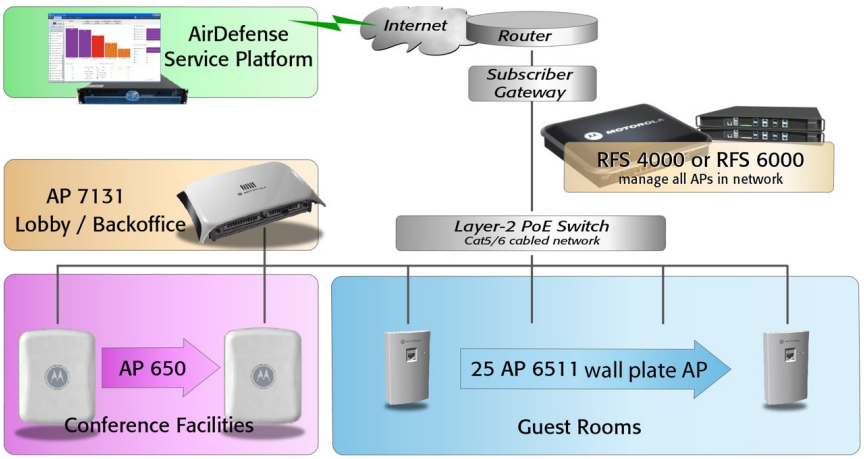
MOTOROLA

WLAN SOLUTIONS FOR HOSPITALITY

Motorola solutions for hospitality encompass a flexible and scalable wireless LAN (WLAN) and productivity boosting applications to improve guest satisfaction and lower operating expenses



A scalable WLAN designed to fit the needs of an enterprise hotel. Mobile business applications and devices enhance the guest experience

WLAN is Business Critical for Hotels

The hospitality market covers a broad range of properties from limited service hotels to full service resorts and all face a common challenge – providing an extraordinary guest experience while managing the operating budget.

The wireless user community is sophisticated and prefers properties that provide premium-quality wireless service. Travelers will use video conference applications, streaming video (including content from home DVR), streaming music, VoIP, and e-mail.

To deliver this premium service requires a high performance network, ease of access, reliability, and performance consistency. Interference from other devices and signal attenuation in a highly mobile environment can sorely degrade the quality of experience for the hotel guest. Ideally, the Internet service should immediately identify connectivity issues and help solve these problems.

Wireless services can really impact the hotel's ability to obtain and retain guest preference – a bad experience can lose a guest forever.

Solution Agility for Multiple Hospitality Types

Motorola's WLAN solutions for hospitality address three broadly defined hotel categories. Solutions may easily span one or more of these categories.

Limited Service Hotels

These hotels typically focus on the value-minded business and leisure traveler. Room counts range from 75 rooms per hotel to over 120 rooms per hotel. Guest wireless Internet access is always required.

Limited service hotels require wireless guest access in every room and may include a business center or lobby wireless access. Limited service hotels have a small staff to care for the guest; thus the network equipment must be reliable and no-maintenance for the cost-conscious hotel.

Motorola solutions include specialized wall plate access points for guest rooms, lobby and business center that install quickly, with automatic management and optimization.

Select Service Hotels

Typically, these are conveniently located near business parks and appeal to a savvy business traveler who needs quick access to business services and customers. One application that epitomizes this market is streaming news and airport check-in from a lobby touch screen. Select service hotels will have a breakfast service, and may have one or more restaurants for dinner service. Boutique hotels offer guests a high degree of personalization.

Select service and full service hotels include meeting rooms, back-of-house WLANs, public access WLANs and point of sale applications.

Motorola WLAN provides a scalable network with specialized wall plate access points for guest rooms, convention access points for meeting rooms and conference facilities, and central management and control.

Full Service Hotels

These are typically differentiated by the degree and scope of the guest services they offer such as 24-hour room service, turndown service, multiple dining options, poolside ordering and curbside

check-in. These hotel types include resorts and large conference facilities capable of hosting from hundreds to thousands of attendees. Conference attendees pay for, and rightly expect, a high degree of service assurance.

The Motorola wireless solution includes specialized wall plate access points for guest rooms, conventional access points for meeting rooms, conference facilities and indoor and outdoor recreational areas such as pool and golf facilities, central management and control in addition to proactive troubleshooting and responsive helpdesk services to easily and quickly identify and resolve connectivity or service issues without having to add additional sensor radios. A voice over wireless LAN (VoWLAN) solution enables staff communications and push-to-talk interconnectivity with existing two-way radio systems. Wireless broadband offers high-speed and cost effective site interconnectivity to aggregate services, such as entertainment and internet access.

