Cisco SNS 3400 Series Appliance Overview

Cisco SNS 3415 and Cisco SNS-3495 Appliances

The Cisco SNS 3415 or Cisco SNS 3495 server is designed for performance and density over a wide range of business workloads, from web serving to distributed databases.

Building on the success of the Cisco SNS 3415 or Cisco SNS 3495 server, the enterprise-class Cisco SNS 3415 or Cisco SNS 3495 server further extends the capabilities of the Cisco Unified Computing System portfolio in a 1U form factor. The Cisco SNS 3415 or Cisco SNS 3495 server does this with the addition of the Intel Xeon processor E5-2600 product family, which delivers significant performance and efficiency gains. In addition, the Cisco SNS 3415 Cisco SNS 3495 server offers up to 256 GB of RAM, 8 drives, and 2 x 1 GbE lights-out management (LOM) ports that deliver outstanding levels of density and performance in a compact package.

Cisco SNS 3415 and SNS 3495 Appliances Hardware Specifications

The following table describes the hardware specifications of Cisco SNS 3415 and Cisco SNS 3495 appliances.

Cisco Identity Services Engine Appliance	Hardware Specifications	Diagrams
Cisco SNS-3415-K9	• Cisco UCS C220 M3 • Single socket Intel E5-2609 2.4Ghz CPU 4 total cores, 4 total threads • 16 GB RAM • 1 x 600-GB disk • Embedded Software RAID 0 • 4 GE network interfaces • For physical, environmental, and power specifications, see Server Specifications	Cisco SNS-3415 or 3495 Appliance Front Panel View, on page 3 Cisco SNS 3415 or SNS 3495 Appliance Back Panel View , on page 5
Cisco SNS-3495-K9	• Cisco UCS C220 M3 • Dual socket Intel Xeon E5-2609 2.4GHz CPU 8 total cores, 8 total threads 32 GB RAM 2 x 600-GB disks RAID 0+1 4 GE network interfaces For physical, environmental, and power specifications, see Server Specifications.	

Note You cannot add additional RAM to Cisco SNS 3400 series appliance.

LED Indicators on Cisco SNS-3415 and 3495 Appliances

This section describes the front- and rear-panel controls, ports, and LED indicators on the Cisco SNS 3415 or Cisco SNS 3495 appliances.

- Cisco SNS-3415 or 3495 Appliance Front Panel View, on page 3

- Cisco SNS 3415 or SNS 3495 Appliance Back Panel View , on page 5

Cisco SNS-3415 or 3495 Appliance Front Panel View

The following figure shows the components of the Cisco SNS-3415 or Cisco SNS-3495 appliance front panel view.

Figure 1: Cisco SNS-3415/3495 Appliance Front View
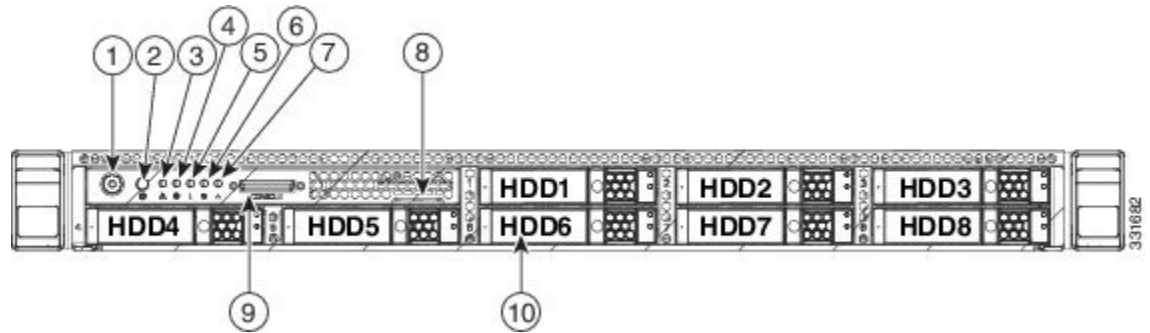
1	Power button/Power status LED	6	Power supply status LED
2	Identification button/LED	7	Network link activity LED
3	System status LED	8	Asset tag (serial number)
4	Fan status LED	9	9 KVM connector (used with KVM cable that provides two USB, one VGA, and one serial connector)
5	Temperature status LED	10	Drives (up to eight hot-swappable 2-5-inch drives)

The following table describes the LEDs located on the front panel of the Cisco SNS-3415 or Cisco SNS-3495 appliance.

