Cisco Catalyst 3560-CX and 2960-CX Series Compact Switches

The Cisco® Catalyst® Compact Switches easily expand your Catalyst switching infrastructure outside the wiring closet to enable new workspaces, extend wireless LANs, and connect PoE devices. These fan-less, small form-factor switches are ideal for space-constrained deployments where multiple cable runs would be challenging.

Product Overview

The Cisco Catalyst 3560-CX and 2960-CX Series Compact Switches help optimize network deployments. These Gigabit Ethernet (GbE) managed switches are ideal for high-speed data connectivity, Wi-Fi backhaul, and Power over Ethernet (PoE) connectivity in places where space is at a premium. With a single copper or fiber cable from the wiring closet, Catalyst compact switches enable IP connectivity for devices such as IP phones, wireless access points, surveillance cameras, PCs, and video endpoints.

With their quiet, fan-less design and compact footprint, these switches offer flexible mounting options and open up a variety of network design and connectivity options. Use them in offices, classrooms, hotels, retail stores, and other enterprise and branch locations. The setup allows for shorter cable runs from the compact switches, allowing for flexibility in space redesign and growth as new devices join the network - this eliminating the need for expensive and inflexible cabling infrastructure.

Cisco Catalyst 3560-CX and 2960-CX Series Compact Switch Highlights

- 8 or 12 Gigabit Ethernet ports with line rate forwarding performance
- Gigabit copper, small form factor pluggable (SFP) or 10G SFP+ uplinks
- Power over Ethernet Plus (PoE+) support with up to 240W of PoE budget
- Advanced Layer 2 (LAN Base) and Layer 3 (IP Base) support with an option to upgrade to IP services
- Fan-less design and silent operation
- Enhanced Limited Lifetime Warranty (E-LLW)

Figure 1 shows the Catalyst 3560-CX and 2960-CX switch family.

Figure 1. Cisco Catalyst 3560-CX and 2960-CX Compact Switch Family

Features and Benefits

Like the larger Catalyst switches typically used in wiring closets, the Catalyst Compact switches are a managed option for consistency across your LAN switching network. Unlike unmanaged switches and hubs, they provide advanced networking features for flexibility, security, and scale.

Table 1 lists many of the Catalyst 3560-CX and 2960-CX switch features and benefits.

Table 1.   Compact Switch Features and Benefits Summary

Feature	Benefit(s)
Hardware	
Small form factor; fan-less design; silent operation	The switch can be used in open workspaces and other areas that can't tolerate equipment noise and where multiple cable runs could be difficult, expensive, and intrusive.
Flexible mounting options	The switch can be mounted on the wall, under a desk, rack, DIN rail, or practically anywhere they're needed.
10-Gigabit SFP+ uplinks	Accommodates business growth and increased traffic, such as aggregate upstream gigabit traffic loads from 802.11ac Wi-Fi access points.
Increased PoE+ Scale	Provides up to 240W of PoE budget (twice the power per switch than previous series).
Perpetual PoE	Provides uninterrupted power to a powered-down device even when the switch is booting. This eliminates the need for a backup power source.
Management and Operations	
Cisco Instant Access Mode	Available on Catalyst 3560-CX switches with 10 G SFP+ uplinks, this optional mode enables a single point of management and operation for campus networks. Multiple Catalyst 3560-CX compact switches with 10 G SFP+ uplinks can be connected to Catalyst 6500 or 6800 core switches, and the entire configuration can then work as a single extended switch with a common management domain.
	In this mode, compact switches inherit all the features of the Catalyst 6500 or 6800. Advanced Catalyst 6500 and 6800 features like MPLS and EVN can be extended to the access layer, so the Cisco Catalyst Instant Access solution can be deployed on all or a subset of the campus network.
Cisco Network Plug 'n Play (PnP)	Network Plug-n-Play (PnP) is a secure, scalable solution that accelerates network device deployments by automating the installation and configuration of Cisco IOS software. The Catalyst 3560-CX and 2960-CX switches are 'Network-PnP Ready' and can be used as part of the APIC-EM solution for automated switch deployments. This feature helps improve productivity, cut costs, reduce downtime, and enhance the user experience.
Cisco Catalyst Smart Operations	This comprehensive set of Cisco Catalyst technologies and Cisco IOS Software features simplify LAN deployment, configuration, and troubleshooting.
	• **Cisco Smart Install** enables the configuration of the Cisco IOS Software image and switch without user intervention.
	• **Cisco Auto Smartports** provides automatic configuration as end devices connect to the switch port, allowing auto-detection and plug-and-play of the device onto the network. Interface templates containing configurations or policies that can be applied to ports are also supported.
	• **Cisco Smart Troubleshooting** is an extensive array of debug diagnostic commands and system health checks, including **Generic Online Diagnostics (GOLD)** and **Onboard Failure Logging (OBFL).**
	• **Embedded Event Manager (EEM),** supported on the Catalyst 3560-CX, provides real-time network event detection and onboard automation. You can adapt the behavior of your network devices to align with business needs.
Cloud and System Management	• Cisco Prime Infrastructure provides comprehensive network lifecycle management with an extensive library of features that automate initial and day-to-day management. Cisco Prime integrates hardware and software platform expertise and operational experience into a powerful set of workflow-driven configuration, monitoring, troubleshooting, reporting, and administrative tools.
	• Cisco Network Assistant is a PC-based, centralized network management and configuration application for small and medium-sized business (SMB) with up to 250 users. An intuitive GUI lets you easily apply common services across Cisco switches, routers, and access points.
	• Cisco Active Advisor is a cloud-based service that provides essential lifecycle information about your network inventory. Available by itself or as a component of other Cisco network management applications, it helps you reduce your network's overall risk by keeping you up-to-date on the status of your products.