Wireless Portfolio for Hospitality

The Motorola wireless portfolio enables wireless and communications integration for any hotel type. This includes indoor and outdoor WLAN, purposely designed guest room solutions, wireless broadband featuring low-cost and high-performance site interconnectivity, and voice over wireless LAN solutions featuring mobile voice and two-way radio interconnectivity.

Improve guest services with 802.11n WLAN

Motorola brings industry leading portfolio of 802.11n to hotels; from inside the guest room to outdoor connectivity. 802.11n offers significantly faster network speeds and is expanding in enterprise and consumer homes. Hotels will need to upgrade their existing networks to provide the "at-home" experience and meet increasing performance demands.

Motorola's WLAN provides key solutions for hospitality that enable seamless wireless management and service across the properties.

Guest Room Wireless Access: unobtrusive and high-performance 802.11n wall plate access points that are purpose-built for hotel rooms, install in minutes over existing wall plates and use existing telephone lines or in-room CAT5/CAT6 cabling.

Indoor Wireless Access: wall and ceiling 802.11n access points for administration, lobby, restaurant and conference areas

Outdoor Wireless Access: 802,11n access points in NEMA enclosures to extend the wireless LAN across the property encompassing recreational facilities and curbside check-in.

Wireless Controller: centralizes and simplifies real-time management and control of the entire Motorola hospitality WLAN portfolio.

Infrastructure Management: single, centralized AirDefense management dashboard for entire wireless network, including 3rd party legacy WLAN deployments.

Network Assurance: AirDefense solution for proactive remote troubleshooting by your level-1 helpdesk staff using radios in security sensors or Motorola access points. The same radios also perform spectrum analysis and forensics for in-depth remote troubleshooting.

Network Security and Compliance: Motorola WLAN technologies and AirDefense solutions come with native security features including stateful packet filtering firewall, VPN, AAA, intelligent threat detection analytics, automatic threat mitigation and more to help ensure secure operations and guest services in addition to maintaining compliance with PCI reporting requirements.

Increase Internet Uplink Speeds and Lower Costs with Wireless Broadband

The increased 802.11n wireless performance (up to 300 Mbps) supports the guest demand for quality video and voice applications. 802.11n can drive the need for high-performance access to the Internet which can be expensive and slow local service provisioning. Motorola Wireless Broadband makes it fast and easy to significantly increase Internet performance by interconnecting facilities and accessing Internet Service Provider (ISP) at speeds up to 300 Mbps and ROI in as little as ten months.

Point-to-Point Broadband: easily interconnect facilities and access ISPs at speeds up to 300 Mbps and distances up to 155 miles with line-of-sight, near line-of-sight, and even non line-of-sight wireless broadband.

Point-to-Multipoint Broadband: easily deploy high speed links up to 21Mbps between multiple facilities on a campus or up to to five miles away. Point-to-Multipoint operate in line-of-sight, near line-of-sight, and even non line-of-sight applications.

Making Quality Wireless in the Guestroom Easy with Specialized Access Points

Conventional access points were simply not designed for hotel guest rooms. The Motorola solution for guest rooms was purpose-built for fast, simple deployment and management, while providing high performance and coverage. The solution starts by putting the wireless access point on the "guest side" of the hotel fire doors and fire walls (where the people are). Because of this simplicity there is no need for an expensive site survey. Simply place the access points in every six to ten rooms, and repeat the installation down the hallway.

Because hotels have either copper telephone wire or CAT5/6 cabling going from a telecommunications closet to the rooms Motorola offers two solutions designed to put high performance wireless service in the rooms, WLAN via telephone wires or WLAN via CAT5/6 cabling. Both solution enable hotels to offer guest room wireless quickly, easily, and at the lowest cost.

