



Motorola SMART Branch

Easy, cost-effective 802.11n wireless networking for branch offices





Deliver easy and affordable 802.11n business critical voice and data to one branch office or thousands... with Motorola's SMART Branch solutions.

Motorola's SMART Branch is a portfolio of wireless LAN, management and complementary products that thoroughly change the economics of 802.11n networking. Ease-of-use, rich integrated features and reasonable pricing bring a new level of affordability to 802.11n networking, enabling fast and simple deployment, always-on and secure wireless connectivity and immediate and effective expert support in all your branch locations.

The challenge: cost of wireless in the branch office

Wireless networking is delivering powerful benefits in today's enterprises, with best-in-class companies realizing an average 40 percent increase in employee productivity and a 35 percent improvement in customer satisfaction.¹ With the ratification of the 802.11n standard, companies are embracing 802.11n wireless networks for their substantial performance increase — up to six times the bandwidth of today's wireless LANs. But for companies with distributed locations, deploying and maintaining wireless networks can be expensive — and supporting volumes of remote users can potentially overwhelm IT resources and operational budgets.

The solution: Motorola SMART Branch — affordable 802.11n wireless networking

Regardless of whether your branches are small or large, whether you have just a few or thousands of remote locations, or whether they are located locally, nationally or internationally, Motorola's SMART Branch alleviates the complexities and the high cost of 802.11n wireless networking. How? With lower pricing, more powerful and multipurpose access points, more performance without POE+ upgrades, virtual plug-and-play installation, self-tuning and optimization, and a multitude of key networking and security features that come standard in a series of controllers designed for any size branch.

Motorola puts the 'smarts' right into the network with SMART RF to optimize and heal — automatically. And since the SMART Branch solution includes a suite of remote helpdesk features that are enabled by multi-purpose access points, when a network issue arises, IT has the visibility required to analyze and resolve issues in the remote branch without dispatching a technician — providing the equivalent of an IT expert in every site.

The result? Deployments are fast and simple. Users are always-on and secure. Expert support is immediate and effective. And the typical operational costs associated with delivering headquarters-grade wireless services in branch offices is significantly reduced.

Fast and simple to deploy

With Motorola SMART Branch, deployment couldn't be easier. You can remotely design and configure a site, create the bill of materials and have the infrastructure drop shipped directly to the branch office. There is no need to receive, stage and re-ship materials, greatly simplifying the logistics of the staging process. Plug-and-play installation and self-optimization allow branches to virtually come up by themselves — without requiring costly on-site wireless technicians. Remote configuration is a snap — the integrated, easy-to-use management system provides a single centralized interface for remote control over all security and networking services. And since all the wired and wireless network and security services your branch office requires are integrated into a single, feature-rich wireless switch/controller, there is a perceivable reduction of on-site hardware cost, clutter and complexity.

Highly resilient and secure infrastructure

SMART RF intelligence is continually and automatically tuning and healing virtually any network issue — including power, channels, load-balance and even local and WAN network failures. The result is the highly resilient and high performance connection required to ensure continuity of service — no matter where users may roam in your facility. Our SMART Branch infrastructure offers integrated gap-free security, including a firewall, VPN, intrusion detection, AAA Radius server, DHCP server and best-in-class AirDefense wireless security — providing each and every one of your branch locations with 24x7x365 best-in-class security.

Motorola's SMART Branch Solution Components

The flexible components of Motorola's SMART Branch solution enable the delivery of enterprise-class cost-effective wireless voice and data to any number of home and branch office locations — and any size branch office:

Centralized Management

Motorola's comprehensive suite of management solutions enables centralized control of every aspect of your mobility solution, significantly simplifying and reducing the cost of day-to-day support.

Enterprise-grade Wireless Switch/Controllers

Motorola's family of wireless switch/controllers enables centralized distribution of high performance, secure and resilient wireless voice and data services to remote locations — with the superior scalability required to meet the needs of the largest distributed enterprises.

Powerful Access Points

Ideal for small to large branch offices, Motorola's 802.11n access points provide advanced functionality with the top radio power in its class. For home office locations, Motorola's dependent access point provides an inexpensive enterprise-class solution that is fully managed by a Motorola wireless switch in your headquarters or NOC — no on-site expertise required.

Helpdesk and Performance Management

Motorola's suite of troubleshooting and analysis tools helps remote helpdesk personnel resolve user issues by emulating user connectivity issues. Additional tools allow helpdesk technicians to remotely analyze and resolve network power, interference, attenuation and other issues.

