

Cisco Connected Safety and Security UCS Platform Series

The Cisco[®] Connected Safety and Security Unified Computing System[™] (Cisco UCS[®]) platform series offers you performance and density for deploying and managing Cisco Video Surveillance Manager. Cisco Connected Safety and Security UCS comprises a suite of two server models and a wide array of features in a single, easy-to-use, and easy-to-deploy configuration.

- The Cisco Connected Safety and Security UCS C220 model (**CSS UCS C220 M4**) is an enterprise-class server in a one-rack unit (1 RU) form factor with Intel[®] Xeon[®] E5-2600 series processor family CPUs that deliver significant performance and efficiency. In addition, it supports up to four 3.5-inch drives for added density in a compact 1 RU package.
- The Cisco Connected Safety and Security UCS C240 model (**CSS UCS C240 M4**) is an enterprise-class server in a 2RU form factor with dual Intel Xeon E5-2600 series processor family CPUs that deliver significant performance and efficiency. In addition, it supports up to twelve 3.5-inch drives for storage expandability and performance.

Figures 1 and 2 show the C220 model and C240 model, respectively. Tables 1 and 2 address the software application available on each server.

Figure 1. Cisco Connected Safety and Security UCS C220 M4



Table 1. Cisco Connected Safety and Security UCS C220 M4 Software Application

Software Application	Options
Video Surveillance Manager	<ul style="list-style-type: none"> • Video Surveillance Manager Version 7.8 • Drive and RAID configurations <ul style="list-style-type: none"> ◦ 2 x CPS-HDD2T12F213 or CPS-HD4T7KS3-E in RAID 1 ◦ 4 x CPS-HDD2T12F213 or CPS-HD4T7KS3-E in RAID 5 • 1 x CPS-PSU-770W Redundant Power Supply (optional) Supports the following option card: <ul style="list-style-type: none"> • 1 x N2XX-AEPCI05—Emulex LPE 12002 Dual Port 8 Gb Fibre Channel card

Figure 2. Cisco Connected Safety and Security UCS C240 M4



Table 2. Cisco Connected Safety and Security UCS C240 M4 Software Application

Software Application	Options
Video Surveillance Manager	<ul style="list-style-type: none"> • Video Surveillance Manager Version 7.8 • Drive and RAID configurations <ul style="list-style-type: none"> ◦ 2 x CPS-HDD2T12F213 or CPS-HD4T7KS3-E or CPS-HD6T7KL4K in RAID 1 ◦ 6 x CPS-HDD2T12F213 or CPS-HD4T7KS3-E or CPS-HD6T7KL4K in RAID 5 ◦ 6 x CPS-HDD2T12F213 or CPS-HD4T7KS3-E or CPS-HD6T7KL4K in RAID 6 ◦ 12 x CPS-HDD2T12F213 or CPS-HD4T7KS3-E or CPS-HD6T7KL4K in RAID 5 ◦ 12 x CPS-HDD2T12F213 or CPS-HD4T7KS3-E or CPS-HD6T7KL4K in RAID 6 <p>Supports the following option card:</p> <ul style="list-style-type: none"> • 1 x N2XX-AEPCI05—Emulex LPE 12002 Dual Port 8Gb Fibre Channel card

Table 3. Cisco Connected Safety and Security UCS M4 Platform Overview

Feature	Benefit
Intel Xeon processor E5-2600 product family	<p>The Intel Xeon processor E5-2600 v4 and v3 product family is designed to deliver the best combination of performance, built-in capabilities, and cost-effectiveness:</p> <ul style="list-style-type: none"> • Over twice the performance than the previous generation Intel Xeon processor. • Low power, high performance DDR4 memory technology. • Increased performance with Intel AVX2. • Increased virtual machine density. • Automated energy efficiency reduces energy costs by automatically putting the processor and memory in the lowest available power state while still delivering the performance required.
Integrated dual-port Gigabit Ethernet	<ul style="list-style-type: none"> • Outstanding network I/O performance and increased network efficiency and flexibility.
High capacity, flexible internal storage	<ul style="list-style-type: none"> • 7200-RPM 3.5" SAS drives for high capacity and performance. • Up to 4 SAS drives on C220 M4 and up to 12 SAS drives on C240 M4.
RAID 1, 5, 6	<ul style="list-style-type: none"> • .
Hot-swappable SAS drives	<ul style="list-style-type: none"> • Up to 4 LFF (U220) or 12 LFF (U240) front-accessible, hot-swappable SAS drives. • Included Cisco 12Gbps SAS Modular RAID Controller with FBWC Cache module. • RAID 0, 1, 5, 6, 10, 50, and 60 supported.