Feature	Benefit(s)
Operational Simplicity	• **Link Aggregation Control Protocol (LACP)** for creating Ethernet channeling with devices that conform to IEEE 802.3ad. Similar to Cisco EtherChannel technology and PAgP. • **Dynamic Host Configuration Protocol (DHCP)** autoconfiguration of multiple switches through a boot server. • **Multicast VLAN Registration (MVR)** continuously sends multicast streams in a multicast VLAN. Isolates streams from subscriber VLANs for bandwidth and security reasons. • **Voice VLAN** keeps voice traffic on a separate VLAN for easier administration and troubleshooting. • **Cisco VLAN Trunking Protocol (VTP)** supports dynamic VLANs and dynamic trunk configuration across all switches. • **Remote Switch Port Analyzer (RSPAN)** allows administrators to remotely monitor ports in a Layer 2 switch network from any other switch in the same network. • For enhanced traffic management, monitoring, and analysis, the Embedded **Remote Monitoring (RMON)** software agent supports four RMON groups (history, statistics, alarms, and events).
Security	
Cisco TrustSec®	A suite of components that secures networks, data, and resources with policy-based access control, identity, and role-aware networking with the following elements: • **Hardware on the Catalyst 3560-CX for Secure Group Tagging (SGT)** and **Secure Group Access Control lists (SGACL)** for identity, segmentation, and role-based security. Role-based security is possible with Cisco **Identity Services Engine (ISE)**. • **Hardware on the Catalyst 3560-CX for IEEE 802.1AE MACsec** for Layer 2, line-rate Ethernet data confidentiality and integrity on host-facing ports. Protects against man-in-the-middle attacks (snooping, tampering, and replay). • Flexible authentication that supports multiple authentication mechanisms including **802.1X, MAC Authentication Bypass**, and **web authentication** using a single, consistent configuration. • **Monitor mode** that creates a user-friendly environment for 802.1X operations. • **RADIUS change of authorization and downloadable ACLs** for comprehensive policy management. • **802.1X supplicant** with **Network Edge Access Transport (NEAT)** for extended secure access; compact switches in the conference rooms have the same level of security as switches inside a locked wiring closet.
Threat Defense	Advanced, integrated security features that provide threat defense capabilities for mitigating man-in-the-middle attacks and protecting your critical network infrastructure. • **Superior Layer 2 capabilities** for mitigating MAC, IP, and ARP spoofing risks. Also protects port security, guards against DHCP snooping, and supports Dynamic ARP Inspection and IP Source Guard. • **IPv6 first-hop security** with Binding Integrity Guard, RA Guard, and DHCP Guard. • **Private VLAN** provides security and isolation between switch ports. • **Multidomain Authentication** allows an IP phone and a PC to authenticate on the same switch port while placing them on appropriate voice and data VLAN. • **Secure Shell (SSH), Kerberos, and Simple Network Management Protocol Version 3 (SNMPv3) that encrypt** administrator traffic during Telnet and SNMP sessions to keep access credentials secure. • **Port-based access control list (ACL)** to let the switch automatically allow or block packets based on policies for source and destination IP addresses. Rules can be set up differently on a port-by-port basis. • **Secure Boot** to make sure that only signed and authorized images can load on the switch. • **Cisco AutoSecure** to simplify security configurations with a single-line CLI.
Power Management and Energy Efficiency	
Switch Hibernate Mode	Innovative technology that puts the switch in an ultra-low power mode during periods of non-operation such as nights and weekends. The switch can be configured to be in the hibernate mode using the Cisco Energy Management Suite.
IEEE 802.3az or Energy-Efficient Ethernet (EEE)	Ports dynamically sense idle periods between traffic bursts and quickly switch the interfaces into a low-power idle mode, reducing power consumption.
Cisco Energy Management Suite (formerly EnergyWise)	Measures power consumption of network infrastructure and network-attached devices and enforces rules to reduce energy usage.
Power Supply	80-Plus Silver Certified
Traffic Management and QoS	
Application Visibility	NetFlow Lite lets you maintain awareness of all application traffic on the network. It helps capture and record specific packet flows. Exports flow data in the NetFlow Version 9 format for analysis on a wide range of Cisco and third-party collectors.
Advanced Quality of Service	Intelligent traffic management with flexible mechanisms for marking, classifying, and scheduling traffic at wire speed. Includes: • Up to **eight egress queues** per port and strict priority queuing so that the highest priority packets are serviced ahead of all other traffic. • **Shaped Round Robin** (SRR) scheduling and **Weighted Tail Drop** (WTD) congestion avoidance. • **Flow-based rate limiting** and up to 256 aggregate or individual policers per port.