Wireless Broadband Infrastructure

Motorola's field-proven fixed wireless broadband portfolio provides a building-to-building connection between branch offices, eliminating recurring leased line costs — and providing end-to-end control of the enterprise network.

VoWLAN Services

Motorola's voice-ready WLANs and Total Enterprise Access Mobility (TEAM) VoWLAN solution integrates with PBXs and application servers to put voice and business applications in the hands of the user in compact and pocketable devices.

Agility to adapt to future needs

New network and application requirements are a reality in any organization, and they must be adopted in the branch as quickly as in headquarters. Cloud computing is one example — it is quickly becoming a normal part of everyday operations in many companies. But the requirements for the users include greater performance, reliability, security and site flexibility. Different branch locations may have distinct requirements, such as QoS, VLANs, direct Internet access, and even local VPN termination. Motorola's management, security, and high-performance features make it easy to adapt each branch to meet its unique policy and performance needs, while maintaining high levels of security required for cloud computing changes.

Put a virtual IT expert in every branch office

Although the built-in intelligence in Motorola's SMART Branch ensures premium operations on a day-to-day basis, the multi-purpose access points and band unlocked radios allow IT to reach into the branch and manage the network remotely. Right from the network operations center (NOC), IT can execute planning, configuration management, monitoring, and advanced troubleshooting and analysis — just as if they were on site.

Now, IT can easily and cost-effectively resolve almost any connectivity issue a remote user might have — even issues that are not related to the wireless LAN. For example, Motorola's Advanced Troubleshooting allows level one helpdesk technicians to easily emulate user problems, and in most cases, diagnose and resolve — without the high cost of escalation or technician dispatch. And Motorola's Spectrum Analysis provides the advanced network visualization and analysis tools required to detect and address RF interference that may be impacting network performance.

Complementary solutions: VoWLAN and Wireless Broadband

Motorola provides a strong set of complementary solutions to meet the needs of the extended enterprise, including voice over wireless LAN (VoWLAN) solutions that include VoWLAN smartphones and the infrastructure to integrate with the IP PBX and application services such as e-mail and line-of-business applications. To complete your branch solution, Motorola's wireless broadband network solutions enable organizations to securely and cost-effectively interconnect remote facilities up to 155 miles away at speeds up to 300 Mbps.

For more information on Motorola's SMART Branch, the industry's premier branch networking solutions, visit us on the web at www.motorola.com/wirelessbranch or access our global contact directory at www.motorola.com/enterprisemobility/contactus

Motorola's comprehensive 802.11n SMART Branch office portfolio

Wireless Switches/Controllers

Motorola Wireless Switches/Controllers deliver on the promise of the wireless enterprise to the network edge, providing the performance, security, resiliency, scalability and manageability required to deliver cost-effective centralized wireless voice and data in larger deployments.



RFS7000: Features include integrated security plus SMART RF operation and fast secure roaming. The RFS7000 supports 1024 (802.11a/b/g/n) adaptive access points, 12,000 adaptive access points in a resilient cluster and up-to 192,000 users.



RFS6000: Features include integrated security plus SMART RF operation, fast secure roaming, and 8 POE ports. The RFS6000 supports 256 (802.11a/b/g/n) adaptive access points, 3,072 adaptive access points in a resilient cluster, and up to 49,000 users.



RFS4000: Features include integrated security plus SMART RF operation, fast secure roaming and 5 POE ports. Supports 24 (802.11a/b/g/n) adaptive access points and 288 adaptive access points in a resilient cluster and up-to 4,600 users, plus an optional integrated dual-radio 802.11a/b/g/n access point.

Access Points

Motorola Access Ports and Access Points offer flexible deployment options, whether you are implementing a single cell site, a mesh network or a large installation.



AP650: The AP650 thin multipurpose access point reduces the cost of deploying and operating a secure, reliable 802.11n wireless LAN (WLAN) in branch offices or headquarters facilities. The AP650 provides simultaneous WLAN access and sensing, enabling IT to provide advanced over-the-air helpdesk support or Wireless IPS from a centralized remote location.



AP-7181: This outdoor high performance multi-radio 802.11n mesh access point delivers superior network capacity and data rates. The AP-7181 delivers faster, more stable connections and enables the extension of 802.11n capabilities in outdoor areas in enterprises, municipal agencies, and transit systems.



