

Cisco CBS250-16T-2G

Cisco Business CBS250-16T-2G Smart Switch User Manual

Model: CBS250-16T-2G | Brand: Cisco

1. PRODUCT OVERVIEW

The Cisco Business CBS250-16T-2G Smart Switch is designed to provide powerful network performance, security, and reliability for small business networks. It features 16 Gigabit Ethernet ports and 2 SFP uplinks, offering comprehensive network capabilities.



Figure 1: Front view of the Cisco Business CBS250-16T-2G Smart Switch, showing 16 Gigabit Ethernet ports and 2 SFP uplink ports, along with the Cisco Business 250 Series branding.

Key Features:

- **16-Port 10/100/1000 + 2 x 1GE SFP:** Provides ample connectivity for various network devices.
- **Intuitive Management:** Simplified network operations and automated lifecycle management via Cisco Business Dashboard or on-box UI.
- **Flexible Deployment:** Supports various network configurations from 8 to 48 ports and PoE+ combinations.
- **Enhanced Security:** Features IEEE 802.1X port security, Denial-of-Service (DoS) attack prevention, and extensive Access Control Lists (ACLs).
- **Compact Design:** Elegant and compact form factor suitable for diverse installation environments.
- **Energy Efficient:** Optimizes power usage, compliant with IEEE802.3az Energy Efficient Ethernet, and fanless in most models.

2. SETUP AND INSTALLATION

2.1 Package Contents:

Verify that your package contains the following items:

- Cisco Business CBS250-16T-2G Smart Switch
- Power cord or adapter
- Mounting hardware
- Quick Start Guide

2.2 Physical Installation:

1. **Mounting:** Use the provided mounting hardware to secure the switch in a suitable location. The compact design allows for installation outside of traditional wiring closets, such as retail stores, open-plan offices, or classrooms.
2. **Power Connection:** Connect the power cord or adapter to the switch and a reliable power source.
3. **Network Connections:** Connect your network devices (computers, servers, access points) to the 10/100/1000 Gigabit Ethernet ports using standard Ethernet cables.
4. **Uplink Connections:** Utilize the 1GE SFP ports for high-speed uplink connections to your core network or other switches.

2.3 Initial Configuration:

The switch can be configured via its on-box user interface or through the Cisco Business Dashboard for centralized management.

- **On-box UI:** Access the web-based management interface by connecting a computer to one of the switch's Ethernet ports and navigating to the default IP address (refer to the Quick Start Guide for details).
- **Cisco Business Dashboard:** For zero-touch deployment and simplified management, integrate the switch with the Cisco Business Dashboard. This allows for remote configuration and monitoring.

3. OPERATING THE SWITCH

3.1 Basic Operation:

Once powered on and connected, the switch will automatically detect connected devices and establish network links. LEDs on the front panel indicate port status, link activity, and power status.

3.2 Network Management:

The Cisco Business Dashboard provides a comprehensive platform for managing your network devices. Key management functions include:

- **Monitoring:** View real-time network topology, device status, and performance metrics.
- **Configuration:** Configure VLANs, QoS settings, security policies (e.g., 802.1X, ACLs), and other advanced features.
- **Troubleshooting:** Identify and resolve network issues through centralized logging and diagnostic tools.
- **Firmware Updates:** Manage and deploy firmware updates to ensure optimal performance and security.

For detailed instructions on specific configurations, refer to the comprehensive user guide available on the Cisco support website.

4. MAINTENANCE

4.1 Firmware Updates:

Regularly check for and apply firmware updates to ensure your switch has the latest features, performance enhancements, and security patches. Firmware updates can typically be managed through the Cisco Business Dashboard or the device's web UI.

4.2 Cleaning:

Keep the switch clean and free from dust to ensure proper ventilation and prevent overheating. Use a soft, dry cloth for cleaning. Do not use liquid cleaners or aerosols.

4.3 Environmental Considerations:

Ensure the switch is operated within its specified environmental ranges (temperature, humidity) to maintain optimal performance and longevity. Avoid placing the switch in direct sunlight or near heat sources.

