

# Cisco Catalyst 3560-C and 2960-C Series Switches

The redesigned Cisco® Catalyst® 3560-C and 2960-C Series Switches are the next generation of compact switches from Cisco designed to deliver unified communications, wireless, IP video, and other applications to the retail, hospitality, education, and enterprise customer. These compact switches are created specifically to be placed outside the wiring closet, and they contain many innovative features that give customers flexibility in switch placement and end-device support with Power over Ethernet (PoE) pass-through, as well as advanced security services and ease-of-management features (Figure 1).



Figure 1 Cisco 3560-CG Series Compact Switch

## What Is PoE Pass-Through?

PoE pass-through allows you to power PoE and devices, as well as the switch itself, by drawing PoE+ or Cisco Universal Power Over Ethernet™ (Cisco UPOE™) power from a wiring-closet switch, providing PoE or deployment flexibility. PoE pass-through technology is ideal for wiring and space-constrained applications. Cisco Catalyst compact switches that support PoE pass-through can have non-PoE, PoE, or PoE+ capable downlink ports with UPOE or PoE+ input or uplink ports (Figure 2).

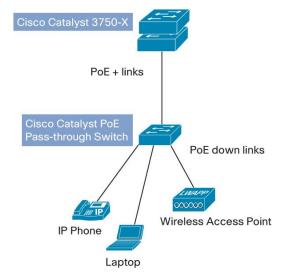


Figure 2 PoE Pass-Through

# What Types of Management Features Do the New Compact Switches Have?

Cisco Catalyst 3560-C and 2960-C Compact Switches make deployment and ongoing management easy with Cisco Smart Operations, which enables you to reduce switch installation, configuration, troubleshooting time, and operational costs.

Cisco Smart Install and Configuration is a transparent automated technology to configure the Cisco IOS® Software image and switch configuration without user intervention. Cisco Smart Install enables a transparent automated network and provides a single point of management for a group of switches. It also adds the ability to archive and back up configuration files to a file server or switch.

Cisco Auto SmartPorts provides automatic configuration as devices connect to the switch port, allowing autodetection and activation of the device as soon as it is connected to the network. It configures the port with predefined configurations encapsulating years of Cisco networking expertise, including security, IP telephony, availability, quality of service (QoS), and manageability features, with minimal effort and expertise.

**USB file storage and console** for file backup, distribution, and simplified operations allow you to back up and boot from a USB device and give you mini-USB console access along with traditional RS-232 console port connectivity.

#### Flexibility of Device Placement

The Cisco Catalyst 3560-C and 2960-C Compact Switches are designed to be placed outside of the wiring closets. In addition, the PoE pass-through function allows for switch placement where there is no power supply. PoE pass-through also allows flexibility of deployment end devices that might not have access to power outlets. These end devices include IP phones, wireless access points, IP cameras, video cameras, point-of-sale devices, printers, security access control, and building automation.

For flexibility of device placements, the Cisco Catalyst 3560-C and 2960-C Compact Switches have a variety of mounting options. You can use a **mounting tray** with screws to securely mount the switch on or under a desk or a shelf or on the wall. You also can mount the switch on a metal surface with a **magnetic option**. You can use an optional **rack-mount** bracket to mount the switch onto a 19- or a 24-inch mounting rack.

A **DIN-mount** option is available to mount the switch on a 35-mm DIN rail mount. This standards-based rail saves



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assembly time and provides a central and secure place for internal and external wiring. There is an easy release tab that you can press to remove the mounted switch from the rail.

You can also use a cable guard to prevent unauthorized access to the physical cabling.

# Security and Cisco EnergyWise Technology

The Cisco Catalyst 3560-C and 2960-C Compact Switches offer you an unprecedented level of security features such as Cisco TrustSec® technology. You will also benefit from power-saving features in Cisco EnergyWise™ technology.

#### Cisco TrustSec Security

Strengthen security: Cisco TrustSec technology secures access to the network and resources, whether wired, wireless, or VPN, making sure those endpoint devices are authorized and healthy. It enforces security policies across the entire network. Furthermore, Cisco TrustSec technology protects network data confidentiality and integrity with switch port-level encryption. The consistency, efficiency, and role-aware networking capabilities delivered by this technology enable a secure, collaborative business environment and a transparent user experience.

Address compliance: Cisco TrustSec technology helps address compliance requirements by knowing who is coming to the network, what they are doing on the network, and the types of resources they are allowed to access. You can use the information and capabilities for controls, auditing, and reporting as part of your effort to meet compliance requirements.

Media Access Control Security (MACsec): The Cisco Catalyst 3560-C Series Switch offers exceptional security with integrated hardware support for MACsec, defined in IEEE 802.1AE. MACsec provides MAC layer encryption over wired networks using out-of-band methods for encryption keying. The MACsec Key Agreement (MKA) protocol provides the required session keys and manages the keys required for encryption when configured. MKA and MACsec are implemented following successful authentication using the 802.1x Extensible Authentication Protocol (EAP) framework. In Cisco Catalyst 3560-C Series Switches, only the user and down-link ports (links between the switch and endpoint devices such as a PC or IP phone) can be secured using MACsec.

## Cisco EnergyWise Technology

Cisco EnergyWise technology is an innovative architecture, added to the Cisco Catalyst 3560-C and 2960-C Switches, that enables the measurement of power consumption in the network infrastructure and network-attached devices. It encompasses a highly intelligent network-based approach to communicate messages that measure and control energy between network devices and endpoints. The network discovers Cisco EnergyWise technology-manageable devices, monitors their power consumption, and takes action based on business rules to reduce power consumption.

Efficient switch operation: Cisco Catalyst 3560-C and 2960-C use hardware components created by Cisco providing optimum power-saving, low-power operations for industry best-in-class power-management and - consumption capabilities. The Cisco Catalyst 3560-C ports are capable of reduced power modes so that ports not in use can move into a lower power usage state (Figure 3).



Figure 3 Cisco Catalyst 2960-C and 3560-CG

### Warranty Coverage and Technical Service Options

The Cisco Catalyst 2960-C and 3560-C Series Switches come with an enhanced limited lifetime hardware warranty (E-LLW) that includes 90 days of Cisco Technical Assistance Center (TAC) support and next-business-day hardware replacement where available.

Adding a technical services contract, such as Cisco SMARTnet® Service, to your device coverage provides access to Cisco TAC beyond the 90-day period allowed by the E-LLW. It also can provide a variety of hardware replacement options to meet critical business needs, updates for licensed premium Cisco IOS Software, and registered access to the extensive Cisco.com knowledge base and support tools.

For more information about Cisco warranties, visit <a href="https://www.cisco.com/go/warranty">www.cisco.com/go/warranty</a>

For information about Cisco Technical Services, visit www.cisco.com/go/ts

#### **Product Availability**

The product is shipping worldwide, with no restrictions.

#### For More Information

www.cisco.com/go/compactswitches.