



ACS AND THE WIRELESS SOLUTION

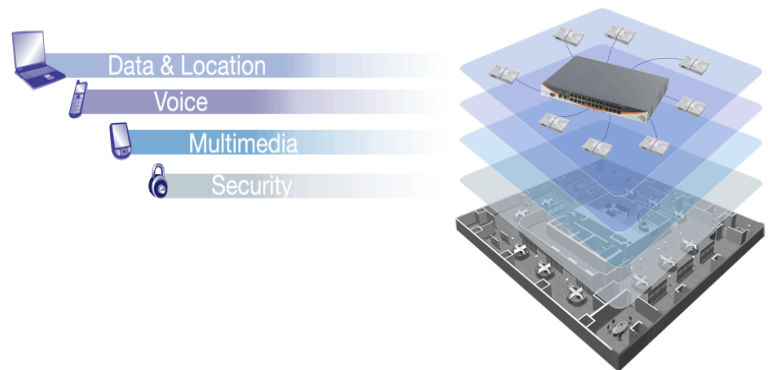
Partnered with Extricom and as their sole UK distributor, acs can supply and install the entire family of wireless networking products, services and solutions to a multitude of different industries. We are revolutionising the Wi-Fi industry, making the all-wireless enterprise a reality.

OVERVIEW

The Extricom WLAN product family is purpose-built to deliver robust, reliable connectivity. Extricom innovation makes the All-Wireless Enterprise possible by delivering voice (VoWLAN), data, video, and location services with an always-on, consistent, and mobile Wi-Fi connection to any client, in any environment.

Extricom WLAN means choice without compromise: supporting multiple and diverse applications from a single infrastructure at maximum performance. Extricom's deployment simplicity and operational flexibility means the investment you make to achieve today's goals will continue to deliver results throughout the system's life.

Powered by Channel Blanket technology, Extricom provides the vendor-agnostic building block you need to deploy whatever your business requires. Extricom WLAN is an IEEE 802.11-compliant solution unlike any other before it, revolutionizing the Wi-Fi experience for both IT administrators and users.



In summary, Extricom's technological breakthroughs accomplish what has not been possible before: radically cut the complexity of WLAN, while significantly increase performance in all critical areas: coverage, capacity, mobility, and Quality of Service.

The award-winning Extricom Interference-Free Wireless LAN System incorporates multiple breakthrough innovations in a system that raises the bar for WLAN performance, flexibility, and ease of ownership.

Groundbreaking architectural thinking gives you a solution that is fully IEEE 802.11-compliant, but changes all of the paradigms about the Wi-Fi experience. In short, Extricom enables the All-Wireless Enterprise today. Voice (VoWLAN), data, and video, and location services are delivered with an always-on, robust and mobile Wi-Fi connection to any client, in any environment. The Interference-Free WLAN System is purpose-built to slash wireless complexity and future-proof your network for tomorrow's multi-service demands.

Our customers include healthcare providers, schools, hotels, universities, municipal governments, and industrial enterprises. Whatever their strategic wireless need, all of our clients have discovered the ease of ownership and uncompromising performance that are the hallmarks of Extricom technology.

Contact acs today for find out how you could benefit from the Extricom revolution: 01908 366390



INTERFERENCE FREE ARCHITECTURE

The Language of Limitations

The Wireless LAN industry has developed an entire vocabulary to express the limitations of traditional WLAN: edge users, co-channel interference, hand-off delay, jitter, hidden nodes, mixed mode impact are just some of the terms to describe the problems.

The 802.11 wireless standard is *constrained* by a scarcity of channels, client-centric portability (rather than mobility), and unreliable bandwidth. But what really *limits* WLAN is the way it has been implemented to date.

The traditional cell-based WLAN topology is fundamentally challenged by its inability to adjust to channelization issues, delay-plagued AP-to-AP handoffs, and the unpredictability of system bandwidth. These problems are multiplied when different traffic types (voice and data) contend for the same airspace.

