

Cisco Catalyst 6807-XL Modular Switch

Product Overview

Network traffic has grown exponentially over the last several years, and this trend is expected to continue into the foreseeable future. By 2016, there will be 19 billion networked devices, up from 10 billion in 2011. Business IP traffic is expected to reach 13.1 exabytes per month in 2016¹. Networks must be capable of scaling well beyond the needs of today to deal with the traffic of tomorrow while at the same time providing investment protection.

With this in mind, Cisco is introducing the Cisco® Catalyst® 6807-XL Modular Switch for the next-generation campus. The Cisco Catalyst 6807-XL Modular Switch is built on the rich DNA of the Cisco Catalyst 6500 Series Switch and provides high levels of scalability and performance. The Cisco Catalyst 6807-XL Modular Switch provides unprecedented investment protection for migrations and upgrades from the Cisco Catalyst 6500-E Series Switch.

The Cisco Catalyst 6807-XL chassis (Figure 1) is capable of delivering up to 11.4 terabits per second (Tbps) of system bandwidth capacity and up to 880 gigabits per second (Gbps) of per-slot bandwidth. In a system configured for VSS, this translates to a system capacity of 22.8 Tbps. The Cisco Catalyst 6807-XL Modular Switch is optimized for high-density 10 Gigabit Ethernet, 40 Gigabit Ethernet, and 100 Gigabit Ethernet.

The Cisco Catalyst 6807-XL chassis provides superior investment protection by supporting the Cisco Catalyst 6500 Series Supervisor Engine 2T and associated line cards and service modules. Refer to Table 2 for the complete list of modules supported.

The Cisco Catalyst 6807-XL chassis offers integrated resiliency by providing 1+1 supervisor engine redundancy, redundant fans, and N+1 power supply redundancy, thereby limiting network downtime and making sure of workforce productivity, customer satisfaction, and profitability.

Figure 1. Cisco Catalyst 6807-XL chassis



¹ Cisco VNI forecast - http://www.cisco.com/web/solutions/sp/vni/vni_forecast_highlights/index.html.

Features and Benefits

The Cisco Catalyst 6807-XL Modular Switch is ideally suited for enterprise core and aggregation environments and offers industry-leading Gigabit Ethernet, 10 Gigabit Ethernet, and 40 Gigabit Ethernet port densities while providing high levels of network resilience. The platform is also ready to support 100 Gigabit Ethernet.

The Cisco Catalyst 6807-XL Modular Switch is built on the Cisco Catalyst 6500 DNA and runs the same Cisco IOS® Software operating system as the Cisco Catalyst 6500 Series Switches. At FCS the switch will support all the features supported on the Cisco Catalyst 6500-E Series Switch.

At 10 rack unit, the Cisco Catalyst 6807-XL chassis is smaller than the Cisco Catalyst 6506-E chassis while providing an extra slot. This coupled with support for the Cisco Catalyst 6500 Series Supervisor Engine 2T and its family of line cards means upgrading the campus backbone can be done with simplicity, speed, and full investment protection.

Table 1 lists the Cisco Catalyst 6807-XL chassis features and benefits.

Table 1. Cisco Catalyst 6807-XL Chassis Features and Benefits

Feature	Benefit
Scalability	
Capable of delivering up to 11.4 terabits per second of system bandwidth capacity and 880 Gbps of per-slot bandwidth for all slots. A system configured for VSS is capable of delivering 22.8 terabits per second of system bandwidth.	Scales the system capacity for future needs.
High interface capacity	Scales to high-density Gigabit Ethernet, 10 Gigabit Ethernet, and 40 Gigabit Ethernet and configurations. Capable of supporting 100 Gigabit Ethernet.
Increased resiliency	
Standby fabric hot sync	Decreases the supervisor engine switchover time of Supervisor Engine 2T based systems to between 50 and 200 ms, depending on the modules being used.
Redundant control channel	Increases resiliency to protect against backplane control channel failures.
Redundant supervisor engine option	Increases availability by supporting a redundant supervisor engine.
Redundant power supply option	Provides N+1 power supply redundancy for increased availability.
Fan tray	Supports hot-swappable fan tray. The variable speed fans in the fan tray can handle individual fan failures (N+1 redundancy) and still provide sufficient cooling to the chassis.
Environmental	
Side-to-side airflow	Consistent with existing Cisco Catalyst 6500 Series chassis to allow easy upgrades.
AC power supply	Supports up to 4 AC power supplies, which can be added incrementally as the system requirements grow. Power supplies support both 110 volt and 220 volt inputs.
Network Equipment Building Standards Layer 3 (NEBS L3) compliant	Supports NEBS L3 compliance for deployment in demanding environments.

