

Cisco SRW2016 16-Port Gigabit Switch: WebView Cisco Small Business Managed Switches

Secure, Reliable, Intelligent Switching for Small Businesses

Highlights

- 16 high-speed ports optimized for the network core or to support bandwidth-intensive applications
- Strong security protects network traffic to keep unauthorized users off the network
- Basic 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 SRW2016 16-Port Gigabit Switch: WebView



Product Overview

Growing businesses require cost-effective networking solutions that can scale to meet ever-changing business needs. The Cisco® SRW2016 16-Port Gigabit Switch (Figure 1) brings Gigabit speeds to your users and servers, while adding a new level of intelligence and security to the network infrastructure. The sixteen 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. Unauthorized access to the network and mission-critical data is a constant concern. The Cisco SRW2016 is able to secure the network through 802.1x port authentication. 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 SRW2016, voice data can be prioritized, helping ensure clear and reliable voice communications.

Enabling the advanced features of the Cisco SRW2016 further secures the integrity of your network. The WebView interface provides an intuitive, secure management interface, helping you better utilize the comprehensive feature set of the switch, for a better-optimized, more secure network.

Features

- Sixteen 10/100/1000 Gigabit Ethernet ports
- Two mini Gigabit Interface Converter (mini-GBIC) slots for fiber Gigabit Ethernet expansion
- 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 medium dependent interface (MDI) and MDI crossover (MDI-X) 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 link redundancy with Link Aggregation Control Protocol (LACP)
- Enhanced rate-limiting capabilities provide control, including back pressure to control the rate that data that 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 SRW2016 16-Port Gigabit Switch.

Table 1. Specifications for the Cisco SRW2016 16-Port Gigabit Switch: WebView

Specifications	
Standards	IEEE 802.3, 802.3u, 802.3ab, 802.3x, 802.1p, 802.1Q
Ports	Sixteen 10/100/1000 RJ-45 ports and 2 shared mini-GBIC slots
Cabling type	Category 5 Ethernet or better
LEDs	System, Link/Activity, Gigabit

Performance	
Switching capacity	32 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, and 9 only) • RFC 2618 RADIUS client MIB
RMON	Embedded RMON software agent supports four 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 • RADIUS • TACACS+ • Telnet client • 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 • Syslog
Security Features	
IEEE 802.1x	802.1X - RADIUS authentication; MD5 encryption
Access control	MAC-based access control lists (ACLs)
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 (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	<ul style="list-style-type: none"> • Portbased • 802.1p VLAN priority based • IP ToS/IP precedence based • IPv6 traffic class based • DiffServ • MAC address port security* • VLAN ID* • MAC address* • IP address* • Subnet mask* • Service type* • Protocol* • TCP/ User Datagram Protocol (UDP) port*
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	7.3 lb (3.311 kg)
Power	100 to 240V 0.5A
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	-40° to 158°F (-40° to 70°C)
Operating humidity	20% to 95% relative humidity, noncondensing
Storage humidity	5% to 90%, noncondensing
Package Contents	
<ul style="list-style-type: none"> • Cisco SRW2016 16-Port Gigabit Switch • AC power cord • Rack-mounting kit with brackets and hardware • CD with user guide in PDF format • Registration card • Console cable 	
Minimum Requirements	
<ul style="list-style-type: none"> • 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

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>.

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