

Cisco SRW224P 24-Port 10/100 + 2-Port Gigabit Switch: WebView/PoE

Cisco Small Business Managed Switches

Secure, Reliable, Intelligent Switching with PoE for Growing Businesses

Highlights

- Connects up to 24 network devices - PCs, printers, and servers - to share and transfer files and videos across your network
- Power over Ethernet easily and cost-effectively powers wireless access points, video cameras, and other network-connected endpoints
- Simplified, web-based management for easy installation and configuration
- Strong security protects network traffic to keep unauthorized users off the network

Figure 1. Cisco SRW224P 24-Port 10/100 + 2-Port Gigabit Switch: WebView/PoE



Product Overview

The Cisco® SRW224P 24-Port 10/100 + 2-Port Gigabit Switch (Figure 1) offers a highly secure way to expand your network. Web-based configuration of the switch is secured using SSL. User access is verified using 802.1X security with a RADIUS authentication mechanism and can also be controlled using MAC-based filtering.

Extensive quality of service (QoS) features makes the solution ideal for real-time applications such as voice and video. The four priority queues, together with the weighted round-robin and strict priority scheduling techniques, facilitate efficient coexistence of real-time traffic with data traffic, allowing each to meet its QoS needs. Individual users or applications can be prioritized above others using various class of service options - by port, Layer 2 priority (802.1p), or Layer 3 priority (type of service [ToS] or differentiated services code point [DSCP]). Intelligent broadcast and multicast storm control minimizes and contains the effect of these types of traffic on regular traffic. Internet Group Management Protocol (IGMP) snooping limits bandwidth-intensive video traffic to only the requestors without flooding all users. Incoming traffic can be policed, allowing you to control network access and traffic flow.

Other features of the Cisco SRW224P allow you to expand and grow your network of switches. Link aggregation allows multiple high-bandwidth trunks between switches to be set up. This also provides reliability, in that the system continues to operate if one of the links breaks. Spanning Tree Protocol (STP), Fast STP, and Multiple STP allow you to build a mesh of switches, increasing the availability of the system.

The rich features of the WebView management software include Simple Network Management Protocol (SNMP), Remote Monitoring (RMON), and HTTP management options, allowing you to flexibly integrate and manage these devices in your network.

Automatic load sensing in the power control circuitry automatically detects Power over Ethernet on connected devices before providing power. Power feeding of Ethernet is provided on the 10BASE-T/100BASE-TX ports, with maximum output power per port of up to 15.4W simultaneously on 12 ports. Alternatively, the switch can power all ports at a maximum of 7.5W per port. Each port has independent overload and short-circuit protection, with LED indicators for power status for each port.

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 mini Gigabit Interface Converter [mini-GBIC] ports)
- Switching capacity delivers 8.8 Gbps, nonblocking capacity
- WebView monitoring allows administrators to view the current status and configuration using their favorite web browser
- Port-based and 802.1Q-based VLANs support up to 128 VLANs
- Port trunking for up to four groups (with up to eight ports in a group) allows you to increase your bandwidth for each uplink or server connection
- Port configuration settings for link, speed, automatic medium dependent interface (MDI) and MDI crossover (MDI-X), flow control, and more
- Fully rack mountable using the included rack-mounting hardware
- Auto MDI/MDI-X per port allows for automatic cable detection
- MAC address table supports up to 8000 entries
- Optimal platform to support real-time applications such as voice and video, with features like IGMP snooping, multiple queues (four) with appropriate scheduling techniques, prioritization of traffic based on Layer 2/Layer 3 priority, and line rate forwarding mechanisms
- Secure control with SSL for HTTP interface
- User/network security via 802.1X (with RADIUS authentication) and MAC-based filtering
- Containment of storms - broadcast and multicast
- Expandability and availability increased across multiple switches using link aggregation
- SNMP and RMON management expand your visibility options

Specifications

Table 1 contains the specifications, package contents, and minimum requirements for the Cisco SRW224P 24-Port 10/100 + 2-Port Gigabit Switch.

Table 1. Specifications for the Cisco SRW224P 24-Port 10/100 + 2-Port Gigabit Switch: WebView/PoE

Specifications	
Ports	• 24 RJ-45 connectors for 10BASE-T and 100BASE-TX • 2 RJ-45 connectors for 10BASE-T/100BASE-TX/1000BASE-T with 2 shared Small Form-Factor Pluggable (SFP) slots • Console port • Auto MDI/MDI-X • Auto negotiate/manual setting
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	10/100 Link/Act, PoE, 2 Gig Link/Act, Speed, System
Performance	
Switching capacity	8.8 Gbps nonblocking
MAC table size	8000
Number of VLANs	128 active VLANs
Management	
Web user interface	Built-in web user interface for easy browser-based configuration (HTTP/HTTPS)
SNMP	SNMP versions 1 and 2c with support for traps
SNMP MIBs	• 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, and 9 only) • RFC2737 entity MIB, • RFC2618 RADIUS client MIB, private PoE MIB • RFC1215 traps
RMON	Embedded RMON software agent supports 4 RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis
Firmware upgrade	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	• SSL • SSL security for web user interface • Switch audit log • Dynamic Host Configuration Protocol (DHCP) client • BOOTP • Simple Network Time Protocol (SNTP) • Xmodem upgrade • Cable diagnostics • Ping • Traceroute
Security	
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/DSCP • Port • VLAN • EtherType
Availability	
Link aggregation	• Link aggregation using IEEE 802.3ad Link Aggregation Control Protocol (LACP) • Up to 8 ports in up to 4 groups
Storm control	Broadcast and multicast
Spanning Tree	IEEE 802.1d Spanning Tree, IEEE 802.1w Rapid Spanning Tree, Fast Linkover
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 (CoS)	• Port based • 802.1p VLAN priority based • IP precedence/ToS/DSCP based • IPv4 traffic class-based CoS • TCP/ User Datagram Protocol (UDP) port based • Differentiated Services (DiffServ) • Classification and re-marking ACLs
Rate limiting	Ingress policer
Layer 2	
VLAN	• Port-based and 802.1Q tag-based VLANs • Management VLAN
Head-of-line (HOL) blocking	HOL blocking prevention
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, 802.3af PoE
Environmental	
Dimensions W x H x D	16.93 x 1.75 x 13.78 in. (430 x 45 x 350 mm)
Unit weight	9.04 lb (4.1 kg)
Power	Internal switching power
Certification	FCC Part 15 Class A, CE Class A, UL, cUL, CE mark, CB
Operating temperature	32° to 122°F (0° to 50°C)
Storage temperature	-4° to 158°F (-20° to 70°C)
Operating humidity	10% to 90%
Storage humidity	10% to 95%
Package Contents	
• Cisco SRW224P 24-Port 10/100 + 2-Port Gigabit Switch • Power cord • Rack-mounting kit • CD with user guide in PDF format • Registration card • Console cable	
Minimum Requirements	

- Web-based utility: Microsoft Internet Explorer (version 5.5 or later)
- Category 5 Ethernet network cables
- Operating system: Windows 2000, XP, or later

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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