 to 240 VAC           Supply: Rated line voltage         50 to 60 Hz           Environmental         6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)           Rated input trequirements (per power supply): Rated line voltage         50 to 89.6F (10 to 35C) at 0 to 3000 ft (0 to 914.4 m)	10BASE-T cable support	EIA Category 3, 4, or 5 unshielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)	
IOUOBASE-T cable support       EIA Category & UTP (recommended), SE UTP, or 5 UTP (2 pair) up to 328 ft (100m)         Interface Port Specifications       1         Video Graphics Array (VGA) ports       1         Serial ports       0         Universal-serial-bus (USB) 2.0 ports       4         Keyboard port       1         Aduit ports       None         System management ports       None         Security       • None         • Power-on and privileged access pass-word functions that control who has access to the data and server setup program on the server         • A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive Expansion Options         &x PCI-Express full height, three-quarter length       1         Power       100 to 127 VAC and 200 to 240 VAC         Supply): Rated line voltage       100 to 127 VAC and 200 to 240 VAC         Rated input current       6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)         Rated input frequency       50 to 60 Hz         Environmental       50 to 55° (10 to 35°) at 0 to 3000 ft (0 to 914.4 m)         So to 89.6° (10 to 32°) at 3000 to 6998 ft (914.4 to 2133m)         Air temperature: Server off       50 to 109.4°F (10 to 43°C)         Humidity: Server on       8 to 80% (noncondensing)         Maximum altitude <th>100BASE-TX cable support</th> <th></th>	100BASE-TX cable support		
Interface Port Specifications         Video Graphics Array (VGA) ports         Serial ports         1         Parallel ports         0         Universal-serial-bus (USB) 2.0 ports         4         Keyboard port         1         Mouse port         1         Audio ports         None         System management ports         None         Security         • Power-on and privileged access password functions that control who has access to the data and server setup program on the server         • Power-on and privileged access password functions that control who has access to the data from the diskette drive Expansion Options         8x PCI-Express full height, three-quarter length         1         Power-supply output power         9cwer         Powersupply output power         9cwer         Powersupply output power         100 to 127 VAC and 200 to 240 VAC         supply): Rated line voltage         Rated input requirements (per power supply) output power         9c to 80 SFF (10 to 35C) at 0 to 3000 ft (0 to 914.4 m) 50 to 89.8 FF (10 to 32C) at 3000 to 6998 ft (914.4 to 2133m)         Air temperature: Server off       50 to 109.4 FF (10 to 43C)         Humidity: Server on       <	1000BASE-T cable support		
Video Graphics Array (VGA) ports1Serial ports0Parallel ports0Universal-serial-bus (USB) 2.0 ports4Keyboard port1Mouse port1Audio portsNoneSystem management portsNoneSecurity•• Power-on and privileged access password functions that control who has access to the data and server setup program on the server• A selectable boot sequence that car prevent unauthorized installation of software or removal of data from the diskette driveExperises full height, three-quarter length18x PCI-Express full height, three-quarter length1Power251WPowers100 to 127 VAC and 200 to 240 VACSupply): Rated line voltage351WInput requirements (per power soft 0 to 300 to 102 to 240 VAC)Supply): Rated line voltage50 to 60 HzEnvironmental50 to 95F (10 to 35C) at 0 to 3000 to (10 to 914.4 m) so to 830 to 83.8 F (10 to 32C) at 3000 to 6998 ft (914.4 to 2133m)Art temperature: Server off50 to 10.9.4F (10 to 43C)Humidity: Server on8 to 80% (noncondensing)Maximum attitude7000 ft (2133m)BTU rating (maximum)1048/hrSound emissions, idle6.5 bels (operating)	Interface Port Specifications		
Serial ports1Parallel ports0Universal-serial-bus (USB) 2.0 ports4Keyboard port1Mouse port1Audio portsNoneSystem management portsNoneSecuritySecurity• Power-on and privileged access password functions that control who has access to the data and server setup program on the server• A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette driveExpansion Options8x PCI-Express full height, three-quarter length18x PCI-Express low profile, half length1PowerPower351WInput requirements (per power supply): Rated line voltage100 to 127 VAC and 200 to 240 VACRated input current6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)Rated input current6D to 80 HzEnvironmental50 to 95% (10 to 35°C) at 0 to 3000 tf (0 to 914.4 m) 50 to 89.6% (10 to 32°C) at 3000 to 6998 ft (914.4 to 2133m)Air temperature: Server on80 to 95% (10 to 32°C) at 3000 to 6998 ft (914.4 to 2133m)Air temperature: Server on80 to 95% (10 to 33°C) at 3000 to 6998 ft (914.4 to 2133m)Air temperature: Server on80 to 80% (noncondensing)Maximum altitude7000 tf (213m)BTU rating (maximum)1048/hrSound emissions, idle6.5 bels (operating)	Video Graphics Array (VGA) ports	1	
Parallel ports0Universal-serial-bus (USB) 2.0 ports4Keyboard port1Mouse port1Audio portsNoneSystem management portsNoneSecurity•• Power-on and privileged access password functions that control who has access to the data and server setup program on the server• A seletable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette driveExpansion Options8x PCI-Express full height, three- quarter length18x PCI-Express full height, three- uparter length11BowerPowerPowerPowerStated line voltage351WInput requirements (per power supply): Rated line voltage351WRated input trequency50 to 60 HzEnvironmentalAr temperature: Server on So to 895 (10 to 35C) at 0 to 3000 to (0 to 914.4 m) So to 89.6 F(10 to 33C)Air temperature: Server onff50 to 109.4 F(10 to 43C)Humidity: Server on Bato 80% (noncondensing)Maximum altitude7000 tt (213m)BTU rating (maximum)1048/hrSound emissions, idle6.5 bels (operating)			