Product Details

Switch Models

The Catalyst Compact Switches are available in seven switch models. They vary by whether they support both Layer 2 and Layer 3 services or Layer 2 services only; whether they support Power over Ethernet Plus (PoE+); by the number of Gigabit Ethernet ports; the aggregate power provided, and the type of cabling connections they support.

Tables 2 and 3 compare the available switch models and list the software package that ships by default with each model.

Table 2.   Cisco Catalyst 3560-X Compact Switch Models and Default Software

Model	Ethernet Ports	PoE Output Ports	Available PoE Power	Uplinks	Default Software
3560CX-8TC-S	8 x 10/100/1000 Gigabit Ethernet	NA		2 x 1G copper + 2 x 1G SFP	IP Base (IP Services with RTU License)
3560CX-12TC-S	12 x 10/100/1000 Gigabit Ethernet	NA		2 x 1G copper + 2 x 1G SFP	IP Base (IP Services with RTU License)
3560CX-8PC-S	8 x 10/100/1000 Gigabit Ethernet	8 PoE+	240W	2 x 1G copper + 2 x 1G SFP	IP Base (IP Services with RTU License)
3560CX-12PC-S	12 x 10/100/1000 Gigabit Ethernet	12 PoE+	240W	2 x 1G copper + 2 x 1G SFP	IP Base (IP Services with RTU License)
3560CX-12PD-S	12 x 10/100/1000 Gigabit Ethernet	12 PoE+	240W	2 x 1G copper + 2 x 10G SFP+	IP Base (IP Services with RTU License)

Table 3.   Cisco Catalyst 2960-X Compact Switch Models and Default Software

Model	Ethernet Ports	PoE Output Ports	Available PoE Power	Uplinks	Default Software
2960CX-8TC-L	8 x 10/100/1000 Gigabit Ethernet	N/A		2 x 1G copper + 2 x 1G SFP	LAN Base
2960CX-8PC-L	8 x 10/100/1000 Gigabit Ethernet	8 PoE+	124W	2 x 1G copper + 2 x 1G SFP	LAN Base

Note: All four uplink ports (two copper and two fiber) can be used simultaneously and also as downlinks.

Switch Software

Cisco Catalyst 3560-CX compact switches ship with the IP Base version of Cisco IOS® Software. The 3560-CX switches can be upgraded to use the IP Services version of IOS Software with a right-to-use (RTU) License. The IP Base and IP Services feature set on Cisco Catalyst 3560-CX switches provides baseline enterprise services in addition to all LAN Base features. They support Layer 3 networking features, including support for routed access, Cisco TrustSec, media access control security (MACsec), and other advanced network services. The IP Services feature set provides full Layer 3 routing capabilities with Open Shortest Path First (OSPF), Border Gateway Protocol (BGP), Enhanced Internal Gateway Routing Protocol (EIGRP), Policy-Based Routing (PBR), Multicast Routing, and Virtual Routing and Forwarding (VRF) Lite.

Cisco Catalyst 2960-CX Series compact switches ship with the LAN Base version of Cisco IOS® Software. These switches deliver advanced Layer 2 switching with intelligent Layer 2 through 4 services for the network edge, such as voice, video, and wireless LAN services.

Licensing and Software Policy

Customers with Cisco Catalyst LAN Base and IP Base software feature sets will receive updates and bug fixes designed to maintain the compliance of the software with published specifications, release notes, and industry standards compliance as long as the original end user continues to own or use the product or for up to one year from the end-of-sale date for this product, whichever occurs earlier. This policy supersedes any previous warranty or software statement and is subject to change without notice.