Feature	Benefit
Cisco UCS C-Series Integrated Management Controller (IMC)	<ul style="list-style-type: none"> • Web user interface for server management; remote keyboard, video, and mouse (KVM). • Intelligent Platform Management Interface (IPMI) 2.0 support for out-of-band management through third-party enterprise management systems. • Virtual media support for remote CD and DVD drives as if local. • Command-line interface (CLI) for server management. • Provides Cisco UCS visibility and control to management ecosystem partners using a comprehensive XML API.
Advanced reliability, availability, and serviceability (RAS) features	<ul style="list-style-type: none"> • Hot-swappable, front-accessible drives. • Redundant Cisco FlexFlash SD cards. • Dual-redundant fans and hot-swappable, redundant power supplies for enterprise-class reliability and uptime (C240 standard; C220 optional). • Convenient latching lid for easy access to internal server components. • Tool-free CPU insertion allows for processor upgrades and replacements with reduced risk of damage. • Tool-free access to all serviceable items and color-coded indicators to guide users to hot-pluggable and serviceable items.
Health monitoring	<ul style="list-style-type: none"> • Health status monitoring from Video Surveillance Operations Manager

Connectors

Table 4 describes the connectivity and connectors of the Cisco Connected Safety and Security UCS M4 platform series.

Table 4. Cisco Connected Safety and Security UCS M4 Platform I/O Connections

Item	Specification
USB 3.0	2 ports
10/100/1000M Ethernet	2 ports 1 port for management
Serial RS-232 (RJ-45)	1 port
Video ports	1 VGA video port (15-pin)
KVM	1 KVM console connector (supplies 2 USB, 1 VGA, 1 serial (DB-9) connectors)
Fibre Channel (optional PCIe card)	2 ports

Specifications

Tables 5 and 6 provide specifications for the Cisco Connected Safety and Security UCS platform series.

Table 5. CSS UCS C220 M4 Technical Specifications

Item	Specification
Housing	1-RU, 4 x SAS front-loading drive bays
Motherboard	Intel E5-2620v3 2.4 GHz Xeon 6-core CPU, 16 GB DDR4 RAM
RAID Controller PCIe Card	Cisco 12-Gbps RAID 0/1/5/6/50/60 8 ports SAS
LEDs	Power, hard-drive activity, network activity, system overheat/fan fail
Gross weight	40 lbs. (14.3kg) base system with 4 HDD, 1 CPU, and 1 power supply
Dimensions	1.7 x 16.9 x 29.8 in. (4.32 x 43 x 75.6 cm)
Power supply	1 x 770W power supply
Redundant power supply	1 x 770W redundant power supply (optional)

Item	Specification
Power requirements (4 HDD)	<ul style="list-style-type: none"> • Max watts: 252 • 50 % load watts: 171 • Idle watts: 88
Operating temperature	41 to 95°F (5 to 35°C)
Nonoperating temperature	-40 to 149°F (-40 to 65°C)
Operating humidity	10 to 90% noncondensing
Nonoperating humidity	5 to 93% noncondensing
Operating altitude	0 to 10,000 ft (0 to 3000m); maximum ambient temperature decreases by 1°C per 300m
Nonoperating altitude	0 to 40,000 ft (12,000m)
Cooling BTU/hr	582 BTU/hour @ 50% utilization and 4 HDD
Onboard storage option	2 TB or 4 TB SAS hard-disk drive in 2- or 4-drive configurations
Onboard storage capacity (preformatted)	<ul style="list-style-type: none"> • 2 x 2 TB with RAID 1 ~ 2 TB storage available • 2 x 4 TB with RAID 1 ~ 4 TB storage available • 4 x 2 TB with RAID 5 ~ 6 TB storage available • 4 x 4 TB with RAID 5 ~ 12 TB storage available
Number of onboard storage repositories	<ul style="list-style-type: none"> • 1 for RAID-5 configuration for video surveillance application