Universal-serial-bus (USB) 2.0 ports4Keyboard port1Mouse port1Audio portsNoneSystem management portsNoneSecurity• Power-on and privileged access password functions that control who has access to the data and server setup program on the server• A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette driveExpansion Options8x PCI-Express full height, three- quarter length18x PCI-Express full height, three- quarter length18x PCI-Express low profile, half length1100 to 127 VAC and 200 to 240 VACPower351WRated input current 6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)Rated input frequency50 to 60 HzEnvironmentalAri temperature: Server on 50 to 95F (10 to 35C) at 0 to 3000 ft (0 to 914.4 m) 50 to 88.6F (10 to 43°C)Humidity: Server on Maximum altitude8 to 80% (noncondensing)Maximum altitude7000 ft (213m)BTU rating (maximum)1048/hrSound emissions, idle6.5 bels (operating)	Parallel ports		
Keyboard port       1         Mouse port       1         Audio ports       None         System management ports       None         Security       • Power-on and privileged access password functions that control who has access to the data and server setup program on the server         • A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive         Expansion Options         8x PCI-Express full height, three- quarter length       1         8x PCI-Express low profile, half leight       1         Power       100 to 127 VAC and 200 to 240 VAC         Power supply output power supply: Rated line voltage       100 to 127 VAC and 200 to 240 VAC         Rated input requirements (per power supply): Rated line voltage       6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)         Rated input frequency       50 to 60 Hz         Environmental       Air temperature: Server on         Air temperature: Server on       50 to 95% (10 to 35°) at 0 to 3000 ft (0 to 914.4 m) 50 to 99.6% (10 to 32°C) at 3000 to 699.8 ft (914.4 to 2133m)         Air temperature: Server on       8 to 80% (noncondensing)         Maximum altitude       7000 ft (2133m)         BTU rating (maximum)       104.8/nr         Sound emissions, idle       6.5 bels (operating) <th>Universal-serial-bus (USB) 2.0 ports</th> <th></th>	Universal-serial-bus (USB) 2.0 ports		
Mouse port       1         Audio ports       None         System management ports       None         Security       •         • Power-on and privileged access password functions that control who has access to the data and server setup program on the server       •         • A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive Expansion Options       1         8x PCI-Express full height, three- quarter length       1         Power       1         Power-supply output power       351W         Input requirements (per power supply): Rated line voltage       100 to 127 VAC and 200 to 240 VAC         Rated input current       6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)         Rated input frequency       50 to 60 Hz         Environmental       50 to 95° (10 to 35°) at 0 to 3000 ft (0 to 914.4 m) so to 89.6° (10 to 32°) at 3000 to 6998 ft (914.4 to 2133m)         Air temperature: Server on       50 to 109.4° (10 to 43°C)         Humidity: Server on       8 to 80% (noncondensing)         Maximum altitude       7000 ft (2133m)         BTU rating (maximum)       1048/hr         Sound emissions, idle       6.5 bels (operating)	. , .	1	
Audio ports       None         System management ports       None         Security       • Power-on and privileged access password functions that control who has access to the data and server setup program on the server         • A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive         Expansion Options         8x PCI-Express full height, three- quarter length       1         8x PCI-Express low profile, half       1         Power       100 to 127 VAC and 200 to 240 VAC         Power/supply output power       351W         Rated input current       6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)         Rated input frequency       50 to 60 Hz         Environmental       50 to 95° (10 to 35°C) at 0 to 3000 ft (0 to 914.4 m) 50 to 89.6°F (10 to 35°C) at 3000 to 6998 ft (914.4 to 2133m)         Air temperature: Server onf       50 to 109.4°F (10 to 43°C)         Humidity: Server on       8 to 80% (noncondensing)         Maximum alitude       7000 ft (2133m)         BTU rating (maximum)       1048/hr		1	
System management ports         None           Security         • Power-on and privileged access password functions that control who has access to the data and server setup program on the server           • A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive           Expansion Options         1           8x PCI-Express full height, three- quarter length         1           8x PCI-Express low profile, half length         1           Power         351W           Power supply output power         351W           Rated input current         6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)           Rated input current         6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)           Rated input frequency         50 to 60 Hz           Environmental         50 to 95F (10 to 35C) at 0 to 3000 ft (0 to 914.4 m) 50 to 89.6F (10 to 32C) at 3000 to 699.8 ft (914.4 to 2133m)           Air temperature: Server off         50 to 109.4F (10 to 43C)           Humidity: Server on         8 to 80% (noncondensing)           Maximum altitude         7000 ft (2133m)           BTU rating (maximun)         1048/hr	•	None	
