# Cisco SRW224G4 24-Port 10/100 + 4-Port Gigabit Switch: WebView Cisco Small Business Managed Switches

Secure, Reliable, Intelligent Managed Switching for Your Growing Business

## Highlights

- Connects up to 24 network devices PCs, printers, and servers to share and transfer files and videos across your network
- Strong security protects network traffic to keep unauthorized users off the network
- Intelligent QoS helps ensure a consistent network experience and supports networked applications including voice, video, and data storage
- Simplified, web-based management for easy installation and configuration



Figure 1.Cisco SRW224G4 24-Port 10/100 + 4-Port Gigabit Switch: WebView

# **Product Overview**

Growing businesses require cost-effective networking solutions that can scale with ever-changing business needs. The Cisco<sup>®</sup> SRW224G4 24-Port 10/100 + 4-Port Gigabit Switch (Figure 1) brings a new level of intelligence and security to the network infrastructure. The twenty-four 10/100 Mbps ports enable you to consolidate your network from several smaller switches or hubs to a single managed switch. The optional Gigabit optical interfaces allow you to expand the network as your business grows.

Network security is a top priority in any size business. Unauthorized access to the network and mission-critical data is a constant concern. The Cisco SRW224G4 is able to secure the network through 802.1X port authentication and MAC filtering. The 802.1X standard requires clients to authenticate themselves before the port will pass data for them.

Businesses are recognizing the benefits of voice over IP (VoIP) and are quickly migrating their voice services to IP-based platforms, requiring their local area networks to support both voice and data applications. In unmanaged IP networks, bursty data sessions can disrupt voice packet delivery, causing poor voice quality. With the enhanced quality of service (QoS) and traffic management features in the Cisco SRW224G4, voice data can be prioritized, helping ensure clear and reliable voice communications.

Enabling the advanced features of the Cisco SRW224G4 further secures the integrity of your network. The WebView interface provides an intuitive, highly secure management interface,

enabling you to better utilize the comprehensive feature set of the switch, for a better-optimized, more secure network.

#### Features

- Twenty-four 10/100 switched RJ-45 ports with automatic medium dependent interface (MDI) and MDI crossover (MDI-X) cable detection
- Four 10/100/1000 switched RJ-45 ports with automatic MDI/MDI-X cable detection
- Two shared mini Gigabit Interface Converter (mini-GBIC) ports for optical or copper interconnection
- · Nonblocking, store-and-forward switching mechanism
- Simplified QoS management enabled by advanced queuing techniques using 802.1p, Differentiated Services (DiffServ), or type of service (ToS) traffic prioritization specifications
- · Configuration and monitoring from a standard web browser with WebView management
- Secure remote management of the switch via Secure Shell (SSH) and SSL secure channel network protocols
- 802.1Q-based VLANs enable segmentation of networks for improved performance and security
- Private VLAN Edge (PVE) for simplified network isolation of guest connections or autonomous networks
- Automatic configuration of VLANs across multiple switches through Generic VLAN Registration Protocol (GVRP) and Generic Attribute Registration Protocol (GARP)
- 802.1ab (Link Layer Discovery Protocol [LLDP]) and Universal Plug and Play (UPnP) support
- · User/network port-level security via 802.1X authentication and MAC-based filtering
- Increased bandwidth (up to 8x) and link redundancy with Link Aggregation Control Protocol (LACP)
- Enhanced rate-limiting capabilities and storm control, including multicast, broadcast, and flood control
- · Port mirroring for noninvasive monitoring of switch traffic
- Mini jumbo frame support
- Simple Network Management Protocol (SNMP) versions 1, 2c, and 3
- · Fully rack mountable using the included rack-mounting hardware

#### Specifications

Table 1 contains the specifications, package contents, and minimum requirements for the Cisco SRW224G4 24-Port 10/100 + 4-Port Gigabit Switch.

Table 1. Specifications for the Cisco SRW224G4 24-Port 10/100 + 4-Port Gigabit Switch: WebView

Specifications		
Ports	<ul> <li>24 RJ-45 connectors for 10BASE-T and 100BASE-TX, 4 RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T with 2 shared Small Form Factor Pluggable (SFP) slots</li> </ul>	
	Auto MDI/MDI-X	
	Auto negotiate/manual setting	