Product Specifications

Table 4 provides hardware specifications for the Catalyst 3560-CX and 2960-CX compact switches.

Table 4.   Cisco Catalyst 3560-CX and 2960-CX Series Compact Switch Hardware

Description	Specification		
Performance		Cisco Catalyst 3560-CX	Cisco Catalyst 2960-CX
	Forwarding Bandwidth	34 Gbps (with 10 G uplinks) 16 Gbps (with 1 G uplinks)	12 Gbps
	Flash memory	128 MB	128 MB
	Memory DRAM	512 MB	512 MB
	Max VLANs	1023	1023
	VLAN IDs	4000	4000
	Maximum transmission unit (MTU)	Up to 9000 bytes	Up to 9000 bytes
	Jumbo frames	9018 bytes	9018 bytes
	Forwarding rate 64 Byte Packet Cisco Catalyst 3560-CX and 2960-CX		
	2960CX-8TC-L	17.9 mpps	
	2960CX-8PC-L	17.9 mpps	
	3560CX-8TC-S	17.9 mpps	
	3560CX-12TC-S	23.8 mpps	
	3560CX-8PC-S	17.9 mpps	
	3560CX-12PC-S	23.8 mpps	
	3560CX-12PD-S	50.6 mpps	
	Resource Cisco Catalyst 3560-CX and 2960-CX		
	See the release notes for the SDM Templates for 3560-CX and 2960-CX: http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst2960cx_3650cx/software/release/15-2_3_e/release_notes/rn-1523e-2960cx-3560cx.html		
Connectors and cabling	**Cisco Catalyst 3560-CX and 2960-CX with SFP-based ports:** • 10BASE-T ports: RJ-45 connectors, 2-pair Category 3, 4, or 5 unshielded twisted-pair (UTP) cabling • 100BASE-TX ports: RJ-45 connectors, 2-pair Category 5 UTP cabling • 1000BASE-T ports: RJ-45 connectors, 4-pair Category 5 UTP cabling • 1000BASE-T SFP-based ports: RJ-45 connectors, 4-pair Category 5 UTP cabling • 1000BASE-SX -LX/LH, -ZX, -BX, -T*, -FX*, and CWDM SFP-based ports: LC fiber connectors (single/multimode fiber) • 100BASE-LX, -BX, -FX: SFP-based ports: LC fiber connectors (single/multimode fiber) * GLC-T and GLC-GE-100FX are not supported		
Power connectors	• Customers can provide power to a switch by using the internal power supply. The connector is located at the back of the switch. The internal power supply is an autoranging unit. • The internal power supply supports input voltages between 100 and 240VAC. • Use the supplied AC power cord to connect the AC power connector to an AC power outlet.		
Indicators	Per-port status: Link integrity, disabled, activity, speed, full-duplex System status: System, link status, link duplex, link speed		

Description	Specification		
Dimensions (H x W x D)	**Cisco Catalyst 3560-CX and 2960-CX**	**Inches**	**Centimeters**
	2960CX-8TC-L	1.75 x 10.6 x 8.4	4.44 x 26.9 x 21.3
	2960CX-8PC-L	1.75 x 10.6 x 9.4	4.44 x 26.9 x 23.8
	3560CX-8TC-S	1.75 x 10.6 x 8.4	4.44 x 26.9 x 21.3
	3560CX-12TC-S	1.75 x 10.6 x 8.4	4.44 x 26.9 x 21.3
	3560CX-8PC-S	1.75 x 10.6 x 9.4	4.44 x 26.9 x 23.8
	3560CX-12PC-S	1.75 x 10.6 x 9.4	4.44 x 26.9 x 23.8
	3560CX-12PD-S	1.75 x 10.6 x 9.4	4.44 x 26.9 x 23.8
Weight	**Cisco Catalyst 3560-CX and 2960-CX**	**Pounds**	**Kilograms**
	2960CX-8TC-L	3.8	1.72
	2960CX-8PC-L	5.0	2.27
	3560CX-8TC-S	3.8	1.72
	3560CX-12TC-S	3.9	1.77
	3560CX-8PC-S	5.0	2.27
	3560CX-12PC-S	5.1	2.31
	3560CX-12PD-S	5.1	2.31

