

## Cisco SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch: WebView Cisco Small Business Managed Switches

Secure, Reliable, Intelligent Switching for Your Growing Small Business

### Highlights

- Connects up to 48 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 SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch: WebView



### Product Overview

Growing businesses require cost-effective networking solutions that can scale to meet ever-changing business needs. The Cisco® SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch (Figure 1) brings increased intelligence and security to the network infrastructure. The forty-eight 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. Most business data networks, large and small, are unsecured. Unauthorized access to the network and mission-critical data is a constant concern. The Cisco SRW248G4 helps secure the network through 802.1X port authentication and MAC-based 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 SRW248G4, voice data can be prioritized, helping ensure clear and reliable voice communications.

Enabling the advanced features of the Cisco SRW248G4 further secures the integrity of your network. The WebView interface provides an intuitive, highly secure management interface, helping you to better utilize the comprehensive feature set of the switch for a better-optimized, more secure network.

## Features

- Forty-eight 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 auto 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
- Highly 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)
- Automatic port configuration through auto MDI/MDI-X
- 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 added link redundancy with Link Aggregation Control Protocol (LACP)
- Enhanced rate-limiting capabilities provide control, including back pressure to control the rate at which data can flow into and out of a port
- Multicasting, broadcasting, and flooding 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 SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch.

**Table 1.** Specifications for the Cisco SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch: WebView

Specifications	
<b>Ports</b>	<ul style="list-style-type: none"> <li>• 48 RJ-45 connectors for 10BASE-T and 100BASE-TX</li> <li>• 4 RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T with 2 shared Small Form-Factor Pluggable (SFP) slots</li> <li>• Auto MDI/MDI-X</li> <li>• Auto negotiate/manual setting</li> </ul>
<b>Cabling type</b>	<ul style="list-style-type: none"> <li>• Unshielded twisted pair (UTP) Category 5 or better for 10BASE-T/100BASE-TX</li> <li>• UTP Category 5 Ethernet or better for 1000BASE-T</li> </ul>
<b>LEDs</b>	Power, Link/Act, Speed
Performance	
<b>Switching capacity</b>	17.6 Gbps, nonblocking
<b>MAC table size</b>	8000
<b>Number of VLANs</b>	256 - static and dynamic
Management	
<b>Web user interface</b>	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
<b>SNMP</b>	SNMP versions 1, 2, and 3 with support for traps
<b>SNMP MIBs</b>	<ul style="list-style-type: none"> <li>• RFC1213 MIB-2</li> <li>• 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>• RFC 2618 RADIUS client MIB</li> </ul>
<b>Remote Monitoring (RMON)</b>	Embedded RMON software agent supports 4 RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis
<b>Firmware upgrade</b>	<ul style="list-style-type: none"> <li>• Web browser upgrade (HTTP)</li> <li>• Trivial File Transfer Protocol (TFTP) upgrade</li> </ul>
<b>Port mirroring</b>	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe
<b>Other management</b>	<ul style="list-style-type: none"> <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	
<b>IEEE 802.1X</b>	802.1X - RADIUS authentication; MD5 encryption
<b>Access control</b>	Filtering; MAC-based
Availability	
<b>Link aggregation</b>	<ul style="list-style-type: none"> <li>• Link aggregation using IEEE 802.3ad LACP</li> <li>• Up to 8 ports in up to 8 trunks</li> </ul>

<b>Storm control</b>	Broadcast, multicast, and unknown unicast
<b>Spanning Tree</b>	IEEE 802.1d Spanning Tree, IEEE 802.1s Multiple Spanning Tree, IEEE 802.1w Rapid Spanning Tree, Fast Linkover
<b>Internet Group Management Protocol (IGMP) snooping</b>	IGMP (versions 1 and 2) snooping provides for fast client joins and leaves of multicast streams and limits bandwidth-intensive video traffic to only the requestors
<b>QoS</b>	
<b>Priority levels</b>	4 hardware queues
<b>Scheduling</b>	Priority queuing and weighted round-robin (WRR)
<b>Class of service (CoS)</b>	<ul style="list-style-type: none"> <li>• Port based</li> <li>• 802.1p VLAN priority based</li> <li>• IP ToS/DSCP based</li> <li>• IPv4 and IPv6 traffic class-based CoS</li> </ul>
<b>Rate limiting</b>	Ingress policer, egress shaper
<b>Layer 2</b>	
<b>VLAN</b>	<ul style="list-style-type: none"> <li>• Port-based and 802.1Q-based VLANs</li> <li>• PVE</li> <li>• Management VLAN</li> </ul>
<b>Head-of-line (HOL) blocking</b>	HOL blocking prevention
<b>Mini jumbo frame</b>	Supports frames up to 1600 bytes
<b>Dynamic VLAN</b>	GVRP - dynamic VLAN registration
<b>Standards</b>	<ul style="list-style-type: none"> <li>• 802.3i 10BASE-T Ethernet</li> <li>• 802.3u 100BASE-TX Fast Ethernet</li> <li>• 802.3ab 1000BASE-T Gigabit Ethernet</li> <li>• 802.3z Gigabit Ethernet</li> <li>• 802.3x flow control</li> </ul>
<b>Environmental</b>	
<b>Dimensions W x H x D</b>	16.93 x 1.75 x 13.78 in. (430 x 45 x 350 mm)
<b>Unit weight</b>	8.60 lb (3.9 kg)
<b>Power</b>	Internal switching power
<b>Certification</b>	FCC Part 15 Class A, CE Class A, UL, cUL, CE mark, CB
<b>Operating temperature</b>	32° to 104°F (0° to 40°C)
<b>Storage temperature</b>	-4° to 158°F (-20° to 70°C)
<b>Operating humidity</b>	10% to 90%
<b>Storage humidity</b>	10% to 95%
<b>Package Contents</b>	
<ul style="list-style-type: none"> <li>• Cisco SRW248G4 48-Port 10/100 + 4-Port Gigabit Switch</li> <li>• AC power cord</li> <li>• Rack-mounting kit with brackets and hardware</li> <li>• CD with user guide in PDF format</li> <li>• Registration card</li> <li>• Console cable</li> </ul>	
<b>Minimum Requirements</b>	
<ul style="list-style-type: none"> <li>• Web-based utility: Microsoft Internet Explorer (version 5.5 or later)</li> <li>• Category 5 Ethernet network cables</li> <li>• Operating system: Windows 2000, XP, or later</li> </ul>	
<b>Product Warranty</b>	
5-year limited hardware warranty with return to factory replacement and 90-day limited software 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:

<http://www.cisco.com/go/smallbiz>.

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:

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