

WS2000

Wireless Switch

WIRELESS SWITCH SYSTEM

Simple, cost-effective wired and wireless networking for small and medium enterprises

The WS2000 Wireless Switch is a powerful all-in-one solution that simplifies and reduces the costs of managing wired and wireless (802.11a/b/g) networks in smaller offices. The WS2000 integrates a router, gateway, firewall, Power-over-Ethernet (PoE) and more in a single device, eliminating the cost of purchasing and the complexity of managing multiple pieces of equipment. Easy to use and manage, the WS2000 delivers enterprise-class network security and performance for retail stores, warehouses, restaurants, healthcare clinics, satellite offices and more — without onsite IT expertise. And the ability to scale and upgrade to support new security, radio and other standards ensures you will not only meet your networking needs today, but can evolve and grow to meet your needs of tomorrow. The WS2000 — enterprise-class wireless and wired functionality, priced for the small to medium-sized business or branch office.

End-to-end enterprise-class security

Protect your network and data with end-to-end enterprise-class security with support for WPA2, an integrated AAA (authentication, authorization and accounting) server, Rogue Access Port/Point (AP) detection and more. WPA2 provides robust encryption and authentication mechanisms. The integrated AAA server ensures that only authorized users gain access to your network resources. User name and password are required to obtain network access. Services and policies are delivered and enforced based on user profile, ensuring the right level of network access is provided. The need to purchase and manage a separate RADIUS server to obtain this same functionality is eliminated. Rogue AP detection strengthens the protection on your network edge, immediately identifying and reporting any unauthorized access ports or points. And the ability to upgrade to support new security standards as they evolve ensures that the WS2000 provides enterprise-class security now...and in the future.

Robust local and remote management

The WS2000 offers management flexibility that eliminates the need and cost for onsite IT personnel. Less technical onsite staff can easily manage the wired and wireless network through an easy to use interface and centralized management and control of Access Ports. And secure remote management capabilities, including the ability to automatically update configuration and firmware files via DHCP, allow you to fully leverage the expertise in your network operations or data center.

Integration with Wired Networks

Tight integration with your wired network simplifies the extension of wired VLANs to the wireless LAN. Network access can be granted by geographic location, function, or application, ensuring that users only access authorized resources. Users can be reassigned to another VLAN instantly — without re-cabling. And network performance is improved by minimizing broadcast traffic, which maximizes network bandwidth and throughput.



FEATURES

BENEFITS

Switch-based architecture: Next-generation wireless LAN with centralized intelligence, upgradeable to support future standards

Unparalleled performance and functionality; simplified deployment/management, investment protection; low TCO

Supports next generation Access Ports: 802.11a/b/g compatibility

Lower cost; more functionality; broad, flexible radio support

Scalable: Each WS2000 supports up to 6 Access Ports

Fast, easy and cost-effective expansion

Enterprise-class security: 802.1X/EAP Kerberos, WPA-TKIP, WPA2 (802.11i)

Enterprise-class authentication and encryption; ensures privacy of data during transmission

Integrated secure gateway: Routing, DHCP, NAT, Stateful Packet Inspection Firewall and WAN Uplink (with PPPoE support)

Eliminates need to purchase and manage additional equipment; simplifies provisioning of network services

AAA integrated server: verifies identify of users and administrators

Eliminates the cost and need to manage a separate RADIUS server

Rogue AP detection

Identifies and reports unauthorized access ports and points

Site-to-site security: IPSec VPN (Virtual Private Network)

Cost-effective secure communications between branch offices and partners

Power-over-Ethernet (PoE) Support: Integrated 802.3af Ethernet Ports

Eliminates expense for power lines and outlets to power Access Ports and Points

Supports multiple management interfaces, secure shell telnet access and automatic update of firmware

Secure, remote anytime anywhere management and troubleshooting

Support for active/standby configuration

Ensures network availability if a WS2000 should go offline

Lower Total Cost of Ownership (TCO)

The WS2000 eliminates the complexities and reduces the costs associated with deploying, managing, securing, upgrading and scaling your wired and wireless network — delivering outstanding investment protection and a lower TCO. All over the world, companies turn to Symbol for world-class enterprise mobility solutions and Symbol Enterprise Mobility Services, which provide the comprehensive support and technical expertise you need to design, deploy and maintain the most successful mobility solutions. For more information on the WS2000, contact us at +1.800.722.6234 or +1.631.738.2400, or visit: www.symbol.com/ws2000