Environmental ranges		Cisco Catalyst 3560-CX		Cisco Catalyst 2960-CX	
	Operating[*] temperature up to 5000 ft (1524 m)	-5°C to +45°C[**]	+23°F to +113°F	-5°C to +45°C[**]	+23°F to +113°F
	Operating[*] temperature up to 10,000 ft (3048 m)	-5°C to +45°C	+23°F to +113°F	-5°C to +45°C	+23°F to +113°F
	Storage temperature up to 15,000 ft (4572 m)	-25°C to +70°C	-13°F to +158°F	-25°C to +70°C	-13°F to +158°F
	Operating altitude	Up to 3048 m	Up to 10,000 ft	Up to 3048 m	Up to 10,000 ft
	Storage altitude	Up to 4000 m	Up to 15,000 ft	Up to 4000 m	Up to 15,000 ft
	Operating relative humidity	5% to 95% noncondensing		5% to 95% noncondensing	
	Storage relative humidity	5% to 95% noncondensing		5% to 95% noncondensing	

[*] Minimum ambient temperature for cold start is 0°C (+32°F)

[**] 10G SKUs have a maximum operating temperature of 40°C

Mean time between failure (MTBF)	Cisco Catalyst 3560-CX	MTBF	Cisco Catalyst 2960-CX	MTBF
	3560CX-8TC-S	756,260	2960CX-8TC-L	756,260
	3560CX-12TC-S	755,270	2960CX-8PC-L	569,530
	3560CX-8PC-S	569,530		
	3560CX-12PC-S	553,140		
	3560CX-12PD-S	528,480		

Table 5 describes the power specifications for Cisco Catalyst 3560-CX and 2960-CX switches.

Table 5. Power Specifications for Cisco Catalyst 3560-C and 2960-C Series Compact Switches

Description	Specification				
Measured 100% throughput power consumption	**Cisco Catalyst 3560-CX**	**Switch Power Consumption Watts**	**Cisco Catalyst 2960-CX**	**Switch Power Consumption Watts**	
	3560CX-8TC-S	19.7W	2960CX-8TC-L	20.0W	
	3560CX-12TC-S	21.9W	2960CX-8PC-L	24.5W	
	3560CX-8PC-S	25.4W			
	3560CX-12PC-S	27.8W			
	3560CX-12PD-S	32.6W			
Measured 10% throughput power consumption	**Cisco Catalyst 3560-CX**	**Switch Power Consumption Watts**	**Cisco Catalyst 2960-CX**	**Switch Power Consumption Watts**	
	3560CX-8TC-S	19.5W	2960CX-8TC-L	19.8W	
	3560CX-12TC-S	21.7W	2960CX-8PC-L	24.3W	
	3560CX-8PC-S	25.3W			
	3560CX-12PC-S	27.6W			
	3560CX-12PD-S	32.6W			
Measured 0% throughput power consumption (with EEE)	**Cisco Catalyst 3560-CX**	**Switch Power Consumption Watts**	**Cisco Catalyst 2960-CX**	**Switch Power Consumption Watts**	
	3560CX-8TC-S	16.6W	2960CX-8TC-L	16.7W	
	3560CX-12TC-S	17.3W	2960CX-8PC-L	20.4W	
	3560CX-8PC-S	22.2W			
	3560CX-12PC-S	23.5W			
	3560CX-12PD-S	28.2W			
Measured 100% throughput power consumption (with maximum possible PoE loads)	**Cisco Catalyst 3560-CX**	**Switch Power Consumption Watts**	**Cisco Catalyst 2960-CX**	**Switch Power Consumption Watts**	
	3560CX-8TC-S	NA	2960CX-8TC-L	NA	
	3560CX-12TC-S	NA	2960CX-8PC-L	135.5W	
	3560CX-8PC-S	247.4W			
	3560CX-12PC-S	253.0W			
	3560CX-12PD-S	254.7W			
AC/DC input voltage and current	**Cisco Catalyst 3560-CX**			**Cisco Catalyst 2960-CX**	
		I/P Voltage	I/P Current		I/P voltage	I/P Current
	3560CX-8TC-S	100-240 VAC	0.5-0.2A	2960CX-8TC-L	100-240 VAC	3.25-1.5A
	3560CX-12TC-S	100-240 VAC	0.5-0.2A	2960CX-8PC-L	100-240 VAC	3.25-1.5A
	3560CX-8PC-S	100-240 VAC	3.25-1.5A			
	3560CX-12PC-S	100-240 VAC	3.25-1.5A			.
	3560CX-12PD-S	100-240 VAC	3.25-1.5A			

Description	Specification							
Power rating	**Cisco Catalyst 3560-CX**				**Cisco Catalyst 2960-CX**			
		Watts	KVA	BTU		Watts	KVA	BTU
	3560CX-8TC-S	30	0.05	170.6	2960CX-8TC-L	30	0.05	170.6
	3560CX-12TC-S	30	0.05	170.6	2960CX-8PC-L	280	0.3	1023.6[1]
	3560CX-8PC-S	280	0.3	1023.6[1]				
	3560CX-12PC-S	280	0.3	1023.6[1]				
	3560CX-12PD-S	290	0.31	1057.7[1]				
	[1] Switch dissipation only (excludes PoE, which is dissipated at the end device).							
PoE and PoE+	• Maximum power supplied per Port for PoE+ is 30W • Maximum power supplied per port for PoE: 15.4W							
PoE Power Supply Characteristics	**Capacity**: 300W, Efficiency: 80 Plus Silver certified							
	% Load		**Efficiency**			**Power Factor**		
	• 20		• 85%			• 0.8		
	• 50		• 88%			• 0.9		
	• 100		• 90%			• 0.95		

Table 6 shows switch management and standards support.