5. TROUBLESHOOTING

5.1 Common Issues and Solutions:

- No Power:**
Ensure the power cord is securely connected to both the switch and a working power outlet. Verify the power outlet is active.
- No Link Light on Port:**
Check the Ethernet cable connection at both ends. Try a different cable or port. Ensure the connected device is powered on and functioning correctly.
- Network Connectivity Issues:**
Verify IP address configurations. Check VLAN settings if configured. Use the diagnostic tools available in the Cisco Business Dashboard or the switch's web UI to identify network conflicts or errors.
- Slow Performance:**
Check for network congestion using the dashboard's traffic monitoring. Ensure firmware is up to date. Verify duplex settings on connected devices.

5.2 Resetting the Switch:

If you encounter persistent issues, you may need to reset the switch. Refer to the Quick Start Guide or the full user manual for instructions on performing a factory reset. **Warning:** A factory reset will erase all configurations and restore the switch to its default settings.

6. TECHNICAL SPECIFICATIONS

Feature	Specification
Model Number	CBS250-16T-2G
Switch Type	Smart Switch
Ports	16 x 10/100/1000 Gigabit Ethernet, 2 x 1GE SFP
Dimensions (LxWxH)	10.55 x 10.69 x 1.73 inches

Item Weight	6.6 pounds
Data Transfer Rate	1000 Megabits Per Second
Material	Plastic
Included Components	Switch, Power cord or adapter, Mounting hardware, Quick Start Guide

7. WARRANTY AND SUPPORT

7.1 Limited Lifetime Protection:

The Cisco Business CBS250-16T-2G Smart Switch comes with a limited-lifetime warranty, which includes return-to-factory replacement. This warranty covers defects in materials and workmanship under normal use.



7.2 Technical Support:

One year of technical support is included with your purchase. For further assistance, troubleshooting, or to access the full user manual and additional resources, please visit the official Cisco support website or refer to the contact information provided in your Quick Start Guide.

You can also find the official Instructions for Use (IFU) PDF [here](#).

Related Documents - CBS250-16T-2G

	<p>Cisco Business 250 Series Smart Switches Quick Start Guide Setup and Configuration</p> <p>Get started quickly with the Cisco Business 250 Series Smart Switches. This guide covers unboxing, connecting, configuring IP addresses, default login, and LED indicators for your network switch.</p>
	<p>Cisco Catalyst 1000 Series Switch Hardware Installation Guide</p> <p>This guide provides detailed hardware installation instructions for Cisco Catalyst 1000 Series 8-Port and 16-Port Gigabit Ethernet switches, covering setup, mounting, connections, and troubleshooting for enterprise network environments.</p>
	<p>Cisco Business 250 & 350 Series Switches Firmware Release Notes v3.1.1.7</p> <p>This document provides release notes for Cisco Business 250 and 350 Series Switches firmware version 3.1.1.7, detailing new features, modifications, resolved issues, and known issues.</p>
	<p>Cisco Business 110 Series Unmanaged Switches Mounting Guide</p> <p>A comprehensive guide for mounting Cisco Business 110 Series Unmanaged Switches, detailing rack-mount, wall-mount, and desktop placement options, along with essential safety instructions and environmental specifications.</p>

 <p>PA-4E 10BaseT Ethernet Port Adapter Installation and Configuration</p> <p>Document Number: 91407</p> <p>Copyright © 2004 Cisco Systems, Inc. All rights reserved. Cisco reserves the right to change this document without notice.</p> <p>10BaseT Ethernet Port Adapter Installation and Configuration Cisco Systems, Inc. San Jose, CA 95134 U.S.A. Tel: 408 526 4000 Fax: 408 526 4000</p>	<p>PA-4E 10BaseT Ethernet Port Adapter Installation and Configuration Guide</p> <p>This guide provides detailed instructions for installing and configuring the Cisco PA-4E 10BaseT Ethernet Port Adapter on various Cisco networking platforms, including Catalyst switches and routers.</p>
 <p>Cisco ACI with VMware VDS Integration</p> <p>Document Number: 91407</p> <p>Copyright © 2004 Cisco Systems, Inc. All rights reserved. Cisco reserves the right to change this document without notice.</p> <p>10BaseT Ethernet Port Adapter Installation and Configuration Cisco Systems, Inc. San Jose, CA 95134 U.S.A. Tel: 408 526 4000 Fax: 408 526 4000</p>	<p>Cisco ACI with VMware VDS Integration Guide</p> <p>A comprehensive guide detailing the integration of Cisco Application Policy Infrastructure Controller (APIC) with VMware vSphere Distributed Switch (VDS) for enhanced network management and virtualization capabilities.</p>