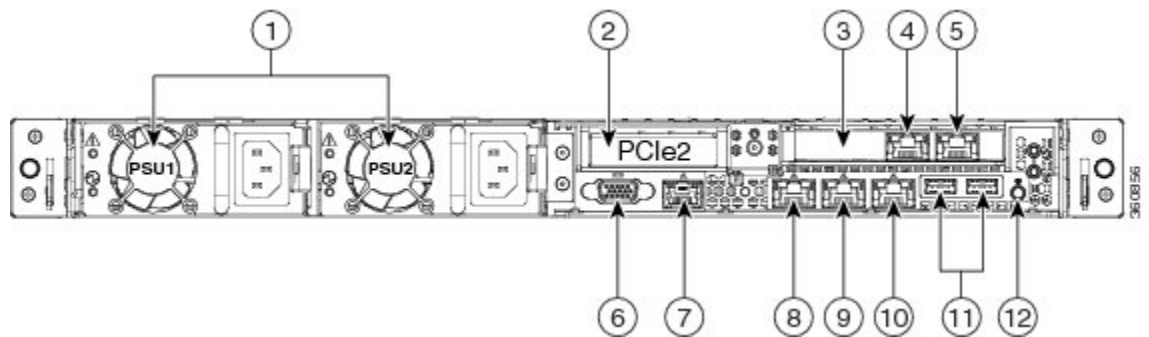| Front Panel LED Names	State
Power button/Power status LED	• Off—There is no AC power to the server. • Amber—The server is in standby power mode. Power is supplied only to the Cisco IMC and some motherboard functions. • Green—The server is in main power mode. Power is supplied to all server components.
Identification	• Off—The identification LED is not in use. • Blue—The identification LED is activated.

Front Panel LED Names	State

System status	• Green—The server is running in normal operating condition.
	
	• Green, blinking—The server is performing system initialization and memory check.
	
	• Amber, steady—The server is in a degraded operational state. For example:
	
	    • Power supply redundancy is lost.
	
	    • CPUs are mismatched.
	
	    • At least one CPU is faulty.
	
	    • At least one DIMM is faulty.
	
	    • At least one drive in a RAID configuration failed.
	
	• Amber, blinking—The server is in a critical fault state. For example:
	
	    • Boot failed.
	
	    • Fatal CPU and/or bus error is detected.
	
	    • Server is in an over-temperature condition.

Fan status	• Green—All fan modules are operating properly. • Amber, steady—One or more fan modules breached the critical threshold. • Amber, blinking—One or more fan modules breached the non-recoverable threshold.
Temperature status	• Green—The server is operating at normal temperature. • Amber, steady—One or more temperature sensors breached the critical threshold. • Amber, blinking—One or more temperature sensors breached the non-recoverable threshold.
Power supply status	• Green—All power supplies are operating normally. • Amber, steady—One or more power supplies are in a degraded operational state. • Amber, blinking—One or more power supplies are in a critical fault state.

Front Panel LED Names	State
Network link activity	• Off—The Ethernet link is idle. • Green—One or more Ethernet LOM ports are link-active, but there is no activity. • Green, blinking—One or more Ethernet LOM ports are link-active, with activity.
Hard drive fault	• Off—The hard drive is operating properly. • Amber—Drive fault detected. • Amber, blinking—The device is rebuilding.
Hard drive activity	• Off—There is no hard drive in the hard drive tray (no access, no fault). • Green—The hard drive is ready. • Green, blinking—The hard drive is reading or writing data.

Cisco SNS 3415 or SNS 3495 Appliance Back Panel View

The following figure shows the components of the Cisco SNS-3415 and Cisco 3495 appliance back panel view.

Figure 2: Cisco SNS-3415/3495 Appliance Rear View

Table 1:

1	Power supplies (up to two)	7	Serial port (RJ-45 connector)

2	Slot 2: Low-profile Peripheral Component Interconnect Express (PCIe) slot on riser (half-height, half-length, x16 connector, x16 lane width)	8	1-GB Ethernet dedicated management port used to access CIMC (labeled M)
3	Slot 1: PCIe1 card containing 1-GB Ethernet ports (GigE2 and GigE3)	9	1-GB Ethernet port 1 (GigE0) for Cisco ISE management communication
4	1-GB Ethernet port 3 (GigE2)	10	1-GB Ethernet port 2 (GigE1)
5	1-GB Ethernet port 4 (GigE3)	11	USB Ports
6	VGA video connector	12	Rear identification button

The following table describes the LEDs located on the back panel of the Cisco SNS-3415 or Cisco SNS-3495 appliance.