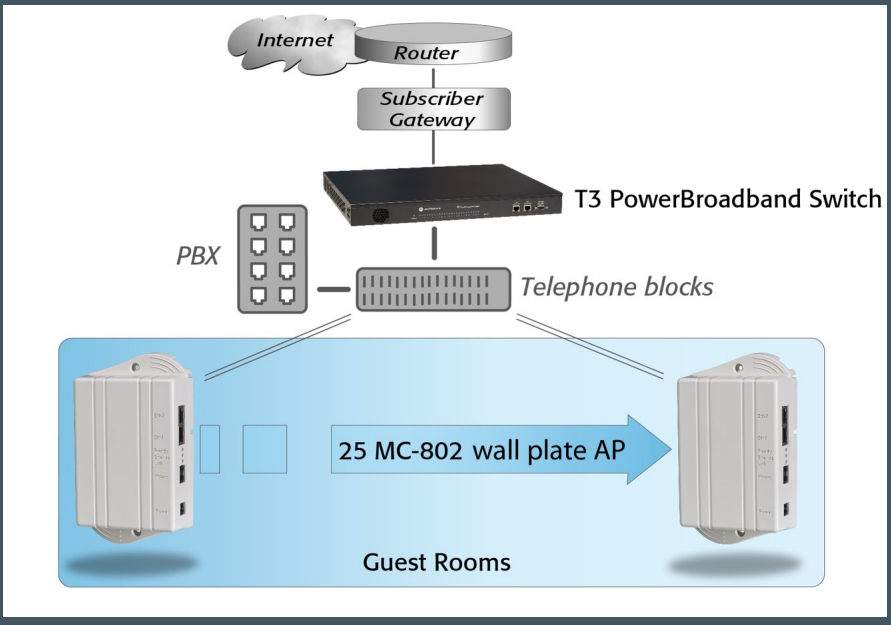
WLAN for Telephone Wired Hotels

While up to 25% of hotel rooms have Cat5/6 structured wiring, virtually all hotels rooms have telephone wiring in place. To make it fast, easy and inexpensive to extend quality wireless services to the guest room Motorola developed the T3 PowerBroadband solution, a purpose-build solution designed for hotels where telephone wiring is already in-place. This patented system extends line power and IP service from a T3 PowerBroadband switch across the copper telephone lines to an 802.11bg wall plate access point. The wall plate access point also includes a phone jack so POTS phone service is available.

To further fit with the limited service hotel profile, the T3 Switch provides all the wireless controller code needed— from automatic RF management to intuitive diagnostics.

Key Differentiators:

- Fast Installation
- Patented Line Power over telephone wire
- Intuitive Wireless and Network Management



802.11n WLAN for Cat5/6 Wired hotels

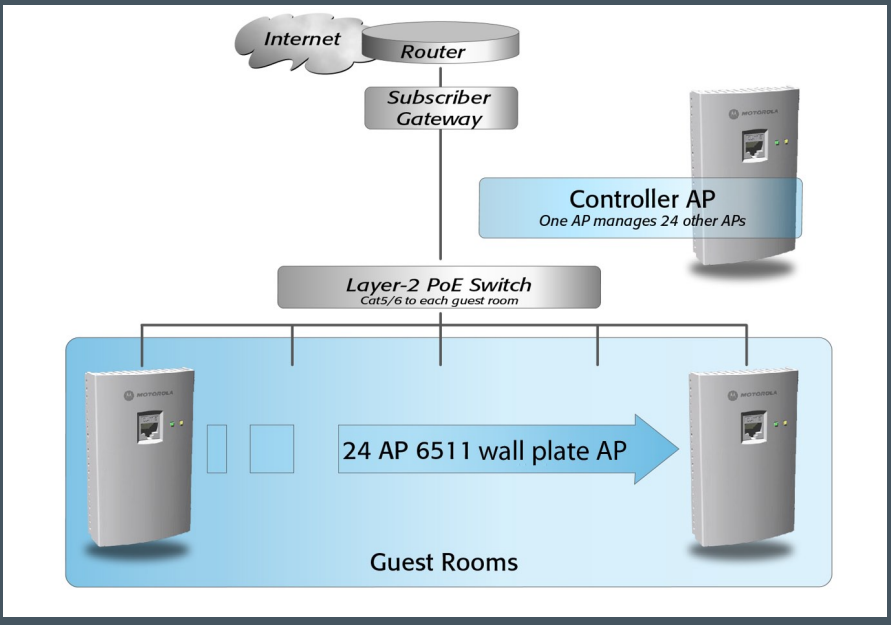
Hundreds of new hotels are built every year with Cat5/6 structured Ethernet cabling in the hotel guest room. This in-place wiring is ideal for deploying wireless networks into guest rooms via Motorola's AP 6511 802,11n wall plate access point which provides crisp, clear communications for 802.11a/b/g/n devices.

Designed to "hide in sight", the sleek design of the AP 6511 is unobtrusive and can be installed over any category 5/6 jack in minutes. There are no "WLAN" or "Access Point" markings, and the LEDs can be disabled by network control.

