



# Wireless that Works

Extricom Wireless LAN System

# Wireless that Supports Today's Applications... and Tomorrow's

Extricom's award-winning Wireless LAN system is a new generation of business-class wireless infrastructure that scales from a single office to multi-building corporate campuses. Developed to tackle real-world business challenges, the Extricom WLAN has established its reputation by providing reliable service where other WLAN systems have failed to perform to expectations, in some of the harshest environments possible.

- **Simpler Design and Maintenance**
- **Better RF Coverage**
- **Predictable Throughput**
- **Continuous Mobility**
- **The Architecture Built for 802.11n**

## The Channel Blanket Difference

The Extricom WLAN System makes it possible to leverage any wireless application anywhere in the enterprise. Extricom's unique Channel Blanket architecture simplifies Access Points (APs) and places the wireless intelligence in a central switch that coordinates the actions of all of the APs.

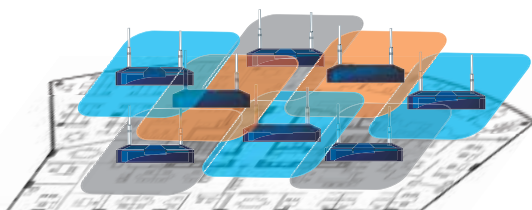
Extricom's UltraThin APs are configured to use the same channel, which eliminates the complexities of cell planning and simplifies wireless deployments. The Channel Blanket architecture enables each radio channel to be used everywhere, from every AP, to create large blankets of continuous coverage.

In this unique architecture, multiple APs provide coverage and receive each client transmission. The Extricom switch automatically replies from the AP with the best RF signal strength. This additional system level diversity provides the best RF coverage and allows the wireless clients to communicate at the highest possible data rate all the time.

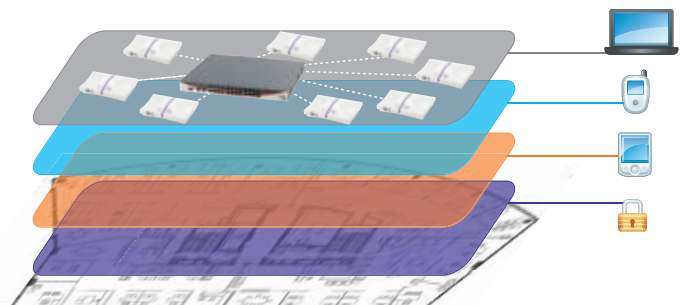
Extricom delivers superior mobility too. Wireless clients associate with the Extricom switch and do not need to scan, re-associate or re-authenticate as they move – there is no AP-to-AP hand-off within the blanket. This translates to continuous mobility and a high performance wireless connection anywhere inside the Channel Blanket.

Extricom APs include multiple radios, allowing additional Channel Blankets to be layered when more capacity or multiple services are needed, and providing an unprecedented level of application control. Multiple services, applications and client types can operate on different blankets, enabling physical isolation throughout the entire system and delivering the appropriate quality of service for each.

Extricom's Channel Blanket architecture enhances all aspects of wireless performance – coverage, throughput, capacity, QoS and mobility.



Cell-based WLAN Architecture



Channel Blanket Architecture

# Is Your WLAN Ready for the Real World?

## Making 802.11n Work for the Enterprise

Extricom WLAN is optimized for the new IEEE 802.11n standard. Extricom delivers better deployment of 11n systems, better RF coverage, a smooth migration from legacy Wi-Fi to 802.11n, and full performance of Draft 2 802.11n today, without the need to redesign the wired network infrastructure.

The underlying MIMO technology behind 802.11n improves range and coverage by increasing diversity at the **device** level – additional antennas and multiple streams of data. With Channel Blanket architecture, Extricom adds diversity at the **system** level – all APs are on the same channel and this provides multiple opportunities to receive client transmissions. Combining the two approaches results in a powerful solution that delivers the best coverage of any enterprise WLAN solution.

Conventional WLANs have trouble dealing with the unpredictable coverage patterns of 802.11n APs, making it difficult to design a cellular WLAN with minimal cell overlap. Channel Blanket architecture leverages overlapping coverage from adjacent APs, making Extricom 802.11n much simpler to deploy.

Extricom's four-radio UltraThin APs are available with two 802.11 a/b/g radios and two 802.11n radios. This makes it possible to support a full speed 802.11n Channel Blanket in the 2.4 band, a legacy 802.11b/g blanket, a 5 GHz 802.11n blanket, and a legacy 802.11a blanket... all from the same physical AP. The Extricom system enables a single integrated deployment that supports all combinations of bands, modes, clients, and applications, without compromising performance.

## The Extricom System in Action

Whether to increase capacity, deploy mobile applications, or support unexpected business requirements, Extricom's customers can attest to the simplicity, stability and performance that are hallmarks of Extricom's Channel Blanket architecture.

### Education

Extricom's WLAN infrastructure delivers the coverage, capacity, and performance needed by schools worldwide.



### Healthcare

Extricom WLAN mobilizes patient care, allowing caregivers to make quicker, better informed decisions.

### Warehousing/Manufacturing

Difficult RF environments and challenging coverage requirements of warehouses and factories are not an obstacle for the Extricom WLAN.

### Hospitality

Extricom WLAN transforms the hospitality experience, giving guests wireless access anywhere on the premises.

## How Channel Blanket Architecture Works

The Extricom Wireless LAN is built around two basic components: a WLAN Switch and a set of connected UltraThin APs. The Extricom system is a centralized WLAN architecture, in which the switch coordinates access to the wireless medium for all of the APs within a blanket, eliminating co-channel interference entirely.

In this architecture, the wireless clients associate directly with the switch rather than individual APs, and the entire Channel Blanket coverage area (up to 32 APs) appears to be provided by a single 802.11 AP. This greatly simplifies Wi-Fi client behavior and leads to improved performance and stable operation, even at very high traffic levels.

## Product Line

The Extricom WLAN System transforms Wi-Fi from a "best effort" technology to a guaranteed-performance solution. With predictable service levels, continuous mobility, and field-proven adaptability, the Extricom WLAN product line fully supports your applications and business objectives, whatever they may be.

The central component of the Extricom product line is the 802.11-compliant EXSW Switch family. Extricom switches are designed to scale to any size of enterprise from the complex, multi-application environment of a large university to the simple internet access needs of a branch office.

Complementing the switches are a range of high-bandwidth UltraThin APs with multiple 802.11 a/b/g/n radios. The APs enable simple, plug-and-play deployments, offer easy maintenance, and are powered by environmentally friendly standard PoE.

At the heart of an Extricom deployment is the EXNM-2000, a comprehensive network management system that allows any size of Extricom WLAN to be centrally managed from a single interface.