The end result is a system that forces you to accept trade-offs between coverage, capacity, mobility, and security. And these trade-offs will only get worse in an era of 802.11n. But trade-offs that were once acceptable when WLAN was only peripheral to your networking strategy are no longer acceptable when Wi-Fi becomes a critical component to business success.

Going Beyond the Limits

Guaranteed performance. Seamless mobility and security. Easy to own and scale. Complete coverage and maximum capacity. These are just some of the words that describe Extricom enterprise WLAN. Extricom has eliminated all the traditional performance trade-offs by rethinking the basics of how wireless clients and the WLAN communicate with each other. In other words, it's about a smarter deployment of the 802.11 standard, powered by new technology.

The Extricom solution is based on a fully centralized WLAN architecture, in which the switch makes all of the decisions for packet delivery on the wireless network. In this configuration, the APs simply function as radios, with no software, storage capability, MAC or IP address.

Even the basics of connecting are different: clients associate directly with the switch, not with the AP. The AP acts as an "RF conduit" to rapidly funnel traffic between the clients and the switch. In essence, the Extricom architecture has centralized the 802.11 logic in the switch, while distributing only the wireless electronics in the APs.

The Channel Blanket Difference

Centralization of the Wi-Fi environment enables enterprises to deploy 802.11a/b/g/n channels at every AP, creating multiple overlapping "Channel Blankets" that leverage each of the radios in the multi-radio UltraThin AP. Each channel's bandwidth is delivered across the blanket's service area (i.e. the combined coverage of all APs connected to the switch), with interference-free operation and consistent capacity throughout.

As the Wi-Fi client moves, different APs will be in the best position to serve it at different times. The switch always chooses the best uplink and downlink path to serve the client. While this is going on "behind the scenes," the client never experiences an AP-to-AP handoff (i.e. de-association and re-association), resulting in seamless mobility.

And with the inter-AP handoffs eliminated, the mobility problem of "sticky" clients goes away. Your organization now has the flexibility to choose any mix of clients, with the confidence that they will all operate with consistent behavior on the same network.

Within each Channel Blanket, the switch avoids co-channel interference by permitting multiple APs to simultaneously transmit on the same channel but only if they won't interfere with each other.

At the same time, the diversity receiver inherent in the channel blanket means that the communications link is rock-solid, virtually eliminating the problem of frequent disconnections common in all other systems. No other system can provide the link robustness of Extricom, ensuring that Wi-Fi communications succeed even in the toughest of environments.

One Infrastructure, Many Uses

What distinguishes Extricom from all other WLAN solutions on the market is its ability to enable *multiple* blankets from the *same* infrastructure. The system is therefore unique in combining multi-channel capacity with channel blanket mobility and robustness. This makes an Extricom WLAN the most operationally flexible system in the market, and has profound implications for the All Wireless Enterprise.

The ultimate challenge to Enterprise WLAN is how to support multiple applications with conflicting system requirements, such as voice and data. Extricom has resolved this problem with an elegant simplicity: separate the applications on different Channel Blankets. The result is the only integrated system that delivers predictable grade of service, by enabling different applications to operate in parallel, without contention, on the same physical infrastructure.

In addition, the multiple concurrent Channel Blanket capability makes Extricom the only solution that can support both 802.11n and legacy 802.11a/b/g *at full performance* and without necessitating a radical cutover from what you have today.



FEATURES AND BENEFITS

The Extricom WLAN System provides many unique innovations and market firsts.

GUARANTEED PERFORMANCE

- Guaranteed Service Level** Unlike all other WLANs, coverage and capacity are independent in the Extricom system. This enables the industry's only guarantee of connection rate and bandwidth.
- Wi-Fi Collaboration™ - Uplink Diversity** With all APs able to receive on the same channel, the Extricom WLAN provides uplink path diversity for client transmissions, making the system effectively self-healing and highly resistant to RF instabilities and outside interference.