Product Specifications

Table 2 lists the Cisco Catalyst 6807-XL product specifications.

Table 2. Product Specifications

Item	Specification
Number of Slots	7
Number of Supervisor Engine Slots	2
Number of Module Slots	5
Supervisor Compatibility	VS-S2T-10G VS-S2T-10G-XL
Module Compatibility	WS-X6904-40G-2T WS-X6904-40G-2TXL WS-X6908-10G-2T WS-X6908-10G-2TXL WS-X6816-10G-2T WS-X6816-10G-2TXL WS-X6816-10T-2T WS-X6816-10T-2TXL WS-X6848-SFP-2T WS-X6848-SFP-2TXL WS-X6824-SFP-2T WS-X6824-SFP-2TXL WS-X6848-TX-2T WS-X6848-TX-2TXL WS-X6704-10GE (with CFC or DFC4) WS-X6748-GE-TX (with CFC or DFC4) WS-X6748-SFP (with CFC or DFC4) WS-X6724-SFP (with CFC or DFC4) WS-X6716-10G-3C (with DFC4) WS-X6716-10G-3CXL (with DFC4XL) WS-X6716-10T-3C (with DFC4) WS-X6716-10T-3CXL (with DFC4XL) NAM3 ASA-SM WiSM2 ACE30
Performance	The chassis is capable of up to 880 Gbps per slot. The performance of the individual modules is available in the module data sheets.
Power Supply Compatibility	AC: 3000W (up to 4 power supplies)
Software compatibility (minimum software version)	
Reliability and Availability	
Calculated Mean Time between Failure (MTBF)	
Online Insertion and Removal (OIR)	OIR of the following components: supervisor engines, line card modules, power supplies, and fan tray.
MIBs	Check the supervisor engine data sheet
Network Management	Check the supervisor engine data sheet

Item	Specification
Physical Dimensions (H x W x D)	
Inches	17.45 x 17.37 x 18.1
Centimeters	44.3 x 44.1 x 46
Rack units (RU)	10
Weight	
Chassis Only (lbs)	62
Fully Configured (lbs)	185
Input Voltage	100 to 240 VAC -48 to -60 VDC
Safety	UL 60950 Second Edition CAN/CSA-C22.2 No. 60950 Second Edition EN 60950 Second Edition IEC 60950 Second Edition AS/NZS 60950
EMC	FCC Part 15 (CFR 47) Class A VCCI Class A EN55022 Class A CISPR 22 Class A CE marking AS/NZS 3548 Class A ETS300 386 EN55024 EN61000-6-1 EN50082-1
NEBS/ETSI	GR-1089-Core NEBS Level 3 ETS 300 019 Storage Class 1.1 ETS 300 019 Transportation Class 2.3 ETS 300 019 Stationary Use Class 3.1
ATIS Pb Free and Energy Efficiency	ATIS-0600020.2010 Pb Free circuit packs ATIS-0600015-2009 General Energy Efficiency Requirements (TEER) ATIS-0600015.03-2009 Switch and Router Energy Efficiency ATIS-0600015.01-2009 Server Energy Efficiency VZ.TPR.9205 Verizon Energy Efficiency Requirements for Telecommunication Equipment (TEEER)
Operating Environment	
Operating Temperature	32°F to 104°F (0 to 40°C)
Storage Temperature	-4 to 149°F (-20 to 65°C)
Thermal Transition	0.5°C per minute (hot to cold) 0. 33°C per minute (cold to hot)
Relative Humidity	Ambient (noncondensing) operating: 5% to 90% Ambient (noncondensing) nonoperating and storage: 5% to 95%
Operating Altitude	Certified for operation: 0 to 6500 ft (0 to 2000 m) Designed and tested for operation: -200 to 10,000 ft (-60 to 3000 m)

Ordering Information

Table 3 lists the ordering information for the Cisco Catalyst 6807-XL chassis. To place an order, visit the [Cisco ordering homepage](#).

Table 3. Ordering Information

Product Name	Part Number
Cisco Catalyst 6807-XL Chassis	C6807-XL
Cisco Catalyst 6807-XL Chassis Spare	C6807-XL=
Cisco Catalyst 6807-XL Fan Tray Spare	C6807-XL-FAN=
Cisco Catalyst 6807-XL 3000 W AC Power Supply	C6800-XL-3KW-AC
Cisco Catalyst 6807-XL 3000 W AC Power Supply Spare	C6800-XL-3KW-AC=

For More Information

For more information about the Cisco Catalyst 6807-XL Modular Switch, visit:
<http://www.cisco.com/en/US/products/hw/switches/index.html>.



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