Security         Security         Security         Power-on and privileged access password functions that control who has access to the data and server setup program on the server         A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive         Expansion Options         8x PCI-Express full height, three- quarter length       1         8x PCI-Express low profile, half length       1         Power       351W         Power supply output power       351W         Input requirements (per power supply): Rated line voltage       10 to 127 VAC and 200 to 240 VAC         Rated input current       6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)         Rated input frequency       50 to 60 Hz         Environmental       50 to 95F (10 to 35C) at 0 to 3000 tf (0 to 914.4 m) 50 to 89.6F (10 to 32C) at 3000 to 6998 ft (914.4 to 2133m)         Air temperature: Server on       8 to 80% (noncondensing)         Maximum altitude       7000 ft (2133m)         BTU rating (maximum)       1048/hr         Sound emissions, idle       6.5 bels (operating)	•	None	
Power-on and privileged access password functions that control who has access to the data and server setup program on the server         • A selectable boot sequence that can prevent unauthorized installation of software or removal of data from the diskette drive Expansion Options         8x PCI-Express full height, three-quarter length       1         8x PCI-Express low profile, half       1         Power       351W         Power-supply output power       351W         Input requirements (per power supply): Rated line voltage       100 to 127 VAC and 200 to 240 VAC         Rated input current       6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)         Rated input frequency       50 to 60 Hz         Environmental       50 to 95F (10 to 35C) at 0 to 3000 tf (0 to 914.4 m) 50 to 89.6F (10 to 32C) at 3000 to 6998 ft (914.4 to 2133m)         Air temperature: Server on       8 to 80% (noncondensing)         Maximum altitude       7000 ft (2133m)         BTU rating (maximum)       1048/hr         Sound emissions, idle       6.5 bels (operating)			
&x PCI-Express full height, three- quarter length1&x PCI-Express low profile, half length1Bower351WPower351WPower supply output power351WInput requirements (per power supply): Rated line voltage100 to 127 VAC and 200 to 240 VACRated input current6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)Rated input frequency50 to 60 HzEnvironmental50 to 95F (10 to 35C) at 0 to 3000 ft (0 to 914.4 m) 50 to 89.6F (10 to 32°C) at 3000 to 6998 ft (914.4 to 2133m)Air temperature: Server off50 to 109.4F (10 to 43°C)Humidity: Server on8 to 80% (noncondensing)Maximum altitude7000 ft (2133m)BTU rating (maximum)1048/hrSound emissions, idle6.5 bels (operating)	<ul> <li>Power-on and privileged access password functions that control who has access to the data and server setup program on the server</li> </ul>		
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Input requirements (per power supply): Rated line voltage100 to 127 VAC and 200 to 240 VACRated input current6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)Rated input frequency50 to 60 HzEnvironmental50 to 95年 (10 to 35℃) at 0 to 3000 ft (0 to 914.4 m) 50 to 89.6年 (10 to 32℃) at 3000 to 6998 ft (914.4 to 2133m)Air temperature: Server on50 to 109.4年 (10 to 43℃)Humidity: Server on8 to 80% (noncondensing)Maximum altitude7000 ft (2133m)BTU rating (maximum)1048/hrSound emissions, idle6.5 bels (operating)	Power		
supply): Rated line voltageRated input current6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)Rated input frequency50 to 60 HzEnvironmental50 to 95F (10 to 35°C) at 0 to 3000 ft (0 to 914.4 m) 50 to 89.6°F (10 to 32°C) at 3000 to 6998 ft (914.4 to 2133m)Air temperature: Server off50 to 109.4°F (10 to 43°C)Humidity: Server on8 to 80% (noncondensing)Maximum altitude7000 ft (2133m)BTU rating (maximum)1048/hrSound emissions, idle6.5 bels (operating)	Power-supply output power	351W	
Rated input frequency         50 to 60 Hz           Environmental	Input requirements (per power supply): Rated line voltage	100 to 127 VAC and 200 to 240 VAC	
Environmental         50 to 95F (10 to 35°C) at 0 to 3000 ft (0 to 914.4 m) 50 to 89.6°F (10 to 32°C) at 3000 to 6998 ft (914.4 to 2133m)           Air temperature: Server off         50 to 109.4°F (10 to 43°C)           Humidity: Server on         8 to 80% (noncondensing)           Maximum altitude         7000 ft (2133m)           BTU rating (maximum)         1048/hr           Sound emissions, idle         6.5 bels (operating)	Rated input current	6A (100 VAC), 6A (120 VAC), and 3A (200 VAC)	
Air temperature: Server on       50 to 95F (10 to 35C) at 0 to 3000 ft (0 to 914.4 m)         50 to 89.6F (10 to 32C) at 3000 to 6998 ft (914.4 to 2133m)         Air temperature: Server off       50 to 109.4F (10 to 43C)         Humidity: Server on       8 to 80% (noncondensing)         Maximum altitude       7000 ft (2133m)         BTU rating (maximum)       1048/hr         Sound emissions, idle       6.5 bels (operating)	Rated input frequency	50 to 60 Hz	
50 to 89.6F (10 to 32°C) at 3000 to 6998 ft (914.4 to 2133m)           Air temperature: Server off         50 to 109.4F (10 to 43°C)           Humidity: Server on         8 to 80% (noncondensing)           Maximum altitude         7000 ft (2133m)           BTU rating (maximum)         1048/hr           Sound emissions, idle         6.5 bels (operating)	Environmental		
Humidity: Server on       8 to 80% (noncondensing)         Maximum altitude       7000 ft (2133m)         BTU rating (maximum)       1048/hr         Sound emissions, idle       6.5 bels (operating)	Air temperature: Server on		
Maximum altitude     7000 ft (2133m)       BTU rating (maximum)     1048/hr       Sound emissions, idle     6.5 bels (operating)	Air temperature: Server off	50 to 109.4F (10 to 43°C)	
BTU rating (maximum)     1048/hr       Sound emissions, idle     6.5 bels (operating)	Humidity: Server on	8 to 80% (noncondensing)	
Sound emissions, idle 6.5 bels (operating)	Maximum altitude	7000 ft (2133m)	
	BTU rating (maximum)	1048/hr	
Dimensions	Sound emissions, idle	6.5 bels (operating)	
	Dimensions		
Form factor Rack-mount 1 rack unit (1RU)	Form factor	Rack-mount 1 rack unit (1RU)	

