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# Cisco Business 110 Series Unmanaged Switches

## Contents

Highlights	3
Product overview	3
Features	4
Specifications	5
Ordering information	9
Cisco Limited Lifetime Warranty for Cisco Small Business Products	10
Cisco environmental sustainability	11
Cisco Capital	11
For more information	11

## Affordable, Plug-and-Play Switches for Small Business Networks

## Highlights

- Affordable 10/100/1000-Mbps speeds for bandwidth-hungry applications
- Plug-and-play, not IT knowledge required
- 5- to 24-port models that are desktop or rack mountable
- Power over Ethernet models to provide power to access points, IP phones and, other devices

## Product overview

These are times of unprecedented change for small businesses. Consumers are more demanding than ever before. Online transactions have accelerated. While this new promises greater reward, it also requires small businesses to accelerate digital transformation. At the same time, employees are increasingly distributed across remote and office locations, and this trend is likely to continue. You need a network solution that provides fast, reliable access to critical cloud-based business applications across a remote and in-office workforce.

Now you can have a high-performance, business-class network with the Cisco<sup>®</sup> Business 110 Series Unmanaged Switches. These affordable plug-and-play switches are ideal for small offices, workgroups, departments, and growing offices with limited IT know-how and support.



Cisco Business 110 Series Unmanaged Switches, part of the Cisco Business networking portfolio, are a family of affordable switches that provide Gigabit Ethernet connectivity for your small business network. Available in desktop and rack-mount models, these switches are designed to suit any small business with basic network needs and are optimized for power efficiency. They provide robust network connectivity your business demands, as well as added reliability with advanced features such as Quality of Service (QoS), loop detection, and cable diagnostics, all in a switch that you can set up yourself in minutes. The Cisco Business 110 Series switches bring the proven reliability and investment protection of Cisco networking solutions to your small business.

## Features

Cisco Business 110 Series switches provide an easy-to-use solution for your small business network. They offer:

- **Simple:** Cisco Business 110 Series switches work right out of the box, with plug-and-play capability without software installation and configuration. 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 Business 110 Series switches are also designed to immediately accommodate all of the devices in your network.
- Flexible deployment: Designed for small office spaces, Cisco Business 110 Series switches are available in 5-, 8-, 16-, and 24-ports configurations, providing ultimate flexibility for diverse use cases and deployment scenarios. The Cisco Business 110 Series switches are also 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. All switches have no fans, so they run silently and unobtrusively in any workspace.
- **High performance:** Cisco Business 110 Series switches deliver the performance you need to run your business applications, including bandwidth-intensive cloud applications and video services, and to avoid slow and sluggish networks. They support 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 Business 110 Series switches are designed to help conserve energy by optimizing power use without compromising performance, which protects our environment and reduces your energy costs. In addition, they support the Energy Efficient Ethernet (IEEE 802.3az) standard, which reduces energy consumption by monitoring the amount of traffic on an active link and putting the link into a sleep state during quiet periods.
- Power over Ethernet (PoE): Cisco Business 110 Series switches are available with PoE ports. This
  capability simplifies the deployment of IP telephony, wireless, video surveillance, and other IoT solutions
  by allowing you to connect and power network endpoints over a single Ethernet cable. With no need to
  install separate power supplies for IP phones or wireless access points, you can take advantage of
  advanced communications technologies more quickly and at a lower cost.
- Advanced technologies: All switches include advanced Cisco traffic-handling features to keep your applications running at peak performance. Integrated QoS intelligence on all models automatically prioritizes delay-sensitive services such as voice or video to improve your network's performance. Loop detection helps discover loops in the network that you might have accidentally created, thus avoiding storms that will bring your network to a stall. Cable diagnostics help to quickly identify and troubleshoot network cabling faults and issues. 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 Business 110 Series switches deliver the rock-solid reliability you expect from a Cisco switch. The solution has been rigorously tested to make sure of optimal uptime and performance. In addition, the limited lifetime hardware warranty provides peace of mind.