Table 6.   Management and Standards Support for Cisco Catalyst 3560-CX and 2960-CX Series Compact Switches

Description	Specification	
Management	• BRIDGE-MIB • CISCO-CABLE-DIAG-MIB • CISCO-CDP-MIB • CISCO-CLUSTER-MIB • CISCO-CONFIG-COPY-MIB • CISCO-CONFIG-MAN-MIB • CISCO-DHCP-SNOOPING-MIB • CISCO-ENTITY-VENDORTYPE-OID-MIB • CISCO-ENVMON-MIB • CISCO-ERR-DISABLE-MIB • CISCO-FLASH-MIB • CISCO-FTP-CLIENT-MIB • CISCO-IGMP-FILTER-MIB • CISCO-IMAGE-MIB • CISCO-IP-STAT-MIB • CISCO-LAG-MIB • CISCO-MAC-NOTIFICATION-MIB • CISCO-MEMORY-POOL-MIB • CISCO-PAGP-MIB • CISCO-PING-MIB • CISCO-POE-EXTENSIONS-MIB • CISCO-PORT-QOS-MIB • CISCO-PORT-SECURITY-MIB • CISCO-PORT-STORM-CONTROL-MIB • CISCO-PRODUCTS-MIB • CISCO-PROCESS-MIB • CISCO-RTTMON-MIB • CISCO-SMI-MIB • CISCO-STP-EXTENSIONS-MIB • CISCO-SYSLOG-MIB	• CISCO-TC-MIB • CISCO-TCP-MIB • CISCO-UDLDP-MIB • CISCO-VLAN-IFTABLE • RELATIONSHIP-MIB • CISCO-VLAN-MEMBERSHIP-MIB • CISCO-VTP-MIB • ENTITY-MIB • ETHERLIKE-MIB • IEEE8021-PAE-MIB • IEEE8023-LAG-MIB • IF-MIB • INET-ADDRESS-MIB • OLD-CISCO-CHASSIS-MIB • OLD-CISCO-FLASH-MIB • OLD-CISCO-INTERFACES-MIB • OLD-CISCO-IP-MIB • OLD-CISCO-SYS-MIB • OLD-CISCO-TCP-MIB • OLD-CISCO-TS-MIB • RFC1213-MIB • RMON-MIB • RMON2-MIB • SNMP-FRAMEWORK-MIB • SNMP-MPD-MIB • SNMP-NOTIFICATION-MIB • SNMP-TARGET-MIB • SNMPv2-MIB • TCP-MIB • UDP-MIB • ePM MIB

