



WS2000

All-in-one wired and wireless switch for small to medium-sized business and branch offices



FEATURES

Switch-based centralized upgradeable architecture

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

802.11a/b/g compatibility

Lower cost; broad, flexible radio support

Wi-Fi Multimedia (WMM) extensions support

Enables voice/video applications with wired QoS extension support

SIP Call Admission Control

Controls the number of active SIP sessions that are initiated by a wireless VoIP phone

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

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

Simple, cost-effective wired and wireless networking for enterprise branch offices

The WS2000 Wireless Switch is a powerful all-in-one solution that simplifies and helps reduce the costs of managing wired and wireless (802.11a/b/g) networks in enterprise branch offices. The integrated router, gateway, firewall, Power-over-Ethernet (PoE) and more eliminate the cost of purchasing and the complexity of managing multiple pieces of equipment. Support for Wi-Fi Multimedia extensions (WMM) and SIP Call Admission Control enables the WS2000 to provide peak performance for even the most demanding applications, including voice and video. The ability to easily and cost-effectively scale to meet growing needs, as well as upgrade to support new security, radio and other standards provides the assurance that the WS2000 will meet your needs today and tomorrow. The WS2000 — enterprise-class networking functionality, priced for the small to medium-sized business or enterprise branch office.

End-to-end enterprise-class security

End-to-end enterprise-class security keeps your network and data secure with support for WPA2, an integrated AAA (authentication, authorization and accounting) server for authenticating users, rogue access point/detection, stateful packet inspection firewall, IP filtering and more. Your network resources are protected — only authorized users are granted access to your network. With the WS2000, your network perimeter and your resources are more secure.

Easy to manage and deploy

The WS2000 offers a level of management simplicity and flexibility that eliminates the need and cost for onsite IT personnel to manage the wireless networks. Fewer technical onsite staff in restaurants, retail stores, warehouses and healthcare clinics can easily manage the wired and wireless network through an intuitive web-based interface and centralized management and control of access ports. For larger corporations deploying the WS2000 in branch offices, secure remote management capabilities (with SSH and SNMP v3 support) and auto deployment capabilities (with DHCP options) enable staff in the centralized network operations or data center to easily control and manage devices anywhere in the world. Implementation is fast and easy: the plug-and-play WS2000 automatically detects and configures access ports with the best channel. And tight integration with the wired network simplifies the extension of wired virtual LANs (VLANs), improving network performance as well as providing added protection against unauthorized access.

Ideal for hotspots

The WS2000 is uniquely suited for hotspots, enabling hotels, airports, lounges, restaurants and more to offer visitors convenient anywhere anytime access to the Internet, email, and corporate applications. Support for authentication and Radius accounting enables organizations and service providers to offer secure wireless public access, either as a complimentary service, or an additional revenue stream.

SPECIFICATION SHEET

WS2000

All-in-one wired and wireless switch for small to medium businesses and branch offices

Active/standby configuration

Robust network redundancy through multiple links

AAA integrated server: verifies identity of users and administrators

Eliminates the cost/need for a separate RADIUS server

Integrated secure gateway: routing, DHCP, NAT, Stateful Packet Inspection Firewall and WAN uplink (with PPPoE)

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

IP Filtering

Provides flexibility in defining access policies

Comprehensive features to enable public hot spots

Provides secure public access — complimentary or service-based

Rogue AP detection

Identifies and reports unauthorized access ports and points

IPSec VPN

Cost-effective secure point-to-point communications

802.3af Power-over-Ethernet (PoE) support:

Eliminates need and expense to power access ports and points

Lower Total Cost of Ownership (TCO)

The WS2000 reduces the complexities and costs associated with deploying, managing, securing, upgrading and scaling your wired and wireless network — delivering outstanding investment protection and a lower TCO. Motorola Enterprise

Mobility Services 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 motorola.com/ws2000

WS2000 Series Specifications

Packet Forwarding	
802.1D-1999 Ethernet Bridging; 802.11-802.3 Bridging	
Wireless Networking	
Wireless LAN:	Supports 8 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; Auto Channel Selection capability
Radio and 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), Tunnelled Transport Layer Security (TTLS), Protected EAP (PEAP); Kerberos; Integrated AAA server with native support for PEAP and TTLS
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; Motorola mobile client assist
IP Filtering:	Configurable incoming and outgoing IP filtering policies on packets within the same subnet/WLAN and between wired and wireless hosts
Optimized Wireless QoS	
Voice Prioritization; wireless bandwidth management; Power Save Protocol (PSP) integration; Wi-Fi Multimedia Extensions (WMM) and SIP Call Admission Control	
Management	
ECommand 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 options; SNMP v1/v2/v3; MIBs—MIB-II, Ping MIB, TraceRoute MIB, Motorola 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 CF Card (for storage)
MTBF:	>50,000 Hours
RoHS Compliant:	Yes
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 Temp:	32°F to 104°F/0°C to 40°C
Storage Temp:	-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:	UL, cUL (60950-1), EN60950-1, TUV/GS
EMI Compliance:	FCC (Part 15 Subpart B), VCCI, EN 55024, EN 61000-3-2, EN 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
Part Numbers	
WS-2000-SME-WWR	
WS-2000-1C-ABG-WWR (WS2000 and 1 AP300 (802.11a/b/g) bundle)	
WS-2000-2C-ABG-WWR (WS2000 and 2 AP300 (802.11a/b/g) bundle)	
WS-2000-2C-BG-WWR (WS2000 and 2 AP300 (802.11b/g) bundle)	



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