AP-7131 Adaptive Access Point: Adaptive operation and mesh ensures continuous and secure high availability with fast secure roaming. The AP-7131 supports a/b/g/n clients and includes three radios for always-on users, mesh backhaul and intrusion detection or 3G/4G backhaul. The broad feature set includes a router, DHCP server, firewall, AAA server, NAT, hotspot gateway and independent operation in the event of loss of connection to the wireless switch/controller in the NOC.



AP300: The AP300 is a low cost enterprise grade dependent access point offering uncompromised enterprise-class security and reliability. Ideal for deployment in home and smaller branch offices, the AP300 requires no configuration or manual firmware maintenance — the device is centrally managed through a Motorola wireless switch located in your central headquarters or NOC.

Management Software

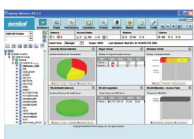
A full suite of software products helps enterprises design, deploy, troubleshoot and secure the wireless network, allowing IT to easily and centrally manage the full lifecycle of a distributed wireless LAN.



RF Management System (RFMS): This comprehensive solution automates centralized planning, deployment, security and management of indoor and outdoor wireless LANs — including the ability to automatically discover and monitor multivendor network environments.

Motorola AirDefense WLAN Security

The industry-leading AirDefense intrusion and rogue prevention for wireless LAN detects and stops intruders while enhancing Motorola's integrated L 2-7 stateful firewall, VPN, AAA, and role-based access control.

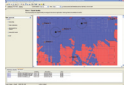


Motorola AirDefense Wireless Intrusion and Rogue Prevention: Motorola AirDefense wireless intrusion and rogue prevention proactively protects the distributed wireless network, mobile devices and traffic from attacks and unauthorized access with 24x7x365 monitoring of any 802.11 network in local and distributed environments.

Motorola AirDefense Wireless Vulnerability Assessment: Allows network administrators to remotely simulate attacks to identify vulnerabilities before a breach occurs.

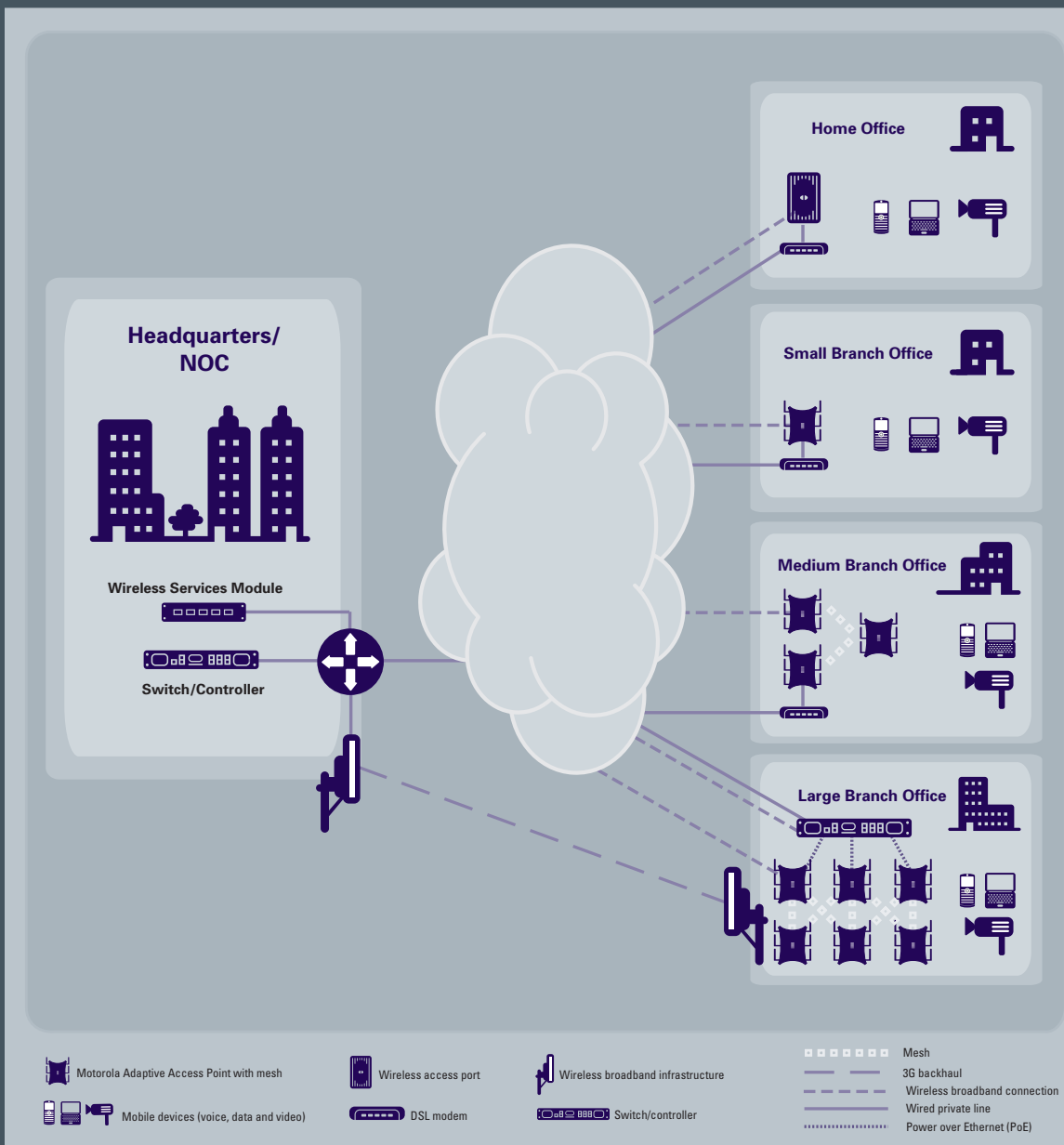
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Motorola's comprehensive 802.11n SMART Branch office portfolio