Description	Specification	
Standards	• IEEE 802.1D Spanning Tree Protocol • IEEE 802.1p CoS Prioritization • IEEE 802.1Q VLAN • IEEE 802.1s • IEEE 802.1w • IEEE 802.1x • IEEE 802.1AB (LLDP) • IEEE 802.3ad • IEEE 802.3af • IEEE 802.3ah (100BASE-X single/multimode fiber only) • IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports • IEEE 802.3 10BASE-T specification • IEEE 802.3u 100BASE-TX specification • IEEE 802.3ab 1000BASE-T specification • IEEE 802.3z 1000BASE-X specification	• 100BASE-BX (SFP) • 100BASE-FX (SFP) • 100BASE-LX (SFP) • 1000BASE-BX (SFP) • 1000BASE-SX (SFP) • 1000BASE-LX/LH (SFP) • 1000BASE-ZX (SFP) • 1000BASE-CWDM SFP 1470 nm • 1000BASE-CWDM SFP 1490 nm • 1000BASE-CWDM SFP 1510 nm • 1000BASE-CWDM SFP 1530 nm • 1000BASE-CWDM SFP 1550 nm • 1000BASE-CWDM SFP 1570 nm • 1000BASE-CWDM SFP 1590 nm • 1000BASE-CWDM SFP 1610 nm • RMON I and II standards • SNMPv1, SNMPv2c, and SNMPv3
RFC compliance	• RFC 768: UDP • RFC 783: TFTP • RFC 791: IP • RFC 792: ICMP • RFC 793: TCP • RFC 826: ARP • RFC 854: Telnet • RFC 951: Bootstrap Protocol • RFC 1542: BOOTP Extensions • RFC 959: FTP • RFC 1058: RIP Routing • RFC 1112: IP Multicast and IGMP • RFC 1157: SNMPv1 • RFC 1166: IP Addresses • RFC 1253: OSPF Routing • RFC 1256: ICMP Router Discovery • RFC 1305: NTP • RFC 1492: TACACS+ • RFC 1493: Bridge MIB • RFC 1542: Bootstrap Protocol • RFC 1583: OSPFv2 • RFC 1643: Ethernet Interface MIB • RFC 1723: RIPv2 Routing • RFC 1757: RMON	• RFC 1812: IP Routing • RFC 1901: SNMPv2C • RFC 1902-1907: SNMPv2 • RFC 1981: MTU Path Discovery IPv6 • FRC 2068: HTTP • RFC 2080: RIP for IPv6 • RFC 2131: DHCP • RFC 2138: RADIUS • RFC 2233: IF MIB • RFC 2236: IP Multicast • RFC 2328: OSPFv2 • RFC 2273-2275: SNMPv3 • RFC 2373: IPv6 Aggregatable Addrs • RFC 2453: RIPv2 Routing • RFC 2460: IPv6 protocol • RFC 2461: IPv6 Neighbor Discovery • RFC 2462: IPv6 Autoconfiguration • RFC 2463: ICMP IPv6 • RFC 2474: DiffServ Precedence • RFC 2597: Assured Forwarding • RFC 2598: Expedited Forwarding • RFC 2571: SNMP Management • RFC 2740: OSPF for IPv6 • RFC 3046: DHCP Relay Agent Information Option • RFC 3101, 1587: NSSAs • RFC 3376: IGMPv3 • RFC 3580: 802.1x RADIUS
Note: RFC, MIB and Standards compliance is dependent on IOS Level.		

Table 7 shows safety and compliance information.

Table 7. Safety and Compliance Support

Description	Specification
Safety standards	• UL 60950-1 • CAN/CSA 22.2 No. 60950-1 • EN 60950-1 • IEC 60950-1 • CE Marking • GB 4943 • IEC 60825
Electromagnetic emissions certifications	• FCC Part 15, CFR 47, Class A, North America • EN 55022 (CISPR22) and EN 55024 (CISPR24), CE marking, European Union • AS/NZS, Class A, CISPR22:2004 or EN55022, Australia and New Zealand • VCCI Class A, V-3/2007.04, Japan • KCC (Formerly MIC, GB17625.1-1998) Class A, KN24/KN22, Korea • ANATEL, Brazil • CCC, China • GOST, Russia
Environmental	Reduction of Hazardous Substances (ROHS) 6
Telco	Common Language Equipment Identifier (CLEI) code

Ordering Information

To place an order, consult Table 8 for ordering information and visit Cisco Commerce Workspace.

Table 8. Ordering Information for Cisco Catalyst 3560-CX and 2960-CX Series Compact Switches

Cisco Catalyst 3560-CX Compact Switches	
Part Number	**Description**
WS-C3560CX-8TC-S	3560-CX Switch 8 GE, Uplinks: 2 x 1G SFP & 2 x 1G Copper, IP Base
WS-C3560CX-12TC-S	3560-CX Switch 12 GE, Uplinks: 2 x 1G SFP & 2 x 1G Copper, IP Base
WS-C3560CX-8PC-S	3560-CX Switch 8 GE PoE+, Uplinks: 2 x 1G SFP & 2 x 1G Copper, IP Base
WS-C3560CX-12PC-S	3560-CX Switch 12 GE PoE+, Uplinks: 2 x 1G SFP & 2 x 1G Copper, IP Base
WS-C3560CX-12PD-S	3560-CX Switch 12 GE PoE+, Uplinks: 2 x 10G SFP+ & 2 x 1G Copper, IP Base
Cisco Catalyst 2960-CX Compact Switches	
Part Number	**Description**
WS-C2960CX-8TC-L	2960-CX Switch 8 GE, Uplinks: 2 x 1G SFP & 2 x 1G Copper LAN Base
WS-C2960CX-8PC-L	2960-CX Switch, 8 GE PoE+, Uplinks: 2 x 1G SFP & 2 x 1G Copper LAN Base
Cisco Catalyst 3560-CX and 2960-CX Accessories	
Part Number	**Description**
PWR-CLP=	Power Clip for the 3560-CX and 2960-CX compact switches
CMPCT-CBLE-GRD=	Cable guard for the 3560-CX and 2960-CX compact switches
CMPCT-MGNT-TRAY =	Magnet and Mounting Tray for 3560-CX and 2960-CX compact switches
CMPCT-DIN-MNT=	DIN Rail Mount for 3560-CX and 2960-CX compact switches
RCKMNT-19-CMPCT=	19-Inch Rack Mounting Brackets for 3560-CX and 2960-CX compact switches
RCKMNT-23-CMPCT=	23- and 24-Inch Rack Mounting Brackets for 3560-CX and 2960-CX compact switches