LED Name	State
Power supply fault	• Off—The power supply is operating normally. • Amber, blinking—An event warning threshold has been reached, but the power supply continues to operate. • Amber, solid—A critical fault threshold has been reached, causing the power supply to shut down (for example, a fan failure or an over-temperature condition).
Power supply AC OK	• Off—There is no AC power to the power supply. • Green, blinking—AC power OK, DC output not enabled. • Green, solid—AC power OK, DC outputs OK.
1-GbE Ethernet dedicated management link speed	• Off—link speed is 10 Mbps. • Amber—link speed is 100 Mbps. • Green—link speed is 1 Gbps.

| LED Name	State
1-GbE Ethernet dedicated management link status	• Off—No link is present. • Green—Link is active. • Green, blinking—Traffic is present on the active link.
1-GbE Ethernet link speed	• Off—link speed is 10 Mbps. • Amber—link speed is 100 Mbps. • Green—link speed is 1 Gbps.
1-GbE Ethernet link status	• Off—No link is present. • Green—Link is active. • Green, blinking—Traffic is present on the active link.
Identification	• Off—The Identification LED is not in use. • Blue—The Identification LED is activated.

Internal Diagnostic LEDs

The server has internal fault LEDs for fan modules and DIMMs. The LED lights amber to indicate a failed component.

Note Power must be connected to the server for these LEDs to be operational.

The following figure shows the locations of these internal LEDs in Cisco SNS-3415 or Cisco SNS-3495 appliance.
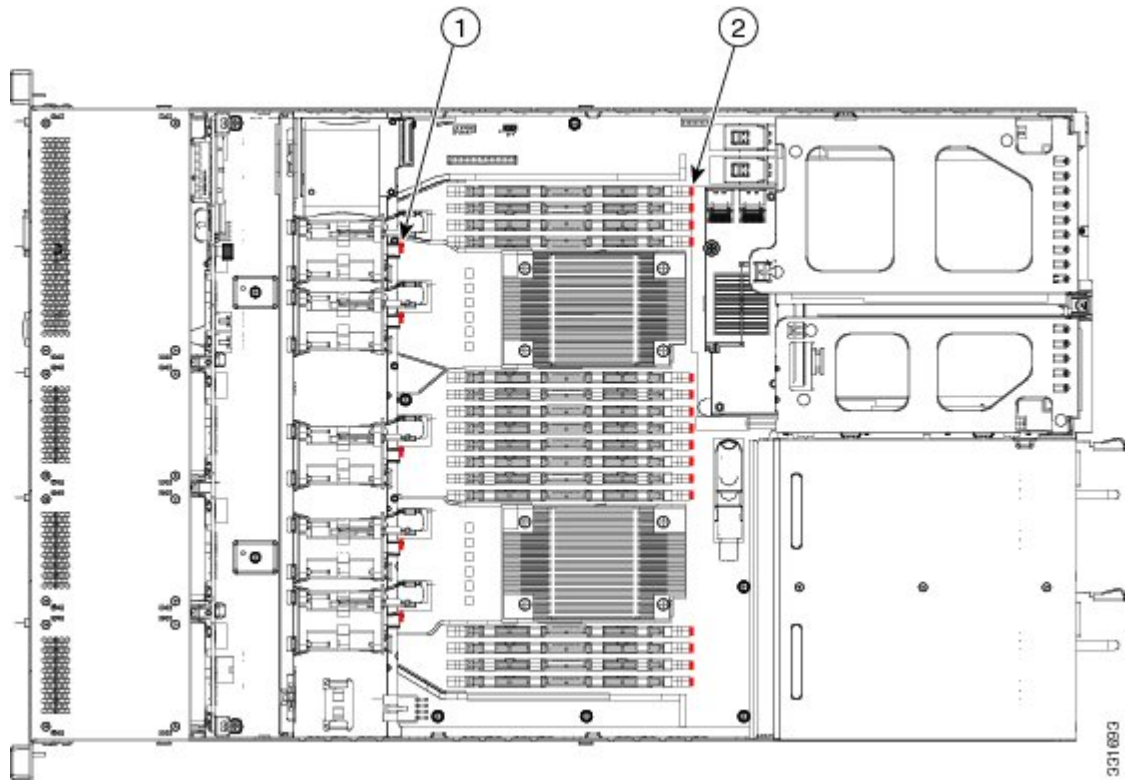
The following table describes the callouts in the above figure.

1	Fan module fault LEDs (one next to each fan connector on the motherboard)	2	DIMM fault LEDs (one next to each DIMM socket on the motherboard)

The following table describes the internal diagnostic LEDs located inside the Cisco SNS-3400 series appliance.

LED Name	State
Internal diagnostic LEDs (all)	• Off—Component is functioning normally. • Amber—Component has failed.

Regulatory Compliance

For regulatory compliance and safety information, see Regulatory Compliance and Safety Information for Cisco SNS-3415, Cisco SNS-3495, Cisco SNS-3515, and Cisco SNS-3595 Appliances.