## Specifications

Table 1 lists the specifications, package contents, and minimum requirements for the Cisco 110 Series.



Specifications	Description			
Performance				
Switching capacity and forwarding rate All switches are wire-	Model	Capacity in millions of packets per second (mpps) (64-byte packets)	Switching capacity in gigabits per second (Gbps)	
speed and nonblocking	CBS110-5T-D	7.4 mpps	10 Gbps	
	CBS110-8T-D	11.9 mpps	16 Gbps	
	CBS110-8PP-D	11.9 mpps	16 Gbps	
	CBS110-16T	23.8 mpps	32 Gbps	
	CBS110-16PP	23.8 mpps	32 Gbps	
	CBS110-24T	35.7 mpps	48 Gbps	
	CBS110-24PP	35.7 mpps	48 Gbps	
General				
Head-of-line (HOL) blocking	HOL blocking prevention			
MAC table	2K addresses for CBS110-5T- 8K addresses for all other mod	2K addresses for CBS110-5T-D		
Jumbo frame	9216 bytes			
Quality of Service (QoS)		are queues, priority queuing and	d Weighted Round-Robin (WRR)	
Loop detection		work to avoid broadcast storms		
Cable diagnostics	Quickly identify and troubleshoot network cable faults and/or shorts			
Media-dependent interface	Automatic Media Dependent Interface (MDI) and MDI crossover (MDI-X)			
Standards	IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3x Flow Control, 802.1p priority, Energy Efficient Ethernet, 802.3af, Power over Ethernet			

Specifications
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## Description

#### Hardware

Hardware				
Ports	Model name	Total system ports	RJ-45 ports	Combo ports (RJ-45 + Small Form-factor Pluggable [SFP])
	CBS110-5T-D	5 Gigabit Ethernet	5 Gigabit Ethernet	-
	CBS110-8T-D	8 Gigabit Ethernet	8 Gigabit Ethernet	-
	CBS110-8PP-D	8 Gigabit Ethernet	8 Gigabit Ethernet	-
	CBS110-16T	16 Gigabit Ethernet	16 Gigabit Ethernet	-
	CBS110-16PP	16 Gigabit Ethernet	16 Gigabit Ethernet	-
	CBS110-24T	24 Gigabit Ethernet	24 Gigabit Ethernet	2 SFP (combo with 2 Gigabit Ethernet)
	CBS110-24PP	24 Gigabit Ethernet	24 Gigabit Ethernet	2 SFP (combo with 2 Gigabit Ethernet)
Power over Ethernet (PoE) 802.3af	Model	Power dedicated to PoE		Number of ports that support PoE
	CBS110-8PP-D	32W		4
	CBS110-16PP	64W		8
	CBS110-24PP	100W	12	
LEDs	Power, link/activity (cable diagnostics, loop detection), Gigabit, * PoE, * Max PoE,. *if present			* Max PoE,.
Cabling type	Category 5e or better			
Mounting options	Desktop, wall-mount o	r rack mount		
Physical security lock	Kensington lock slot			
Flash	16 MB for CBS110-16T, CBS110-16PP 8 MB for CBS110-24T, CBS110-24PP			
CPU	400 MHz ARM for CBS110-16T, CBS110-16PP, CBS110-24T, CBS110-24PP			
CPU memory	128 MB for CBS110-16T, CBS110-16PP 64 MB for CBS110-24T, CBS110-24PP			