Table 6. CSS UCS C240 Technical Specifications

Item	Specification
Housing	2-RU, 12 x SAS front-loading drive bays
Motherboard	Dual Intel E5-2620v3 2.4 GHz Xeon 6-core CPU, 16 GB DDR4 RAM
RAID Controller PCIe Card	Cisco 12 Gbps RAID 0/1/5/6/50/60 8 ports SAS
LEDs	Power, hard drive activity, network activity, system overheat/fan fail
Gross weight	67.5 lbs. (30.6kg) base system with 12 HDD, 2 CPUs, and 2 power supplies
Dimensions	3.4 x 17.65 x 29.0 in. (8.7 x 44.8 x 73.8 cm)
Power supply	2 x 650W power supply
Power requirements (12 HDD)	<ul style="list-style-type: none"> • Max watts: 559 • 50 % load watts: 380 • Idle watts: 208
Operating temperature	41 to 95° F (5 to 35° C) reduce the maximum temperature by 1°C per every 305 m of altitude above sea level
Nonoperating temperature	-40 to 149°F (-40 to 65°C)
Operating humidity	10 to 90% noncondensing
Nonoperating humidity	5 to 93% noncondensing
Operating altitude	0 to 10,000 ft (0 to 3000m); maximum ambient temperature decreases by 1°C per 305m
Nonoperating altitude	0 to 40,000 ft (0 to 12,000m)
Cooling BTU/hr	1295 BTU/hour @50% utilization & 12 HDD
Onboard storage option	2 TB, 4 TB, or 6 TB SAS hard-disk drive in 2, 6, or 12 drive increments
Onboard storage capacity (preformatted)	<ul style="list-style-type: none"> • 2 x 2 TB with RAID 1 ~ 2 TB storage available • 2 x 4 TB with RAID 1 ~ 4 TB storage available • 2 x 6 TB with RAID 1 ~ 6 TB storage available • 6 x 2 TB with RAID 5 ~ 10 TB storage available • 6 x 4 TB with RAID 5 ~ 20 TB storage available • 6 x 6 TB with RAID 5 ~ 30 TB storage available • 12 x 2 TB with RAID 5 ~ 22 TB storage available • 12 x 4 TB with RAID 5 ~ 44 TB storage available

Item	Specification
	<ul style="list-style-type: none"> • 12 x 6 TB with RAID 5 ~ 66 TB storage available • 6 x 2 TB with RAID 6 ~ 12 TB storage available • 6 x 4 TB with RAID 6 ~ 16TB storage available • 6 x 6 TB with RAID 6 ~ 24 TB storage available • 12 x 2 TB with RAID 6 ~ 20 TB storage available • 12 x 4 TB with RAID 6 ~ 40 TB storage available • 12 x 6 TB with RAID 6 ~ 60 TB storage available
Number of onboard storage repositories	1 for video surveillance application

Certifications

For country approval status, visit the Product Approval Status (PAS) tool: <http://tools.cisco.com/cse/prdapp>.

Ordering Information

To place an order, visit the [Cisco Ordering homepage](#). To download firmware, visit the [Cisco Software Center](#).

Table 7 provides ordering information for the Cisco Connected Safety and Security UCS platform series.

Table 7. Cisco Connected Safety and Security UCS M4 Platform Series Ordering Information

Item	Specification
CPS-UCSM4-1RU-K9	Cisco Connected Safety and Security UCS C220 M4 1-RU chassis with motherboard, one 2.4 GHz 6 core CPU, 16 GB DDR4 memory, and one 770W power supply (no drives and no option cards)
CPS-UCSM4-2RU-K9	Cisco Connected Safety and Security UCS C240 M4 2-RU chassis with motherboard, dual 2.4 GHz 6 core CPU, 16GB DDR4 memory, and dual 650W power supply (no drives and no option cards)
CPS-HDD2TI2F213	2 TB SAS 7.2K RPM 3.5 inch HDD
CPS-HD4T7KS3-E	4 TB SAS 7.2K RPM 3.5 inch HDD
CPS-HD6T7KL4K	6 TB SAS 7.2K RPM 3.5 inch HDD
CPS-PSU1-770W	770W power supply for CPS UCS C220 M4
CPS-AECI05	Emulex Lpe 12002 Dual Port 8 Gb FC HBA
CPS-PCI-1A-240M4	Right PCIe riser board (riser 1) (x8 + GPU) for C240 M4

Availability

Cisco Connected Safety and Security UCS platforms are available through Cisco Authorized Technology Provider partners.

Service and Support

Cisco and our certified partners can help you accelerate success and improve the return on your investment in a Cisco Connected Safety and Security solution. The Cisco lifecycle approach to services defines the requisite activities at each phase of the solution lifecycle:

- Reduces deployment costs by identifying the features that will best meet your business requirements
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- Increases operational efficiency and extends the value of your investment with superior technical support

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For More Information

For more information about the Cisco Connected Safety and Security UCS platform series, contact your local account representative or visit <http://www.cisco.com/go/physec>.



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