WS2000 v2.0 Specifications

Packet Forwarding

802.1D-1999 Ethernet Bridging; 802.11-.802.3 Bridging

Wireless Networking

Wireless LAN:	Supports 4 WLANs; Virtual AP - Multi-ESS/BSSID traffic segmentation; Pre-emptive Roaming; Automatic Load Balancing
VLAN Support:	Wireless LAN to VLAN mapping; auto assignment of VLANs based on user authentication
Access Port Radios:	Supports 1-6 802.11a/b/g Access Ports ; Automatic Access Port Adoption with ACLs
Radio & Frequency Management:	Dynamic Frequency Selection and Transmit Power Control (TPC); Country Code based RF Configuration
Network Security	
Packet Filtering:	L2/3/4 Stateful Packet Analysis; Network Address Translation (NAT)
Authentication Mechanisms:	Access Control Lists (ACLs); Pre-Shared Keys (PSK); 802.1x/EAP—Transport Layer Security (TLS), Tunneled Transport Layer Security (TTLS), Protected EAP (PEAP); Kerberos; Integrated AAA server
Transport Encryption:	WEP 40/128 (RC4), KeyGuard, WPA—TKIP, AES—CCMP; (802.11i/WPA2)
Key Exchange Management:	Extensible Authentication Protocol (EAP) Kerberos
Rogue AP Detection:	AP scanning on one or all channels

Optimized Wireless QoS

Voice Prioritization; wireless bandwidth management; Power Save Protocol (PSP) integration

Management

Command Line Interface (Serial, Telnet, SSH); Admin authentication via Radius server; Java Applet (HTTP, Secure HTTP); Syslog; Text-Based Configuration Files; Remote configuration and firmware update (via TFTP, FTP); automatic update of configuration and firmware via DHCP; SNMP v1/v2/v3; MIBs—MIB-II, Ping MIB, TraceRoute MIB, Symbol MIB

High Availability

Active standby configuration support

Physical Characteristics

Form Factor:	Standard 1RU
Dimensions:	1.75 in. H x 11.25 in. W x 8 in. D 44.5 mm H x 286 mm W x 203 mm D
Weight:	1.41 lb/0.64 kg
Physical Interfaces:	1 - RS232 serial console port 7 - 10/100 Ethernet ports (including 1 WAN uplink port), 4 Ports support 802.3af Power-over-Ethernet
MTBF:	>50,000 Hours

Power Requirements

AC Input Voltage:	100-250 VAC
Max AC Input Current:	3A@230 VAC
Max Power Consumption:	120 W
Input Frequency:	47 Hz to 63 Hz

User Environment

Operating Temperature:	32°F to 104°F/0°C to 40°C
Storage Temperature:	-40°F to 158°F/-40°C to 70°C
Operating Humidity:	5% - 95% (w/o condensation)
Storage Humidity:	5% - 95% (w/o condensation)
Operating Altitude:	50 ft. to 8,000 ft./16 m to 2,438 m
Storage Altitude:	50 ft. to 12,000 ft./16 m to 3,658 m

Regulatory

Safety Certifications:	FCC (Art.15, part B), Industry Canada, CE, VCCI, C-Tick, BSMI
EMI Compliance:	UL 1950, cUL (Canada), VDE GS, DENAN (Japan), CB Cert

Part Numbers

WS-2000-SME-WW
WS-2000-IC-ABG-WW (WS2000 and 1 AP300 Solution)
WS-2000-IC-WW (WS2000 and 1 AP100 Solution)

About Symbol Technologies

Symbol Technologies, Inc., The Enterprise Mobility Company™, is a recognized worldwide leader in enterprise mobility, delivering products and solutions that capture, move and manage information in real time to and from the point of business activity. Symbol enterprise mobility solutions integrate advanced data capture products, radio frequency identification technology, mobile computing platforms, wireless infrastructure, mobility software and world-class services programs under the Symbol Enterprise Mobility Services brand. Symbol enterprise mobility products and solutions are proven to increase workforce productivity, reduce operating costs, drive operational efficiencies and realize competitive advantages for the world's leading companies. More information is available at www.symbol.com



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