

Cisco SLM224G 24-Port 10/100 + 2-port Gigabit Smart Switch: SFPs Cisco Small Business Smart Switches

For
Small
Business



Cost-Effective, Secure Switching with Simplified Management for Small Businesses

Highlights

- Connect up to 24 devices – PCs, printers, wireless access points, and servers – to share and transfer files and videos across your network
- Security down to the switch port level keeps unauthorized users off the network
- Basic QoS helps ensure a consistent network experience and supports networked applications including voice, video, and data storage
- Easy-to-use web browser interface makes installation quick and effortless
- Limited lifetime warranty

Figure 1. Cisco SLM224G 24-Port 10/100 + 2-port Gigabit Smart Switch: SFPs



Product Overview

The Cisco® Small Business Smart Switches are cost-effective switching solutions that are ideal for small businesses, the network edge, or workgroups within larger organizations. These easy-to-install, high-speed switches offer many of the same quality of service (QoS) and security features found in more expensive full Layer 2 managed switches, but without their complexity. The Cisco SLM224G 24-Port 10/100 + 2-port Gigabit Smart Switch offers twenty-four 10/100 copper ports with two shared Gigabit copper or optical Small Form-Factor Pluggable (SFP) uplink interfaces for connecting the switch to the core network. The simplified user interface is an intuitive management tool that enables you to quickly utilize the comprehensive feature set of the switch, resulting in a better-optimized network.

The Cisco SLM224G includes numerous QoS features to ensure that traffic is prioritized properly to deliver the best possible user experience for real-time applications such as voice and video or bandwidth-intensive graphic/video file uploads or downloads. With its IGMP snooping feature, the Cisco SLM224G limits IP multicast traffic (such as real-time presentations, video conferences, and online gaming) to only the ports that have requested it, enabling the rest of the network to operate at peak efficiency. Additional QoS capabilities such as IEEE 802.1p priority tagging, differentiated services code point (DSCP), and four hardware queues also maintain quality for real-time applications such as voice and video. Network traffic can be optimized with the switch's 802.1Q VLAN support, which enables you to quickly segregate network traffic by department or workgroup. VLANs also provide an additional layer of security by keeping sensitive data separated from other workgroups on the network.

Network security is an absolute requirement for any business, and preventing unauthorized access to the company network is critical. The Cisco SLM224G secures the network through 802.1X port authentication, which prompts end users to provide their username and password before they are permitted to pass data. User access can also be controlled through the switch's MAC-based filtering capability, which allows network access only to those devices or workstations that have been authorized as identified by their MAC address. The many-to-one or one-to-one port mirroring feature of the Cisco SLM224G enables you to monitor the type of traffic being transmitted on the network.

The Cisco SLM224G includes features for quickly expanding and growing your network. To substantially increase network throughput speeds, especially useful for companies whose employees are routinely backing up their hard drives to a company server or storage platform, the switch supports link aggregation, which allows multiple high-bandwidth trunks between switches to be set up. Link aggregation also provides a level of availability and redundancy, as traffic will continue to flow even if one of the network links breaks. The Cisco SLM224G's Spanning Tree Protocol (STP) support and storm control features help to control planned or inadvertent cable loops when switches are connected to one another. These loops can cause broadcast or multicast storms in the network and severely limit its performance. With these features, you can confidently build a mesh of switches and quickly expand your network to support your growing workforce.

Features

- Twenty-four 10/100 switched RJ-45 ports deliver up to 200 Mbps of throughput per port
- Two 10/100/1000 switched RJ-45 Gigabit uplink ports with two shared SFP ports (combo ports)
- 8.8-Gbps nonblocking, store-and-forward switching mechanism
- Simplified QoS management enabled by advanced queuing techniques using 802.1p, IPv4/v6 Differentiated Services (DiffServ)/DSCP traffic prioritization specifications
- Configuration and monitoring from a standard web browser with a simplified management interface
- 802.1Q-based VLANs enable segmentation of networks for improved performance and security
- Port-level security via 802.1X authentication and MAC-based filtering
- Increased bandwidth (up to 8x) and added link redundancy with Link Aggregation Control Protocol (LACP)
- Multicast and broadcast storm control
- Port mirroring for noninvasive monitoring of switch traffic
- Fully rack-mountable using the included rack-mounting hardware

Specifications

Table 1 shows the specifications, package contents, and minimum requirements for the Cisco SLM224G 24-Port 10/100 + 2-Port Gigabit Smart Switch.