Cisco Catalyst 3560-CX Software Licenses	
Part Number	**Description**
L-C3560CX-RTU=	Cisco Catalyst 3560-CX IP Base to IP Services RTU electronic license
C3560CX-RTU=	Cisco Catalyst 3560-CX IP Base to IP Services RTU paper license

Warranty Information

Cisco Catalyst 3560-CX and 2960-CX Series Switches come with an enhanced limited lifetime hardware warranty that includes 90 days of Cisco Technical Assistance Center (TAC) support and next-business-day hardware replacement free of change (see Table 9 for details).

Table 9. Enhanced Limited Lifetime Hardware Warranty

	Cisco Enhanced Limited Lifetime Hardware Warranty
Device covered	Applies to Cisco Catalyst 3560-CX and 2960-CX Series compact switches.
Warranty duration	As long as the original customer owns the product.
EoL policy	In the event of discontinuance of product manufacture, Cisco warranty support is limited to 5 years from the announcement of discontinuance.
Hardware replacement	Cisco or its service center will use commercially reasonable efforts to ship a replacement for next business day delivery, where available. Otherwise, a replacement will be shipped within 10 working days after receipt of the RMA request. Actual delivery times might vary depending on customer location.
Effective date	Hardware warranty commences from the date of shipment to customer (and in case of resale by a Cisco reseller, not more than 90 days after original shipment by Cisco).
TAC support	Cisco will provide during business hours, 8 hours per day, 5 days per week basic configuration, diagnosis, and troubleshooting of device-level problems for up to a 90-day period from the date of shipment of the originally purchased Cisco Catalyst 2960 and 3560 product. This support does not include solution or network-level support beyond the specific device under consideration.
Cisco.com access	Warranty allows guest access only to Cisco.com.

Your formal warranty statement, including the warranty applicable to Cisco software, appears in the Cisco information packet that accompanies your Cisco product. We encourage you to review carefully the warranty statement shipped with your specific product before use. Cisco reserves the right to refund the purchase price as its exclusive warranty remedy.

Adding a Cisco technical services contract to your device coverage provides access to the Cisco Technical Assistance Center (TAC) beyond the 90-day period allowed by the warranty. It also can provide a variety of hardware replacement options to meet critical business needs, as well as updates for licensed premium Cisco IOS Software, and registered access to the extensive Cisco.com knowledge base and support tools.

For additional information on warranty terms, visit http://www.cisco.com/go/warranty.

Cisco and Partner Services

Enable the innovative, secure, intelligent edge using personalized services from Cisco and our partners. Through a discovery process that begins with understanding your business objectives, we help you integrate the next-generation Cisco Catalyst fixed switches into your architecture and incorporate network services onto those platforms. Sharing knowledge and leading practices, we support your success every step of the way as you deploy, absorb, manage, and scale new technology. Choose from a flexible suite of support services (Table 10), designed to meet your business needs and help you maintain high-quality network performance while controlling operational costs.

Table 10. Technical Services Available for Cisco Catalyst 3560-CX and 2960-CX Series Compact Switches

Technical Services
Cisco SMARTnet® Service • Around-the-clock, global access to the Cisco Technical Assistance Center (TAC) • Unrestricted access to the extensive Cisco.com knowledge base and tools • Next-business-day, 8x5x4, 24x7x4, and 24x7x2 advance hardware replacement and onsite parts replacement and installation available • Ongoing operating system software updates within the licensed feature set • Proactive diagnostics and real-time alerts on Smart Call Home enabled devices
Cisco Smart Foundation Service • Next business day advance hardware replacement as available • Business hours access to SMB TAC (access levels vary by region) • Access to Cisco.com SMB knowledge base • Online technical resources through Smart Foundation Portal • Operating system software bug fixes and patches
Cisco Focused Technical Support Services • 3 levels of premium, high-touch services are available • Cisco High-Touch Operations Management Service • Cisco High-Touch Technical Support Service • Cisco High-Touch Engineering Service • Valid Cisco SMARTnet or SP Base contracts on all network equipment are required

Learn More

For more information, contact your Cisco sales account rep or visit http://www.cisco.com/go/compactswitches.

Printed in USA

C78-733229-01   02/15