SURPRISING SIMPLICITY

- No Cell Planning** Extricom's APs are deployed wherever needed with no RF cell planning and no RF constraints limiting your implementation choices.
- Zero Configuration AP** An Extricom AP requires no configuration and is completely interchangeable with any other AP, for true plug-and-play installation.
- Central Power Supply** The Extricom Wireless Switch provides Power over Ethernet (PoE) to all APs, and Extricom 802.11n APs are the only APs on the market that achieve full performance with standard 802.3af PoE.

TOTAL MOBILITY

- Zero-Handoff VoWLAN Mobility** Wireless clients move within the Channel Blanket without experiencing inter-AP handoffs, making zero-latency mobility and "always-connected" voice a reality for WLAN.
- Security while Mobile** There are no AP-to-AP handoffs within the Channel Blanket, so any Wi-Fi security session, including WPA, on any Wi-Fi device will remain uninterrupted while mobile.

TRIPLE PLAY WITHOUT TRADE-OFFS

- Multi-Layer WLAN** A single set of APs powers multiple high-connectivity, overlapping Channel Blankets, multiplying aggregate capacity. And Channel Blankets can operate on any combination of channels and modes.
- Predictable Quality of Service for Converged Applications** Separate Channel Blankets offer the unique ability to guarantee Quality of Service by physically segregating different user types, traffic and roles onto different channels.
- TrueReuse Bandwidth - Optimized Frequency Reuse** TrueReuse, an Extricom patented technology, takes the concept of frequency reuse and elevates it to a new level of real-world usability. Compared to cell planning, it multiplies per-channel bandwidth and capacity by permitting frequency reuse at higher density while avoiding co-channel interference.
- Best-of-Breed Security** The Extricom Wireless Switch combines 802.11i security with the performance of hardware-based processing, ensuring that even the most stringent security does not impact wireless operation.



EXTRICOM INDUSTRY SOLUTIONS

Extricom customers include healthcare providers, schools, hotels, universities, municipal governments, and industrial enterprises. Whatever their strategic wireless need, all of our clients have discovered the ease of ownership and uncompromising performance that are the hallmarks of Extricom technology.

Primary/Secondary Education

Access to information technology will be one of the most critical aspects of 21st Century primary / secondary education. Extricom WLAN is key to enabling this vital connection.

Higher Education

Universities worldwide are looking for ways to increase student access. Extricom WLAN delivers the capacity and performance large institutions need to expand technology-based learning.

Warehousing/Logistics

Wireless technology has revolutionized the warehousing and logistics operations environment. Extricom WLAN accelerates productivity and profitability gains even further by enabling seamless application mobility everywhere.

Healthcare

Information Technology has revolutionized medicine, from speeding up test results to realizing cost efficiencies. Extricom WLAN brings applications right to the patient's bedside.

Retail

Access to real-time business data is a critical part of any Retail business's operations. Extricom WLAN on the shop floor provides the competitive edge that means the difference between success and failure.

Manufacturing

A harsh environment requires wireless that is up to the job. The Extricom WLAN is unfazed by the challenge of enabling mobility in non-traditional work sites.

Hospitality/Entertainment

Providing Wi-Fi everywhere on hotel grounds was once a high-tech dream, but today is an industry reality. Extricom WLAN transforms not just the guest experience, but the entire operation.

Government

e-Government revolutionizes how citizens receive public services. Extricom WLAN plays a key role in providing direct access to government resources and streamlining operations.

In short, Extricom enables the All-Wireless Enterprise today. Voice (VoWLAN), data, and video, and location services are delivered with an always-on, robust and mobile Wi-Fi connection to any client, in any environment. The Interference-Free™ WLAN System is purpose-built to slash wireless complexity and future-proof your network for tomorrow's multi-service demands.

Contact acs today for find out how you could benefit from the Extricom revolution: 01908 366390