Weight: Maximum	28.0 lb (12.7 kg)	
Height	1.75 in. (43 mm)	
Width	17.32 in. (440 mm)	
Depth 22.0 in. (559 mm)		
Equipment Approvals and Safety		
FCC—Verified to comply with Part 1	5 of the FCC Rules, Class A	
• Canada ICES-003, issue 4, Class A		
• UL/IEC 60950-1*		
• CSA C22.2 No. 60950-1-03		
• NOM-01913		
*This server model is certified by the respective UL and NOM agencies.		

#### **Ordering Information**

To order this product, visit the Cisco Ordering Home Page and refer to Tables 2 and 3.

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 and you will view a list of Cisco Unified Communications Manager Appliances and their associated licenses. You can also order the components individually using the following part numbers:

- MCS7816I3-K9-CMC1 (preloaded with Cisco Unified Communications Manager 7.0)
- MCS7816I3-K9-CMB2 (preloaded with Cisco Unified Communications Manager 6.1)
- MCS7816I3-K9-CMB1 (preloaded with Cisco Unified Communications Manager 6.0)
- MCS7816I3-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 DAT-USB-EXT-72= or DAT-USB-RM-72= are used)
- MOH-USB-AUDIO= (USB music-on-hold adapter)

## **Appliance Spares**

To order spare appliances, reference Table 2.

Table 3.	Ordering Information for Spare Appliances
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Application	Spare Part Number
Cisco Unified Communications Manager 7.0	MCS7816-I3-K9-CMC1
Cisco Unified Communications Manager 6.1	MCS7816-I3-K9-CMB2
Cisco Unified Communications Manager 6.0	MCS7816-I3-K9-CMB1
Cisco Unified Communications Manager 5.1	MCS7816-I3-K9-CMA2

#### Field-Replaceable Spares

Table 3 gives ordering information for server spare parts.

 Table 4.
 Ordering Information for Server Spare Parts

Spare-Part Number	Description	
MEM-7816-I3-2GB=	pare pair 1-GB SDRAM dual in-line memory module (DIMM) for Cisco MCS 7816-I3 server	
HDD-7816-I3-160=	Spare 160-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.

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