# Cisco 100 Series Switches Cisco Small Business



# Affordable, easy-to-use switches for small business networks, with zero configuration required

To stay on top of your business, you need to keep your office running smoothly. These days that means having a highly reliable network connecting your computers, printers, copiers, and other office equipment. But if your business is like most small companies, you don't have an IT staff to set up your network for you. Now you can have a high-performance, business-class office network that just works, right out of the box, with Cisco<sup>®</sup> 100 Series Switches.

Cisco 100 Series switches deliver powerful network performance and reliability for small businesses, without complexity. These switches provide all of the features, expandability, and investment protection you expect from Cisco, with no installation software and nothing to configure. Just plug it in, connect your computers and other business equipment, and get to work.

#### **Cisco 100 Series Switches**

Cisco 100 Series switches (Figure 1), part of the Cisco Small Business networking solutions, are a line of unmanaged switches that provide wire-speed Fast Ethernet and Gigabit Ethernet connectivity to connect your small business office. Available in desktop and rack-mount models, these switches are designed to suit any office space and to optimize power efficiency. They use less power and provide the robust, reliable connectivity your business demands, as well as support for advanced features such as quality of service (QoS)—all in a switch that you can set up yourself, in minutes. A business-class, affordable network solution, Cisco 100 Series switches bring the proven reliability and investment protection of Cisco networking solutions to your small business.

Figure 1. Cisco 100 Series Switches



#### **Features and Benefits**

Cisco 100 Series switches provide an easy-to-use solution for your small business network. They offer:

- Ease of use: Cisco 100 Series switches work right out of the box, with no software to install and nothing to configure. Each switch port independently sets itself for the optimal speed and determines whether to run in half- or full-duplex mode automatically. As a standards-based Cisco solution, Cisco 100 Series switches are also designed to immediately accommodate all of the devices in your network, including:
  - Support for 10 megabits per second (Mbps), 100 Mbps, and up to 1 gigabit per second (1000 Mbps) devices in the same network
  - · Automatic cable detection, so you don't have to worry about using the wrong cable type
  - · Compatibility with network devices from other vendors
- **Simple setup:** Designed for small office spaces, Cisco 100 Series switches are available in both compact desktop and rack-mount models. The desktop models offer a wall-mount option for discreet mounting under a desk or on the wall of an office or conference room.
- High performance: Cisco 100 Series switches deliver the performance you need to run your business applications—including bandwidth-intensive video services—and avoid slow and sluggish networks. It supports up Gigabit Ethernet speeds, unlocking a new level of capacity and performance in your business network and letting you transfer large files in seconds.
- Reduced energy costs: Cisco 100 Series switches are designed to optimize power usage to be energy efficient without compromising performance. The switches also have no fans, so they run silently and unobtrusively while lowering energy costs.
- Support for advanced technologies: All switches include advanced Cisco traffic-handling features to keep
  your applications running at peak performance. Integrated QoS intelligence automatically prioritizes delaysensitive services such as voice or video to improve your network's performance. Fast store-and-forward
  switching identifies damaged packets and prevents them from being passed on through the network. All of
  these features run automatically, with no management or configuration required.
- Peace of mind: Cisco 100 Series switches deliver the rock-solid reliability you expect from a Cisco switch. The solution has been rigorously tested to ensure optimal uptime and performance. In addition, unlike the purchase of a consumer-grade product, your investment in a Cisco Small Business network will grow with your business. With the Cisco Small Business Investment Protection Program, you can trade up to eligible Cisco switches at any time, and receive credit for up to the full value of your Cisco 100 Series.

#### **Cisco Limited Lifetime Warranty**

Cisco Small Business products offer a limited lifetime hardware warranty with return to factory replacement and a 1year limited warranty for fans and power supplies. In addition, Cisco offers software application updates for bug fixes, telephone technical, and online chat support at no charge for the first 12 months following the date of purchase. To download software updates, go to: <u>www.cisco.com/go/smallbiz</u>.

Product warranty terms and other information applicable to Cisco products are available at <a href="http://www.cisco.com/go/warranty">www.cisco.com/go/warranty</a>.

## **Product Specifications**

Table 1 gives the product specifications for the Cisco 100 Series Switches.

