

# Cisco MCS 7816-I4

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**

Cisco<sup>®</sup> Unified Communications is a comprehensive IP communications system of voice, video, data, and mobility products and applications. It enables more effective, more secure, more personal communications that directly affect both sales and profitability. It brings people together by enabling a new way of communicating — where your business moves with you, security is everywhere, and information is always available...whenever and wherever it is needed. Cisco Unified Communications is part of an integrated solution that includes network infrastructure, security, mobility, network management products, lifecycle services, flexible deployment and outsourced management options, end-user and partner financing packages, and third-party communications applications.

The Cisco MCS 7816-I4 is an entry-level server platform used 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 7816-I4 is an easily deployed, cost-effective solution that delivers the high performance and availability demanded by today's enterprise networks. At only 1 rack unit (1RU) high, the Cisco MCS 7816-I4 offers tremendous power in a low-profile chassis that minimizes rack space.

#### **Features and Benefits**

### **Supported Cisco Applications**

- · Cisco Unified Application Environment
- Cisco Unified Communications Manager 4.3
- Cisco Emergency Responder 1.3
- Cisco Unified Contact Center Express Versions 5.0, 6.0, and 7.0
- Cisco Unified IP Interactive Voice Response Versions 5, 6, and 7
- Cisco Unified MeetingPlace<sup>®</sup> Express 2.0
- Cisco Unified MeetingPlace Express 2.0
- Cisco Unified Mobile Communicator 3.0
- · Cisco Unified Presence

## **Product Specifications**

Table 1 lists the product configuration, and Table 2 gives product specifications.

 Table 1.
 Cisco MCS 7816-I4 Configuration

Component	Value
Product part number	MCS-7816-I4-CCX1
	MCS-7816-I4-IPC1
	MCS-7816-I4-RC1
Preload	None
OS included	None
Processor	Single Intel Dual Core Xeon E8400 3.0-GHz 6M L2
Memory	2-GB (two 1-GB) PC2-5300 Error Checking and Correction (ECC) double-data-rate 2 (DDR2)
Hard disks	One 250-GB Serial Advanced Technology Attachment (SATA) 3.5-in. cold-swap drives
Remote management	IBM Remote Supervisor Adapter (RSA) II Slimline supported, but not included.

 Table 2.
 Product Specifications

Processor					
Maximum processors	1				
Processors installed	1				
Basic input/output system (BIOS) type	Flash memory				
Memory					
Memory maximum	8 GB				
Memory interface mega transfers per second	667 MHz				
Memory technology	PC2-5300 DDR2 synchronous dynamic RAM (SDRAM)				
Bit-error mitigation	ECC				
Total RAM slots	4				
Hard Disk					
Hard disk bays	2				
Hard disk revolutions per minute (rpm)	7200				
Hard disk I/O transfer rate	3 GBps				
Hard disk interface type	SATA				
Redundant Array of Independent Disks (RAID)	N/A				
Network Connectivity					
Ethernet network interface card (NIC)	2 onboard Broadcom NetXtreme 10/100/1000				
Connector	2 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); Category 5E UTP, 5 UTP (2 pair) up to 328 ft (100m)				
<b>Expansion Options</b>					
PCI-* non-hot plug slots 133-MHz and 64-bit slots	1 PCI Express x4 low-profile 1/2- length slot 1 PCI Express x8 full-height 3/4 length slot				
Interfaces					
Ethernet	2				
Serial ports	1				
Universal-serial-bus (USB) 2.0 ports	4 (2 at front and 2 at back of chassis)				
Security					

<ul> <li>Power-on password, administrator password, unattended boot, selectable boot, and unattended start mode</li> <li>Secure remote power on or off with Intelligent Platform Management Interface (IPMI) 2.0</li> </ul>					
Power					
Rated input voltage specifications	• 100 to 127 VAC (low range)				
	• 200 to 240 VAC (high range)				
Rated input frequency	50 to 60 Hz				
Approximate input, kilovolt amperes	Minimum: 0.102 kVA				
	Maximum: 0.55 kVA				
Steady-state power	351W				
BTU rating	1024 BTU/hour				
Operating ambient temperature range	50 to 95℉ (10 to 35℃)				
Nonoperating ambient temperature range	50 to 109.4℉ (–10 to 43℃)				
Operating relative humidity (noncondensing)	8 to 80%				
Nonoperating relative humidity	8 to 80%				
(noncondensing)					
Dimensions					
Form factor	Rack-mount 1 1RU				
Rack-mounting	Standard 4-post rail kit (non-proprietary) (included)				
Weight	28 lb (12.7 kg), base chassis				
Height	1.75 in. (4.45 cm)				
Width	17.3 in. (44.0 cm)				
Depth	22 in. (55.9 cm)				