Specifications	Description			
Packet buffer	All numbers are aggregate across all ports as the buffers are dynamically shared:			
	Model Name		Packet Buffer	
	CBS110-5T-D		1 Mbit	
	CBS110-8T-D		2 Mbit	
	CBS110-8PP-D		2 Mbit	
	CBS110-16T		2 Mbit	
	CBS110-16PP		2 Mbit	
	CBS110-24T		2 Mbit	
	CBS110-24PP		2 Mbit	
Supported SFP modules	SKU	Media	Speed	Maximum distance
	MGBSX1	Multimode fiber	1000 Mbps	500 m
	MGBLX1	Single-mode fiber	1000 Mbps	10 km
	MGBLH1	Single-mode fiber	1000 Mbps	40 km
	MGBT1	UTP cat 5e	1000 Mbps	100 m
Environmental				
Unit dimensions (W x D x H)	Model name		Unit dimensions	
(,	CBS110-5T-D		110 x 75 x 30 mm (4.33 x 2.95 x 1.18 in)	
	CBS110-8T-D		160 x 104 x 30 mm (6.30 x 4.07 x 1.18 in)	
	CBS110-8PP-D		160 x 129 x 30 mm (6.30 x 5.06 x 1.18 in)	
	CBS110-16T		279 x 170 x 44 mm (11 x 6.7 x 1.73 in)	
	CBS110-16PP		279 x 170 x 44 mm (11 x 6.7 x 1.73 in)	
	CBS110-24T		279 x 170 x 44 mm (11 x 6.7 x 1.73 in)	
	CBS110-24PP		440 x 203 x 44 mm (17.32 x 7.97 x 1.73 in)	

Specifications	Description			
Unit weight	Model name		Unit weight	
	CBS110-5T-D		0.23 kg (0.52 lb)	
	CBS110-8T-D		0.43 kg (0.94 lb)	
	CBS110-8PP-D		0.55 kg (1.2 lb)	
	CBS110-16T		0.97 kg (2.14 lb)	
	CBS110-16PP		1.30 kg (2.87 lb)	
	CBS110-24T		1.56 kg (3.43 lb)	
	CBS110-24PP		2.98 kg (6.57 lb)	
Power	CBS110-5T-D, CBS11	0-8T-D: DC 12V, 1.0A		
	CBS110-8PP-D: DC 4			
	CBS110-16T, CBS110 internal, universal	)-16PP, CBS110-24T, C	BS110-24PP: 110-240	VAC, 50-60 Hz,
Power consumption (worst case)	Model	System power consumption	Power consumption (with PoE)	Heat dissipation (BTU/hr)
	CBS110-5T-D	110V=2.74W 220V=2.69W	N/A	9.34
	CBS110-8T-D	110V=4.09W 220V=4.13W	N/A	14.09
	CBS110-8PP-D	110V=5.1W 220V=5.29W	110V=38.02W 220V=38.2W	130.34
	CBS110-16T	110V=11.33W 220V=11.53W	N/A	39.34
	CBS110-16PP	110V=11.16W 220V=11.41W	110V=80.28W 220V=80.38W	274.27
	CBS110-24T	110V=16.3W 220V=16.34W	N/A	55.75
	CBS110-24PP	110V=17.21W 220V=17.29W	110V=135.67W 220V=133.82W	462.93
Green (power efficiency)	Supports IEEE 802.3az on all copper Gigabit Ethernet ports			
Compliance/certifications	UL (UL 60950), CSA (CSA 22.2), CE mark, FCC Part 15 (CFR 47) Class A, FCC Class B* *select models			

Specifications	Description			
Operating temperature	32° to 104°F (0° to 40°C)			
Storage temperature	-4° to 158°F (-20° to	-4° to 158°F (-20° to 70°C)		
Operating humidity	10% to 90%, relative, noncondensing			
Storage humidity	5% to 90%, relative, noncondensing			
Acoustic noise and Mean Time Between Failures	Model name	Fan (number)	Acoustic noise	MTBF at 25° C (hours)
(MTBF)	CBS110-5T-D	Fanless	N/A	4,243,002
	CBS110-8T-D	Fanless	N/A	2,066,844
	CBS110-8PP-D	Fanless	N/A	465,437
	CBS110-16T	Fanless	N/A	2,685,092
	CBS110-16PP	Fanless	N/A	1,971,811
	CBS110-24T	Fanless	N/A	524,296
	CBS110-24PP	Fanless	N/A	340,703
Warranty	Limited lifetime			

