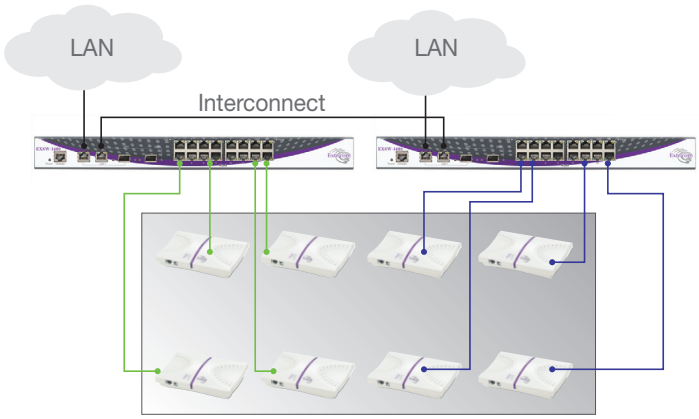
EXSW-1632C Wireless LAN Switch Cascade

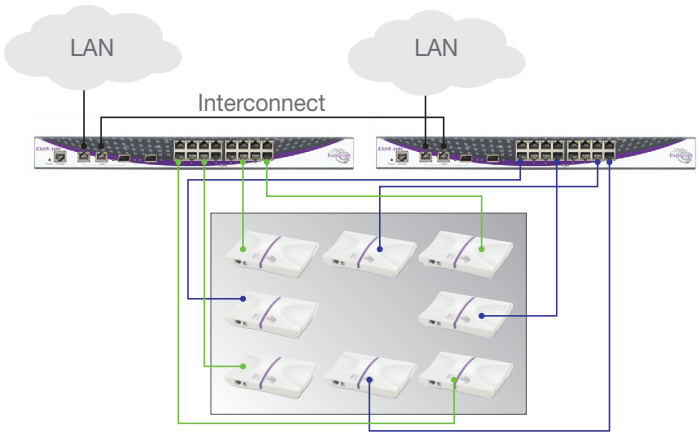
The Wi-Fi CERTIFIED™ n EXSW-1632C Wireless LAN Switch Cascade scales Extricom's Channel Blanket architecture by extending the continuous mobility zone to twice its previous size – an area covered by 32 Extricom UltraThin Access Points (APs). The Switch Cascade also provides a fully redundant wireless LAN infrastructure to eliminate a single point of failure and support high-availability scenarios.

The EXSW-1632C is a WLAN system formed from two conjoined EXSW-1600C switches, each of which is user-configurable as the primary or secondary switch*. Each component switch provides two uplink or interconnect Gigabit Ethernet ports, and sixteen Gigabit Ethernet ports with Power over Ethernet (PoE) to attach any of Extricom's APs. The Switch Cascade system can support up to 32 Extricom APs, enabling up to four independent coverage blankets to be configured from the same physical infrastructure. Component switches may be positioned several hundred metres apart for deployment flexibility. The EXSW-1632C can alternatively be configured in a fully redundant, high availability mode to ensure continuous network access and full performance even if there is an AP or switch failure.

The EXSW-1632C is compatible with all Extricom APs and interoperable with any IEEE 802.11a/b/g/n wireless client. Switch Cascade topology is also available as an upgrade to existing Extricom EXSW-1600 deployments through a firmware upgrade and purchase of an EXSW-1600C switch.



Doubled Channel Blanket Area



High Availability Scenario

The Extricom Difference

Continuous Mobility	Client devices move anywhere within a vastly expanded Extricom Channel Blanket without experiencing inter-AP handoffs, re-authentication or latency.
High Availability	Provides complete physical redundancy from a single edge switch solution, ensuring no single point of failure while allowing wireless clients to leverage both component switches.
Scalability	Provides wireless coverage for facilities with a large geographical footprint, such as sports stadiums or a large logistics center, from a single edge switch solution.
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.
Designed for 802.11n	The 802.11n Draft 2 compliant EXSW-1632C delivers a smooth migration path to 802.11n and enables simple, practical 801.11n deployment for enterprises.
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 switches supply power for all the connected Extricom UltraThin APs through built-in PoE. The EXSW-1632C supports up to 32 Extricom 4-radio UltraThin APs.
TrueReuse	TrueReuse™, an Extricom patented technology, increases capacity by permitting simultaneous transmission on the same channel within the Channel Blanket.

*Individual component switches of the EXSW-1632C system cannot be configured as standalone devices.

Extricom

EXSW-1632C Wireless LAN Switch Specifications

Standards Compliance	
WLAN	IEEE 802.11a/b/g/n IEEE 802.11i IEEE 802.11d
Ethernet	IEEE 802.3x, full duplex IEEE 802.1q, VLAN tagging IEEE 802.3af Power over Ethernet
Wireless Performance	
Channels	Control up to four simultaneous WLAN Channel Blankets, regardless of band
Capacity	Configurable rate for each channel 802.11b: 1 to 11 Mbps 802.11g/a: 1 to 54 Mbps 802.11n: 6 to 300 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 8 ESSIDs per (radio) channel blanket
VLANs	4096 Ethernet VLANs SSID to VLAN mapping
Management	
User Interface	Secure Web-based GUI* 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
Security	
Encryption	802.11i hardware-based encryption for: WEP-64 and WEP-128 WPA-TKIP / AES (CCMP) WPA2-TKIP / AES (CCMP)
Authentication	RADIUS (802.1x) Captive portal authentication WPA Pre-Shared Key (PSK), WPA2 EAP, TLS, TTLS, LEAP, PEAP, MD5, MAC
Security policy	MAC Address-based ACL Per ESSID/BSSID security configuration Built-in wireless intrusion detection (IDS) Captive portal walled garden Per-user dynamic VLAN assignment
Rogue AP	Built-in, dedicated dual-band scanning using one channel blanket
Interfaces	
WLAN Ports (to APs)	Thirty-two (32) Gigabit Ethernet ports with IEEE 802.3af PoE (software enabled)
LAN Ports (Uplink to Wired LAN)	Two (2) Gigabit Ethernet RJ45/SFP Combo Ports per component switch

Physical Properties		
Installation options	Rack mount (19" 1U) and desktop	
Dimensions per component switch (W x H x D)	441 x 44 x 371mm	17.4 x 1.7 x 14.6"
Weight per component switch	3.6 kg	7.9 lbs
LEDs	Power LAN Activity Activity on AP ports	
Power	100-240V / 5A Max PoE to WLAN ports: 15W per port	
Environmental		
Operational	Temperature: 0°C to 45°C (32°F to 113°F) Humidity: 0% to 90%, non-condensing	
Storage	Temperature: - 20°C to +70°C (-4°F to 158°F) Humidity: 0% to 90%, non-condensing	
Ordering Information		
EXSW-1632C	32-Port Extricom GbE Wireless LAN Switch Cascade	
Regulations Approval		
Safety	UL 60950-1 EN 60950-1 IEC 60950-1	
EMC	FCC Part 15 Class B EN 300386 VCCI Technical Requirements, V-3/2001.04	

Related Products	
EXSW400	4-Port Extricom Wireless LAN Switch
EXSW800	8-Port Extricom Wireless LAN Switch
EXSW-1200	12-Port Extricom Wireless LAN Switch
EXSW-2400	24-Port Extricom Wireless LAN Switch
EXSW-800G	8-Port Extricom GbE Wireless LAN Switch
EXSW-1600	16-Port Extricom GbE Wireless LAN Switch
EXRP-20	2-Radio UltraThin 802.11a/b/g Access Point
EXRP-40	4-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-40E	4-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
EXRP-40En	4-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.

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