<p>Helpdesk and Performance Management</p> <p>This diverse toolset allows level-one technicians to resolve most user issues and wireless technicians to analyze and resolve network issues.</p>	
	<p>Advanced Troubleshooting: Performs remote expert analysis of wireless connectivity issues and end-to-end network testing. Reduces network helpdesk costs and operational expenditures related to the wireless network by practically eliminating the need to travel on-site to troubleshoot wireless network issues.</p>
	<p>Motorola AirDefense Spectrum Analysis: Allows administrators to identify and classify possible sources of interference as well as view the network impact utilizing the existing Wireless Intrusion Prevention System (IPS) hardware — no need to purchase and manage dedicated equipment.</p>
	<p>Advanced Forensics: Provides administrators with the ability to rewind and review detailed records of wireless activity to assist in a forensic investigation or wireless network performance troubleshooting.</p>
	<p>Live RF: The Motorola AirDefense LiveRF Module provides a real-time snapshot of wireless coverage allowing administrators to determine the source of performance degradation or analyze how applications will affect the wireless network.</p>
<p>Branch Interconnectivity</p> <p>The Motorola Wireless Broadband Portfolio enables the sharing of data, voice and video across a campus — or across town.</p>	
	<p>Point-to-Multipoint Broadband: Near and non line-of-sight wireless broadband connectivity seamlessly connects multiple sites up to five miles or more at speeds up to 21 Mbps.</p> <p>Point-to-Point Broadband: Near and non line-of-sight wireless broadband connectivity seamlessly connects two sites up to 155 miles (250 km) away at speeds up to 300 Mbps.</p>
<p>Voice Application Solutions</p> <p>Motorola's VoWLAN solutions allow enterprises to deliver highly cost-effective voice services over the WLAN in remote branch offices, eliminating the need for both voice and data cabling at the edge.</p>	
	<p>TEAM VoWLAN Smartphones: Enterprise-class Windows Mobile® 6.1 smartphone deliver toll-quality voice and data services including: PBX telephony, push-to-talk, email/calendar/contacts, text messaging, internet/intranet, and line-of-business applications.</p> <p>Wireless Network Services Managers: This infrastructure enables easy integration with existing PBXs and WLANs to enable VoWLAN services, including: toll-quality VoIP, push-to-talk, dispatch and text messaging as well as centralized management, monitoring and provisioning of the VoWLAN devices.</p>

Additional products: Motorola also offers a wide variety of associated WLAN products, from Power-over-Ethernet injectors to wireless bridges and client adapters.

Motorola's SMART Branch Solution



Whether your organization has tens, hundreds or thousands of remote branches, regardless of their size or their location, Motorola's SMART Branch solution allows you to provide the high performance, secure and resilient wireless voice and data required to simplify and reduce the cost of networking remote locations — and provide your employees with the on-the-move communication services they need to act as efficiently and effectively as possible.



1. Enterprise Mobility: An Investment That Works Harder, Smarter, Andrew Borg, TechNewsWorld, 4/9/09; <http://www.technewsworld.com/story/66742.html?wlc=1254822167>



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