Table 1. Product Specifications
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Table I. Product Specific				
Feature	Description			
Performance				
Switching capacity	Cisco SF 100D-05: 1 Gbps			
	Cisco SF 100D-08: 1.6 Gbps			
	Cisco SF 100D-16: 3.2 Gbps			
	Cisco SF 100-16: 3.2 Gbps			
	Cisco SF 100-24: 4.8 Gbps			
	Cisco SF 102-24: 8.8 Gbps Cisco SG 100D-08: 16 Gbps			
	Cisco SG 100-06: 18 Gbps			
	Cisco SG 100-24: 48 Gbps			
	Cisco SG 102-24: 48 Gbps			
Forwarding capacity	Forwarding rate in million packets per second (mpps) (based on 64-byte packets):			
	Cisco SF 100D-05: 0.74 mpps			
	Cisco SF 100D-08: 1.2 mpps			
	Cisco SF 100D-16: 2.4 mpps			
	Cisco SF 100-16: 2.4 mpps			
	Cisco SF 100-24: 3.6 mpps			
	Cisco SF 102-24: 6.5 mpps			
	Cisco SG 100D-08: 11.9 mpps			
	Cisco SG 100-16: 23.8 mpps			
	Cisco SG 100-24: 35.7 mpps			
	Cisco SG 102-24: 35.7 mpps			
Layer 2 Switching				
Head-of-line (HOL) blocking	HOL blocking prevention			
Quality of Service (QoS)				
Priority levels	4 hardware queues			
Scheduling	Priority queuing and weighted round-robin (WRR)			
Class of service	802.1p priority based			
Product Specifications				
Ports	SF 100D-05: 5 RJ-45 connectors for 10BASE-T/100BASE-TX			
	SF 100D-08: 8 RJ-45 connectors for 10BASE-T/100BASE-TX			
	SF 100D-16:16 RJ-45 connectors for 10BASE-T/100BASE-TX			
	SF 100-16:16 RJ-45 connectors for 10BASE-T/100BASE-TX			
	SF 100-24: 24 RJ-45 connectors for 10BASE-T/100BASE-TX			
	SF 102-24: 24 RJ-45 connectors for 10BASE-T/100BASE-TX; with 2 combo mini- GBIC slots			
	SG 100D-08: 8 RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T ports			
	SG 100-16: 16 RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T ports			
	SG 100-24: 24 RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T ports with 2 combo mini-GBIC slots			
	SG 102-24: 24 RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T ports with 2 combo mini-GBIC slots			
	All units: Automatic medium dependent interface (MDI) and MDI crossover (MDI-X); auto negotiated port for connecting 10-, 100-, 1000- Mbps devices			
Cabling type	Unshielded twisted pair (UTP) Category 5 or better for 10BASE-T/100BASE-TX; 1000BASE-T recommended			
LEDs	System, Link/Activity, 100M,* Gigabit,* mini-GBIC* * if present			
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Feature	Description
Standards	802.3 10BASE-T Ethernet
	802.3u 100BASE-TX Fast Ethernet
	802.3ab 1000BASE-T Gigabit Ethernet
	802.3z Gigabit Ethernet
	802.3x flow control
	802.1p priority
Environmental	
Dimensions	Cisco SF 100D-05: 3.65 x 1.06 x 3.57 inches (92.6 x 27 x 90.6 mm)
WxHxD	Cisco SF 100D-08: 5.12 x 1.06 x 5.12 inches (130 x 27 x 130 mm)
	Cisco SF 100D-16: 5.12 x 1.52 x 5.12 inches (130 x 38.5 x 130 mm)
	Cisco SF 100-16: 11 x 1.75 x 6.7 inches (279.4 x 44.5 x 170 mm)
	Cisco SF 100-24: 11 x 1.75 x 6.7 inches (279.4 x 44.5 x 170 mm)
	Cisco SF 102-24: 17.35 x 1.74 x 7.99 inches (440.6 x 202.82 x 44.32 mm)
	Cisco SG 100D-08: 5.51 x 1.31 x 5.51 inches (140 x 33.35 x 140 mm)
	Cisco SG 100-16: 11 x 1.75 x 6.7 inches (279.4 x 44.5 x 170 mm)
	Cisco SG 100-24: 17.35 x 1.74 x 7.99 inches (440.6 x 202.82 x 44.32 mm)
	Cisco SG 102-24: 11 x 1.75 x 6.7 inches (279.4 x 44.5 x 170 mm)
Unit weight	Cisco SF 100D-05: 0.47 lb. (0.22 kg)
	Cisco SF 100D-08: 0.83 lb. (0.38 kg)
	Cisco SF 100D-16: 1.03 lb. (0.46 kg)
	Cisco SF 100-16: 2.79 lb. (1.25 kg)
	Cisco SF 100-24: 2.91 lb. (1.32 kg)
	Cisco SF 102-24: 4.93 lb. (2.00 kg)
	Cisco SG 100D-08: 0.94 lb. (0.43 kg)
	Cisco SG 100-16: 3.15 lb. (1.43 kg)
	Cisco SG 100-24: 3.59 lb. (1.63 kg)
	Cisco SG 102-24: 5.05 lb. (2.3 kg)
Power	SF 100D-05, SF 100D-08: DC 12V, 500mA
	SF 100D-16, SG 100D-08: DC 12V, 1.0A
	SF 100-16, SF 100-24, SG 100-16, SG 100-24, SG 102-24: 100–240VAC, 50–60 Hz
	internal, universal
Certifications	UL (UL 60950), CSA (CSA 22.2), CE mark, FCC Part 15 (CFR 47) Class A
Operating temperature	32°to 104°F (0°to 40°C)
Storage temperature	-4°to 158年 (-20°to 70℃)
Operating humidity	10% to 90%, relative, non-condensing
Storage humidity	10% to 90%, relative, non-condensing
Package Contents	
Cisco 100 Series Switch	
<ul> <li>Power cord/power adapter</li> </ul>	
<ul> <li>Mounting hardware</li> </ul>	
<ul> <li>Quick-start guide</li> </ul>	
Minimum Requirements	
Category 5 Ethernet network	cable
• TCP/IP notwork adaptor and	network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on