Cabling type	<ul> <li>Unshielded twisted pair (UTP) Category 5 or better for 10BASE-T/100BASE-TX</li> <li>UTP Category 5e or better for 1000BASE-T</li> </ul>
LEDs	Power, Link/Act, Speed
Performance	
Switching capacity	12.8 Gbps, nonblocking
Forwarding rate	9.5 Mpps
MAC table size	8000
Number of VLANs	256 active VLANs - 4096 range
Forwarding Rate in Full Duplex Mode	Bandwidth in Gigabit - 12.8 Bandwidth in Gigabyte - 1.6
Management	
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
SNMP	SNMP versions 1, 2, and 3 with support for traps
SNMP MIBs	<ul> <li>RFC1213 MIB-2, RFC2863 interface MIB</li> <li>RFC2665 Ether-like MIB</li> <li>RFC1493 bridge MIB</li> <li>RFC2674 extended bridge MIB (P-bridge, Q-bridge)</li> <li>RFC2819 RMON MIB (groups 1, 2, 3, and 9 only)</li> <li>RFC2618 RADIUS client MIB</li> </ul>
RMON	Embedded Remote Monitoring (RMON) software agent supports four RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis
Firmware upgrade	<ul> <li>Web browser upgrade (HTTP)</li> <li>Trivial File Transfer Protocol (TFTP) upgrade</li> </ul>
Port mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe
Other management	<ul> <li>RFC854 Telnet (menu-driven configuration)</li> <li>SSH and Telnet management</li> <li>Telnet client</li> <li>SSL security for web user interface</li> <li>Switch audit log</li> <li>Dynamic Host Configuration Protocol (DHCP) client</li> <li>BOOTP</li> <li>Simple Network Time Protocol (SNTP)</li> <li>Xmodem upgrade</li> <li>Cable diagnostics</li> <li>Ping</li> <li>Traceroute</li> <li>Syslog</li> </ul>
Security	r
IEEE 802.1X	802.1X - RADIUS authentication; MD5 encryption
Access control	Access control lists (ACLs) - Drop or rate limit based on: • Source and destination MAC-based • Source and destination IP address* • Protocol* • ToS/differentiated services code point (DSCP)* • Port* • VLAN* • Ethertype*
Availability	1
Link aggregation	<ul> <li>Link aggregation using IEEE 802.3ad LACP</li> <li>Up to 8 ports in up to 8 trunks</li> </ul>
Storm control	Broadcast, multicast, and unknown unicast

Spanning Tree	IEEE 802.1d Spanning Tree
	IEEE 802.1s Multiple Spanning Tree
	IEEE 802.1w Rapid Spanning Tree, Fast Linkover
Internet Group Management Protocol (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
QoS	
Priority levels	4 hardware queues
Scheduling	Priority queuing and weighted round-robin (WRR)
Class of service	Port based*
	802.1p VLAN priority based*
	<ul> <li>IPv4/v6 IP precedence/ToS/DSCP based*</li> <li>TCP/ User Datagram Protocol (UDP) port-based*</li> </ul>
	DiffServ*
	<ul> <li>Classification and re-marking ACLs*</li> </ul>
Rate limiting	Ingress policer
	Egress rate control
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, 802.3ad LACP, 802.1D Spanning Tree Protocol (STP), 802.1Q/p VLAN, 802.1w Rapid STP, 802.1s Multiple STP 802.1X port access authentication
Layer 2	
VLAN	Port-based and 802.1Q based VLANs
	Private VLAN Edge (PVE)
	Management VLAN
Head-of-line (HOL) blocking	HOL blocking prevention
Mini jumbo frame	Supports frames up to 1600 bytes
Dynamic VLAN	GVRP - dynamic VLAN registration
Standards	802.3i 10BASE-T Ethernet, 802.3u 100BASE-TX Fast Ethernet, 802.3ab 1000BASE-T Gigabit Ethernet, 802.3z Gigabit Ethernet, 802.3x flow control
Environmental	
Dimensions	16.93 x 1.75 x 7.97 in.
WxHxD	(430 x 44 x 203 mm)
Unit weight	4.41 lb (2 kg)
Power	Internal switching power
Certification	FCC Part 15 Class A, CE Class A, UL, cUL, CE mark, CB
Operating temperature	32° to 104°F (0° to 40°C)
Storage temperature	-4º to 158ºF (-20º to 70ºC)
Operating humidity	10% to 90%
Storage humidity	10% to 95%
Package Contents	
Cisco SRW224G4 24-Port 10     AC power cord     Rack-mounting kit with brack     CD with upper quide in PDE for	ets and hardware
<ul> <li>CD with user guide in PDF fo</li> <li>Registration card</li> <li>Console cable</li> </ul>	inna.
Minimum Requirements	
Product Warranty	

## **Cisco Limited Warranty for Cisco Small Business Series Products**

This Cisco Small Business product comes with a 5-year limited hardware warranty with return to factory replacement and a 90-day limited software warranty. In addition, Cisco offers software application updates for bug fixes and telephone technical support at no charge for the first 12 months following the date of purchase. To download software updates, go to: <a href="http://www.cisco.com/go/smallbiz">http://www.cisco.com/go/smallbiz</a>.

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## For More Information

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



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