Table 1. Specifications for the Cisco SLM224G 24-Port 10/100 + 2-port Gigabit Smart Switch: SFPs

Feature	Description
Specifications	
Ports	<ul style="list-style-type: none"> • 24 RJ-45 connectors for 10BASE-T/100BASE-TX, 2 combo ports with RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T, and mini Gigabit Interface Converter (mini-GBIC) /SFP slots • Auto medium dependent interface (MDI) and MDI crossover (MDI-X) • Auto-negotiate/manual setting
Buttons	Reset
Cabling type	Unshielded twisted pair (UTP) Category 5 or better for 10BASE-T/100BASE-TX, UTP Category 5 Ethernet or better for 1000BASE-T
LEDs	System, 10/100 Link/Act and Speed, Gigabit Link/Act and Speed
Performance	

Feature	Description
Switching capacity	8.8 Gbps nonblocking
Forwarding rate	6.55 Mpps wire-speed performance
Layer 2	
MAC table size	8000
Number of VLANs	128 active VLANs (4096 range)
VLAN	<ul style="list-style-type: none"> Port-based and 802.1Q tag-based VLANs Management VLAN
Head-of-line (HOL) blocking	HOL blocking prevention
Management	
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP)
Firmware upgrade	Web browser upgrade (HTTP) and Trivial File Transfer Protocol (TFTP)
Port mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer
Other management	<ul style="list-style-type: none"> Port mirroring DHCP/BOOTP client System log Configuration upload and backup via HTTP or TFTP
Security	
<ul style="list-style-type: none"> 802.1X – RADIUS authentication; MD5 encryption Port security – MAC-based filtering Management access control 	
Availability	
Link aggregation	<ul style="list-style-type: none"> Link aggregation using IEEE 802.3ad LACP Up to 4 groups with up to 8 ports per group
Storm control	Broadcast and multicast
Spanning Tree	IEEE 802.1D Spanning Tree and PortFast
IGMP snooping	IGMP (v1/v2) snooping provides for fast client joins and leaves of multicast streams and limits bandwidth-intensive video traffic to only the requestors. Supports 32 multicast groups
QoS	
Priority levels	4 hardware queues
Scheduling	Priority queuing and weighted round-robin (WRR)
Class of service	<ul style="list-style-type: none"> Port based 802.1p VLAN priority based IPv4/v6 IP DSCP based
Standards	
<ul style="list-style-type: none"> 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 802.3ad LACP 802.1D STP 802.1Q/p VLAN 802.1X port access authentication 	
Environmental	
Dimensions W x H x D	17.32 x 1.70 x 10.12 in. (440 x 43.2 x 257 mm)
Weight	6.39 lb (2.9 kg)
Power	Internal power, 100-240V
Certification	FCC Part 15 Class A, CE Class A, UL, cUL, CE mark, CB
Operating temperature	32° to 122°F (0° to 50°C)

Feature	Description
Storage temperature	32° to 158°F (0 to 70°C)
Operating humidity	10% to 90%, noncondensing
Storage humidity	10% to 90%, noncondensing
Package Contents	
<ul style="list-style-type: none"> • Cisco SLM224G 24-Port 10/100 + 2-port Gigabit Smart Switch with 2 combo SFPs • AC power cord • Rack-mounting kits with bracket and hardware • CD with user guide in PDF format • Online registration card 	
Minimum Requirements	
<ul style="list-style-type: none"> • Web-based utility: Microsoft Internet Explorer (version 5.5 or later) • Category 5 Ethernet network cable 	
Product Warranty	
Limited lifetime warranty with return to factory replacement, one year telephone support and software fixes for the warranty term.	

Service & Support

Cisco Small Business switches are backed by the Cisco Small Business Support Service, which provides affordable peace-of-mind coverage. This subscription-based service helps you protect your investment and derive maximum value from Cisco Small Business products. Delivered by Cisco and backed by your trusted partner, this comprehensive service includes software updates, access to the Cisco Small Business Support Center, and expedited hardware replacement.

Cisco Small Business products are supported by professionals in Cisco Small Business Support Center locations worldwide who are specifically trained to understand your needs. The Cisco Small Business Support Community, an online forum, enables you to collaborate with your peers and reach Cisco technical experts for support information.

Cisco Limited Lifetime Hardware Warranty

This Cisco Small Business product offers a limited lifetime hardware warranty with return to factory replacement and a 1-year limited warranty for fans and power supplies. In addition, Cisco offers telephone technical support at no charge for the first 12 months following the date of purchase and software bug fixes for the warranty term. To download software updates, go to: <http://www.cisco.com/cisco/web/download/index.html>.

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

For More Information

For more information on Cisco Small Business products and solutions, visit: <http://www.cisco.com/smallbusiness>.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

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