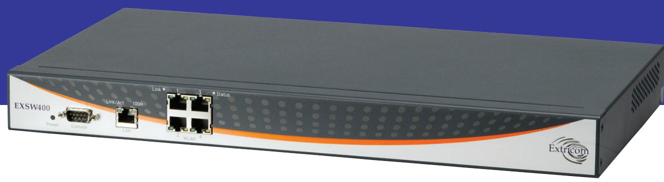
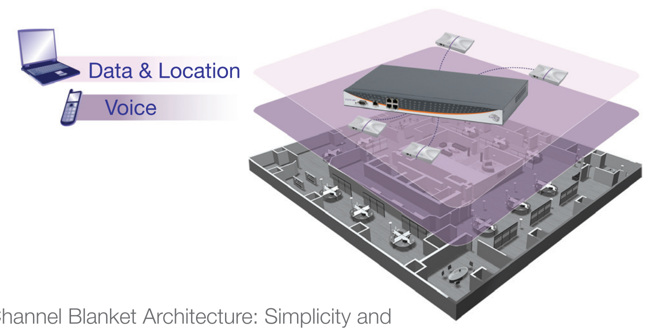


# EXSW400 Wireless LAN Switch

The EXSW400 Wireless LAN Switch is a central component of Extricom's award-winning WLAN system, and the key building block for a new generation of business-class wireless infrastructure that scales from a single office to multi-building corporate campuses. The EXSW400 provides one uplink Fast Ethernet port to connect to the wired LAN, and four Fast Ethernet ports with Power over Ethernet (PoE) to attach Extricom UltraThin Access Points.




Channel Blanket Architecture: Simplicity and Performance without Compromise

The EXSW400 delivers voice, data, video, and location services with a robust and mobile connection to any Wi-Fi client, in any environment. The Extricom system reduces WLAN complexity, delivers high performance with predictable service, works seamlessly with existing wired network infrastructure, and future proofs your network for tomorrow's multi-service demands.

The EXSW400 is an IEEE 802.11-compliant solution which, combined with Extricom's unique Channel Blanket™ architecture, revolutionizes the Wi-Fi experience for both IT administrators and wireless users. Extricom WLAN systems simplify network design and maintenance, while also increasing system performance, capacity, and stability, and Quality of Service for multimedia applications.

## The Extricom Difference

| | |
|---|---|
| Simpler Design and Maintenance | The Extricom WLAN System reduces the complexity of RF surveys and cell planning. Extricom's UltraThin APs are placed where needed for best coverage and do not require configuration. All APs transmit and receive on the same channel in the Channel Blanket architecture, and the Extricom WLAN Switch coordinates the connected APs to eliminate co-channel interference. |
| Superior Wireless Connectivity | With every AP on the same channel, the Extricom switch receives multiple copies of each client transmission and chooses the best AP to transmit the reply, making the system highly resilient to RF interference and ensuring the highest possible throughput. |
| Continuous Mobility | Client devices move anywhere in the Extricom Channel Blanket without experiencing inter-AP handoffs, re-authentication, or latency, enabling seamless mobility for enterprise wireless LANs. |
| Centralized Access | Extricom switches coordinate media access for all of the connected APs and eliminate co-channel interference, which leads to higher performance and more stable operation under heavy load. |
| Centralized Power | The Extricom WLAN switch supplies power for all the connected Extricom UltraThin APs through built-in PoE, eliminating the need for AC power at the APs. The EXSW400 supports up to four Extricom 2-radio UltraThin APs with a single standard 802.3af POE connection. |
| Service Flexibility | Extricom's multi-layer, multi-channel architecture with overlapping Channel Blankets provides physical segregation of wireless clients and applications. Voice clients can be isolated on one channel, data clients use another, and legacy 802.11b clients can be separated from newer 802.11n clients. This flexible approach translates into more stable and predictable wireless LAN performance and the ability to offer service level guarantees. |
| TrueReuse | TrueReuse™, an Extricom patented technology, increases capacity by permitting simultaneous transmission on the same channel within the Channel Blanket. |