each computer in the network

## **Ordering Information**

Table 2 provides ordering information for the Cisco 100 Series Switches.

Table 2.	Ordering Information
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Switch Models			
Part Numbers	Description		
SD205T (SF 100D-05)	5 10/100 ports Unmanaged desktop switch		
SD208T (SF 100D-08)	8 10/100 ports Unmanaged desktop switch		
SD216T (SF 100D-16)	16 10/100 ports Unmanaged desktop switch		
SR216T (SF 100-16)	16 10/100 ports Unmanaged rack-mount switch		
SR224T (SF 100-24)	24 10/100 ports Unmanaged rack-mount switch		
SR224GT (SF 102-24)	24 10/100 ports + 2 combo mini Gigabit Interface Converter (GBIC) ports (each mini-GBIC port has 10/100/1000 Ethernet port and one mini-GBIC slot, 1 port active at a time) Unmanaged rack-mount switch		
SD2008T (SG 100D-08)	8 10/100/1000 ports Unmanaged desktop switch		
SR2016T (SG 100-16)	16 10/100/1000 ports Unmanaged rack-mount switch		
SR2024T (SG 100-24)	22 10/100/1000 ports + 2 combo mini-GBIC ports (each mini-GBIC port has 10/100/1000 Ethernet port and one mini-GBIC slot, 1 port active at a time) Unmanaged rack-mount switch		
SR2024CT (SG 102-24)	22 10/100/1000 ports + 2 combo mini-GBIC ports (each mini-GBIC port has 10/100/1000 Ethernet port and one mini-GBIC slot, 1 port active at a time) Compact unmanaged rack-mount switch		
Transceivers			
MGBLH1	Gigabit Ethernet LH mini-GBIC SFP transceiver, for distances up to 500 m or 40 km		
MGBSX1	Gigabit Ethernet SX mini-GBIC SFP transceiver, for distances up to 220 or 550 m		
MGBT1	Gigabit Ethernet 1000BASE-T mini-GBIC SFP transceiver, for distances up to 100 m		
MGBBX1	1000BASE-BX-20U SFP transceiver, for single-mode fiber, 1310 nm wavelength, for distances up to 40 km		
MGBLX1	1000BASE-LX SFP transceiver, for single-mode fiber, 1310 nm wavelength, for distances up to 10 km		

### High-Performance, Trouble-Free Switches for Your Business Network

Don't compromise on the performance and reliability of your computers, printers, and other vital network-connected resources. With Cisco 100 Series switches, you can have the quality, peace of mind, and investment protection that comes with business-class Cisco networking, in a small business solution that works right out of the box.

#### For More Information

To find out more about Cisco 100 Series switches, visit: www.cisco.com/go/100switches.

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