#### **Equipment Approvals and Safety**

- FCC Verified to comply with Part 15 of the FCC Rules, Class A
- ICES-003 Class A
- AS/NZS CISPR22 Class A
- CISPR22:2005 Class A
- EN55022: 2006 Class A
- EN55024: 1998 +A1:2001 + A2:2003
- IEC 61000-3-2:2000/EN 61000-3-2: 2000
- IEC 61000-3-3: 1995 + A1:2001/EN 61000-3-3: 1995 + A1:2001
- KN22 Class A (MIC Certification)
- CNS13438 Class A (BSMI Certification)
- GB9254 Class A (CCC Certification)
- VCCI-03 Class A (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.
- EN 60950-1:2001, A11:2004 First Edition
- CCC China Certification for China Compulsory Product Certification
- CE Mark (Low Voltage Directive 73/23/EEC, EMC Directive 89/336 EEC)
- NOM (Mexico Safety)
- EN50082-1 (European Union Immunity)
- SASO (Saudi Arabia Safety)
- KN24 Immunity Series (MIC Certification)
- WEEE

## **Ordering Information**

Tables 3 through 5 give ordering information for the Cisco MCS 7816-I4.

 Table 3.
 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 Contact Center Express	CCX-50-STANDARD CCX-50-ENHANCED CCX-50-PREMIUM CCX-60-STANDARD CCX-60-ENHANCED CCX-60-PREMIUM	
Cisco Unified IP IVR	<ul> <li>CCX-70-NEW</li> <li>IVR-5.0-NEW</li> <li>IVR-6.0-NEW</li> <li>IVR-70-NEW-BUNDLE</li> </ul>	
Cisco Unified MeetingPlace conferencing	See Unified MeetingPlace datasheet	
Cisco Unified MeetingPlace Express	See Unified MeetingPlace Express datasheet	

 Table 4.
 Spare Server Ordering Information

Product Name	Part Number
Cisco MCS 7816-I4 for Cisco Unified Application Environment	MCS-7816-I4-IPC1
Cisco MCS 7816-I4 for Cisco Emergency Responder 1.3	MCS-7816-I4-IPC1
Cisco MCS 7816-I4 for Cisco Unified Communications Manager 4.3	MCS-7816-I4-IPC1
Cisco MCS 7816-I4 for Cisco Contact Center Express 5.x	MCS-7816-I4-CCX1
Cisco MCS 7816-I4 for Cisco Contact Center Express 6.x	MCS-7816-I4-CCX1
Cisco MCS 7816-I4 for Cisco Contact Center Express 7.x	MCS-7816-I4-CCX1
Cisco MCS 7816-I4 for Cisco Unified IP IVR 5.x	MCS-7816-I4-CCX1
Cisco MCS 7816-I4 for Cisco Unified IP IVR 6.x	MCS-7816-I4-CCX1
Cisco MCS 7816-I4 for Cisco Unified IP IVR 7.x	MCS-7816-I4-CCX1
Cisco MCS 7816-I4 for Cisco Unified Meeting Express	MCS-7816-I4-RC1
Cisco MCS 7816-I4 for Cisco Unified Presence	MCS-7816-I4-IPC1
Cisco MCS 7816-l4 for Cisco Unified Mobile Communicator 3.0, Proxy Server	MCS-7816-I4-IPC1

 Table 5.
 Spare Parts Ordering Information

Description	Spare Part Number
Spare Two 1024-MB SDRAM DIMM for Cisco MCS 7816-I4	MEM-7816-I4-2GB=
Spare 250-GB SATA drive for Cisco MCS 7816-I4	HDD-7816-I4-250=

## **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/en/US/docs/general/warranty/English/1Y1DEN\_\_.html

#### 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 can enhance your technology experience to accelerate true business advantage.



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