

# Cisco Catalyst 6807-XL Modular Switch



## The Next-Generation Campus Backbone

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 2016. 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® 6800 Series Switch for the next-generation campus. The Cisco Catalyst 6800 Series 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 6800 Series Switch provides unprecedented investment protection for migrations and upgrades from the Cisco Catalyst 6500-E Series Switch.

The Cisco Catalyst 6800 Series Switch has been designed to meet the requirements of the next-generation enterprise network and to simplify the deployment of emerging trends such as bring your own device (BYOD), mobility, pervasive video, collaboration, and resiliency and the resulting challenges of scale, security, and management, making it the ideal switch for all campus backbone deployments.

## Cisco Catalyst 6807-XL Chassis

Figure 1 shows the Cisco Catalyst 6807-XL chassis.

**Figure 1.** Cisco Catalyst 6807-XL chassis.



- 7 slots
- 10 RU
- Cisco Catalyst 6500 DNA
- Supports Cisco Catalyst Supervisor Engine 2T and its family of line cards and service modules
- Up to 880 Gbps/slot capable
- N+1 power supply redundancy with up to 4 3000W power supplies
- Side-to-side air flow

## Investment Protection with the Cisco Catalyst 6807-XL

True to the long history of the Cisco Catalyst 6500 of maintaining support and interoperability of modules, the Cisco Catalyst 6800 Series Switch provides unprecedented investment protection by supporting the Cisco Catalyst 6500 Series Supervisor Engine 2T and its family of line cards and service modules. This backward compatibility coupled with the use of the same Cisco IOS® Software operating system as used on the Cisco Catalyst 6500 Series Switch not only eases the burden of upgrades and migration but also reduces the total cost of ownership of the Cisco Catalyst 6800 Series Switch.

Table 1 lists the modules supported on the Cisco Catalyst 6807-XL.

**Table 1.** Module Support on the Cisco Catalyst 6807-XL

VS-S2T-10G	VS-S2T-10G-XL
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-X6716-10G-3C (with DFC4)	WS-X6716-10G-3CXL (with DFC4XL)
WS-X6716-10T-3C (with DFC4)	WS-X6716-10T-3CXL (with DFC4XL)
WS-X6704-10GE (with CFC or DFC4/DFC4XL)	
WS-X6748-GE-TX (with CFC or DFC4/DFC4XL)	
WS-X6748-SFP (with CFC or DFC4/DFC4XL)	
WS-X6724-SFP (with CFC or DFC4/DFC4XL)	
NAM3	
ASA-SM	
WiSM2	
ACE30	



## Cisco Catalyst 6807-XL Software

The Cisco Catalyst 6807-XL chassis with the Cisco Catalyst 6500 Series Supervisor Engine 2T supports the Cisco Catalyst 6500 Cisco IOS Software operating system, the same operating system used on the Cisco Catalyst 6500 Series Switches. With over 3000 features, Cisco Catalyst 6500 Cisco IOS Software is a highly evolved and mature operating system that delivers the performance, reliability, and lifecycle expected of a campus backbone switch.

## Cisco Catalyst 6807-XL Features and Benefits

### Scalability

The Cisco Catalyst 6800 Series chassis 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 6800 Series Switch is optimized for high-density 10 Gigabit Ethernet, 40 Gigabit Ethernet, and 100 Gigabit Ethernet..

### Availability and Resiliency

The Cisco Catalyst 6800 Series Switch provides a mechanism for rapid supervisor engine failover by supporting Nonstop Forwarding with Stateful Switchover (NSF/SSO).

Moreover, with VSS Quad-Sup SSO (VS4O), the modular Cisco Catalyst 6800 Series Switch takes high availability to the next level. VS4O is the next generation of VSS technology and provides 99.999% availability, making the Cisco Catalyst 6800 Series Switch ideal for campus backbone deployments.

### Smart Operations

The Cisco Catalyst 6800 Series Switch helps simplify the operation of the network by providing support for features such as Cisco Catalyst Instant Access and Smart Install.

The Cisco Catalyst 6800 Series Switch can be configured as a parent for Cisco Catalyst Instant Access deployments. Cisco Catalyst Instant Access enables the deployment of access switches instantly through a single touch point with feature and configuration consistency.

The Cisco Catalyst 6800 Series Switch can serve as a director for Smart Install: a plug-and-play configuration and image-management feature that provides zero-touch deployment for new switches. You can ship a switch to a location, place it in the network, and power it on with no configuration required on the device.

### Security

The Cisco Catalyst 6807-XL chassis with Cisco Catalyst 6500 Series Supervisor Engine 2T provides comprehensive security with features such as Cisco TrustSec®. Cisco TrustSec builds security and intelligence into the network with policy-based access control, identity-aware networking, and data confidentiality and integrity. Because networks have no borders, Cisco TrustSec helps secure borderless networks with confidence, consistency, and efficiency.

### Virtualization

The Cisco Catalyst 6807-XL chassis with the Cisco Catalyst 6500 Series Supervisor Engine 2T provides a comprehensive suite of virtualization features including L2/L3 VPN, full MPLS, EVN, VRF aware applications for NAT Netflow, GRE for v4/v6, L2 extensions with VPLS, etc to segment different user groups and serve the unique security/QoS policy requirements of each of these diverse user groups.

### Application Visibility and Control

The Cisco Catalyst 6800 Series Switch allows IT professionals to meet or exceed business service-level agreements and user expectations through:

- Deep visibility and control for discovery, prioritization, monitoring, and control of applications – integrated into routing and switching with flexible NetFlow and QoS
- Application recognition with NBAR and precise performance analytics with 1588 time stamping with integrated NAM-3 service module

### Ready for Software Defined Networking (SDN)

Cisco Catalyst 6807-XL with Cisco Catalyst Supervisor Engine 2T is SDN ready, with a flexible architecture and API framework with OnePk that allows developers to deliver custom services such as network slicing and traffic steering based on industry standards such as OpenFlow to work in conjunction with applications that make the network agile.

## For More Information

For more information about the Cisco Catalyst 6800 Series Modular Switch, please visit: <http://www.cisco.com/en/US/products/hw/switches/index.html>