#### Package contents

- Cisco Business 110 Series switch
- Power cord or adapter
- Quick start guide
- Mounting kit

#### **Minimum requirements**

- Devices supporting 802.3 Ethernet, 802.3u Fast Ethernet, or 802.3ab Gigabit Ethernet
- Cat5e or better Ethernet cable
- Network interface card for each computer

## Ordering information

Table 2 gives ordering information for the Cisco Business 110 Series Unmanaged Switches.

Table 2.	Ordering information	for Cisco Business 1	10 Series Unmanaged Switches
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Model Name	Product order ID number	Description
Gigabit Ethernet		
CBS110-5T-D	CBS110-5T-D-xx	• 5 10/100/1000 ports
CBS110-8T-D	CBS110-8T-D-xx	• 8 10/100/1000 ports

Model Name	Product order ID number	Description
CBS110-8PP-D	CBS110-8PP-D-xx	• 8 10/100/1000 ports (4 support PoE with 32W power budget)
CBS110-16T	CBS110-16T-xx	• 16 10/100/1000 ports
CBS110-16PP	CBS110-16PP-xx	• 16 10/100/1000 ports (8 support PoE with 64W power budget)
CBS110-24T	CBS110-24T-xx	<ul> <li>24 10/100/1000 ports</li> <li>2 Gigabit SFP (combo with 2 10/100/1000 ports)</li> </ul>
CBS110-24PP	CBS110-24PP-xx	<ul><li> 24 10/100/1000 ports (12 support PoE with 100W power budget)</li><li> 2 Gigabit SFP (combo with 2 10/100/1000 ports)</li></ul>

Each combo port has one 10/100/1000 copper Ethernet port and one SFP Gigabit Ethernet slot, with one port active at a time.

The -xx in the product order ID number is a country/region specific suffix. For example, the complete PID of CBS110-8T-D for the United States is CBS110-8T-D-NA. Please refer to Table 3 for the suffix to use for your country/region.

Suffix	Country/region
-NA	USA, Canada, Mexico, Colombia, Chile, and rest of Latin America
-BR	Brazil
-AR	Argentina
-EU	European Economic Area, Switzerland, Turkey, Russia, Ukraine, Israel, United Arab Emirates, Egypt, South Africa, Indonesia, Philippines, Vietnam, Thailand, Korea
-UK	United Kingdom, Saudi Arabia, Qatar, Kuwait, Singapore, Hong Kong, Malaysia
-AU	Australia, New Zealand
-CN	China
-IN	India
-JP	Japan
-KR	Korea

The products may also be available in countries or regions not listed above. Not all product models are offered in all countries/regions. For Korea, either the -EU or -KR suffix will be used, depending on product models. Please consult with your local Cisco sales representative or Cisco partner for more details.

## Cisco Limited Lifetime Warranty for Cisco Small Business Products

This Cisco Business product comes with a limited lifetime hardware warranty. Product warranty terms and other information applicable to Cisco products are available at <u>https://www.cisco.com/go/warranty</u>.

## Cisco environmental sustainability

Information about Cisco's environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the "Environment Sustainability" section of Cisco's <u>Corporate Social Responsibility</u> (CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the "Environment Sustainability" section of the CSR Report) are provided in the following table:

Sustainability topic	Reference
Information on product material content laws and regulations	Materials
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

Cisco makes the packaging data available for informational purposes only. It may not reflect the most current legal developments, and Cisco does not represent, warrant, or guarantee that it is complete, accurate, or up to date. This information is subject to change without notice.

## Cisco Capital

#### Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. Learn more.

## For more information

For more information about Cisco Business 110 Series switches, visit: <u>https://www.cisco.com/c/en/us/products/switches/business-110-series-unmanaged-switches/index.html</u>.

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