

Cisco SRW2048 48-Port Gigabit Switch: WebView Cisco Small Business Managed Switches

High-Performance, Reliable Switching for Small Businesses

Highlights

- 48 high-speed ports optimized for performance and to support bandwidth-intensive applications
- 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 SRW2048 48-Port Gigabit Switch: WebView



Product Overview

Small businesses require cost-effective yet scalable networking solutions that can meet changing business needs. The Cisco® SRW2048 48-Port Gigabit Switch (Figure 1) brings Gigabit speeds to your users and servers, while increasing the intelligence and security of the network infrastructure. The forty-eight 10/100/1000 Mbps ports enable you to take advantage of the Gigabit Ethernet interfaces shipping in the current generation of servers, workstations, and storage devices, in addition to supporting your existing 10/100 Mbps clients. 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 unsecure. Unauthorized access to the network and mission-critical data is a constant concern. The Cisco SRW2048 helps secure the network by using 802.1X port authentication, access control lists (ACLs), and MAC addresses port locking. 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 QoS and traffic management features in the Cisco SRW2048, voice data can be prioritized, helping ensure clear and reliable voice communications.

Taking advantage of the advanced features of the Cisco SRW2048 can further secure 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

- Forty-eight 10/100/1000 switched RJ-45 ports with automatic medium dependent interface (MDI) and MDI crossover (MDI-X) cable detection
- 4 mini Gigabit Interface Converter (mini-GBIC) ports for fiber or copper interconnections
- Nonblocking, store-and-forward switching mechanism
- Simplified quality of service (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)
- Automatic port configuration through auto MDI/MDIX and 802.1ab (Link Layer Discovery Protocol [LLDP])
- 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
- Broadcast, multicast, and unknown unicast storm control
- Port mirroring for noninvasive monitoring of switch traffic
- Jumbo frame support (10 KB)
- Simple Network Management Protocol (SNMP) versions 1, 2c, and 3 and Remote Monitoring (RMON) support
- Fully rack mountable using the included rack-mounting hardware

Specifications

Table 1 contains the specifications, package contents, and minimum requirements for the Cisco SRW2048 48-Port Gigabit Switch.

Table 1. Specifications for the Cisco SRW2048 48-Port Gigabit Switch: WebView

Specifications	
Ports	48 RJ-45 connectors for 10BASE-T, 100BASE-TX and 1000BASE-T with 4 shared Small Form-Factor Pluggable (SFP) slots
Cabling type	<ul style="list-style-type: none"> Unshielded twisted pair (UTP) Category 5 or better for 10BASE-T/100BASE-TX UTP Category 5 Ethernet or better for 1000BASE-T
LEDs	Power, Link/Act, Speed
Performance	
Switching capacity	96 Gbps, nonblocking
MAC table size	8000
Number of VLANs	256 VLANs
Management	
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
SNMP	SNMP versions 1, 2c, and 3 with support for traps
SNMP MIBs	<ul style="list-style-type: none"> RFC1213 MIB-2, RFC2863 interface MIB, RFC2665 Ether-like MIB RFC1493 bridge MIB, RFC2674 extended bridge MIB (P-bridge, Q-bridge) RFC2819 RMON MIB (groups 1,2,3,9 only), RFC2737 entity MIB RFC 2618 RADIUS client MIB
RMON	Embedded RMON software agent supports 4 RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis
Firmware upgrade	<ul style="list-style-type: none"> Web browser upgrade (HTTP) Trivial File Transfer Protocol (TFTP) upgrade
Port mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe
Other management	<ul style="list-style-type: none"> RFC854 Telnet (menu-driven configuration) SSH and Telnet management Telnet client SSL security for web user interface Switch audit log DHCP client BOOTP Simple Network Time Protocol (SNTP) Xmodem upgrade Cable diagnostics Ping Traceroute Syslog
Security Features	
IEEE 802.1X	802.1X - RADIUS authentication; MD5 encryption
ACLs	<ul style="list-style-type: none"> Differentiated services code point (DSCP)/IP precedence-based class of service (CoS) IPv6 traffic-class-based CoS IP address Subnet mask Protocol Service type MAC address VLAN ID TCP/ User Datagram Protocol (UDP) port

Availability	
Link aggregation	<ul style="list-style-type: none"> • Link aggregation using IEEE 802.3ad LACP • Up to 8 ports in up to 8 trunks
Storm control	Broadcast, multicast, and unknown unicast
Spanning Tree	<ul style="list-style-type: none"> • 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 (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
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 • IP ToS/DSCP based • IPv6 traffic-class-based CoS
Rate limiting	Ingress policer, egress shaper
Layer 2	
VLAN	<ul style="list-style-type: none"> • Port-based and 802.1Q-based VLANs • PVE • Management VLAN
Head-of-line (HOL) blocking	HOL blocking prevention
Jumbo frame	Supports frames up to 10 KB
Dynamic VLAN	GVRP-dynamic VLAN registration
Standards	<ul style="list-style-type: none"> • 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 W x H x D	16.93 x 1.75 x 13.78 in. (430 x 44.5 x 350 mm)
Unit weight	2.20 lb (1 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	-4° to 158°F (-20° to 70°C)
Operating humidity	10% to 90%
Storage humidity	10% to 95%
Package Contents	
<ul style="list-style-type: none"> • Cisco SRW2048 48-Port Gigabit Switch • AC power adapter and cord • Rack mounting kit with brackets and hardware • CD with user guide in PDF format • Online registration card • Console cable 	
Minimum Requirements	
<ul style="list-style-type: none"> • Web-based configuration: Java-enabled browser • Category 5 Ethernet network cable • TCP/IP installed on each computer within the network • Network adapter installed in each computer • Network operating system (Windows, Linux, Mac OS X) 	
Product Warranty	
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

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