Extricom

## EXSW400 Wireless LAN Switch Specifications

| Standards Compliance | |
|---|---|
| WLAN | IEEE 802.11a/b/g/n*<br>IEEE 802.11i<br>IEEE 802.11d |
| Ethernet | IEEE 802.3x, full/half duplex<br>IEEE 802.1q, VLAN tagging<br>IEEE 802.3af Power over Ethernet |
| **Wireless Performance** | |
| Channels | Control up to two simultaneous WLAN Channel Blankets, regardless of band |
| Capacity | Configurable rate for each channel<br>802.11b: 1 to 11 Mbps<br>802.11g: 1 to 54 Mbps<br>802.11a: 6 to 54 Mbps |
| TrueReuse | Extricom exclusive: Increase aggregate bandwidth of a Wi-Fi channel by enabling denser re-use than cell planning, without co-channel interference |
| Roaming | Intra-switch - 0 mSec; Inter-switch < 50 mSec |
| **SSID & VLAN** | |
| SSID | Up to 16 ESSIDs per radio (channel blanket) |
| VLANs | 4096 Ethernet VLANs<br>SSID to VLAN mapping |
| **Management** | |
| User Interface | Secure Web-based GUI<br>Command Line Interface (CLI) |
| SNMP | Version 2c |
| Redundancy | Master-to-backup auto fallback |
| Captive Portal | Customizable web client captive portal |
| Upgrades | Firmware upgrade through Web/CLI |
| **Security** | |
| Encryption | 802.11i hardware-based encryption for:<br>WEP-64 and WEP-128<br>WPA-TKIP / AES (CCMP)<br>WPA2-TKIP / AES (CCMP) |
| Authentication | RADIUS (802.1x)<br>Captive portal authentication<br>WPA Pre-Shared Key (PSK), WPA2<br>EAP, TLS, TTLS, LEAP, PEAP, MD5 |
| Security policy | MAC Address-based ACL<br>Per ESSID/BSSID security configuration<br>Built-in wireless intrusion detection (IDS)<br>Captive portal walled garden<br>Per-user dynamic VLAN assignment |
| **Interfaces** | |
| WLAN Ports (to APs) | Four (4) Fast Ethernet ports with IEEE 802.3af PoE (software enabled) |
| LAN Ports (Uplink to Wired LAN) | One (1) 10/100 RJ45 Ethernet port |

| Physical Properties | | |
|---|---|---|
| Installation options | Rack mount (19" 1U) and desktop | |
| Dimensions (W x H x D) | 433 x 44 x 241mm | 17.0 x 1.7 x 9.5" |
| Weight | 2.8 kg | 6.2 lbs |
| LEDs | Power<br>LAN Activity<br>Activity on AP ports | |
| Power | 100-240V / 5A Max<br>PoE to WLAN ports: 15W per port | |
| **Environmental** | | |
| Operational | Temperature: 0°C to 45°C (32°F to 113°F)<br>Humidity: 0% to 90%, non-condensing | |
| Storage | Temperature: - 20°C to +70°C (-4°F to 158°F)<br>Humidity: 0% to 90%, non-condensing | |
| **Regulations Approval** | | |
| Safety | UL 60950-1<br>EN 60950-1<br>IEC 60950-1<br>ANATEL Resolution 238 | |
| EMC | FCC Part 15 Class B<br>EN 300386<br>VCCI Technical Requirements, V-3/2001.04<br>ANATEL Resolution 442 | |
| **Ordering Information** | | |
| EXSW400 | 4-Port Extricom Wireless LAN Switch | |

| Related Products | |
|---|---|
| EXSW800 | 8-Port Extricom Wireless LAN Switch |
| EXSW-1200 | 12-Port Extricom Wireless LAN Switch |
| EXSW-2400 | 24-Port Extricom Wireless LAN Switch |
| EXSW-1600 | 16-Port Extricom GbE Wireless LAN Switch |
| EXSW-800G | 8-Port Extricom GbE Wireless LAN Switch |
| EXRP-20 | 2-Radio UltraThin 802.11a/b/g Access Point |
| EXRP-20E | 2-Radio UltraThin 802.11a/b/g Access Point with Connectors for External Antennas |
| EXRP-30n | 3-Radio UltraThin 802.11a/b/g/n Access Point |
| EXNM-2000 | Extricom Wireless Network Management System |

Note: Information is subject to change without prior notice.
* 802.11n does not include frame-aggregation and block ACK feature; predicted throughput is under 50Mbps.