Because limited service hotels are typically less than 125 rooms, only a few access points are required to provide a great guest wireless experience. So rather than requiring a separate controller, Motorola offers cluster management code with each AP 6511, enabling a virtual RF controller within the network. Service providers or hotel operators can easily manage configuration, firmware, performance optimizations and detailed statistics. Cluster management code also includes redundant backup and automatic RF management. For larger facilities the AP 6511 and conventional access points, the AP 650 and AP 7131, can be managed and controlled by Motorola's RFS series of controllers.

Key Differentiators:

- Cluster Manager for small hotel networks
- Advanced industrial design
- Next generation 802.11n



Making Wireless Access Easy and Integrated with Conventional Access Points

For select and full service hotels, Motorola offers conventional access points that extend the WLAN beyond the guest room. Using a centralized RFS series controller, the Motorola network offers seamless mobility from the guest room to the conference room.

AP 7131

802.11n Tri-Radio Adaptive Access Point

The industry's first 802.11a/b/g/n tri-radio access point. Designed for maximum performance and flexibility; the AP 7131 can be managed independently, from a Motorola RF controller, or from the Motorola AirDefense Service Platform. With band-unlocked radios and intelligent MESH, the AP 7131 provides site survivability, full time security scanning, and high availability

Key Differentiators:

- Three band-unlocked radios; or dual radios with 3G/4G backhaul
- Highest performance 802.11n radio with 27dBm transmit power, 3x3 MIMO Smart Adaptive and multihop MESH

AP 650

802.11n Dual-Radio Adaptive Access Point

With a high power transmitter coupled to a highly sensitive receiver, this 802.11a/b/g/n radio is ideal for large conference spaces with hundreds or thousands of wireless users. The AP 650 connects to a Motorola RF switch for load balancing, fast roaming, and client troubleshooting. The AP 650's dual band-unlocked radios support 7x24 dual band security scanning along with 7x24 client access from the same AP.

Key Differentiators:

- Multipurpose thin AP with dual band unlocked radios
- Best-in-class RF performance
- Integrated WIPS sensor radio for wireless forensics, and over-the-air help desk support

Simple, Centralized Management and Control

Motorola's RFS series of WLAN controllers makes it easy to manage a secure, extended WLAN network for guests and hotel administration.

RFS 6000

SmartRF, pre-emptive roaming, and enhanced QoS support a carrier grade voice and data network supporting hundreds to tens of thousands of wireless clients. Each RFS 6000 supports 256 802.11a/b/g/n adaptive access points, and 3,072 in a resilient cluster. Dynamic RTLS engine tracks assets through the network; whether mobile or stationary. Each RFS 6000 has eight 802.3af PoE ports.

Key Differentiators:

- Carrier grade voice and data network
- SmartRF and advanced QoS
- Scalable, and redundant

RFS 4000

RFS 4000 is a full featured network in a box with integrated security, SmartRF, fast roaming, and six 802.3af PoE ports. Supports 24 adaptive access points, or 6 thin AP-650 access points. In a resilient cluster, the RFS 4000 supports up to 288 adaptive access points and over 4,000 wireless clients. Optionally connect an 802.11a/b/g/n radio to the RFS 4000 for backoffice enterprise network while managing other APs in the hotel network.

Key Differentiators:

- Full network in a box solution with the lowest TCO
- SmartRF, pre-emptive roaming and enhanced QoS
- Supports mixed network of adaptive APs and thin APs

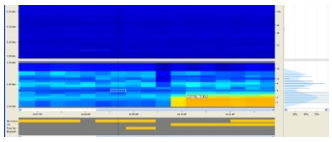
Trusted Wireless Networking Made Easy

With our AirDefense Solutions, you can centrally manage security and network policy for your entire multi-vendor WLAN from a single integrated management system. An onsite wireless expert is expensive and not available 24 hours a day to find and fix problems. Using installed security sensors or Motorola access point radios, the AirDefense advanced troubleshooting tool will probe and test the network from physical RF connectivity through authentication and the application layer so connectivity issues can be localized and then proactively resolved. Level-1 helpdesk staff use an intuitive interface to localize the issue remotely in real-time and test for the source of the problem. If required, Level-2 technicians can also use the Motorola spectrum analyzer to identify the root cause, and plan a resolution. With the Motorola AirDefense Network Assurance solution, your network is verified operational and secure before the breakfast rush so you are freed up to focus on the guests.

The AirDefense Network Assurance solution includes:

Advanced Troubleshooting

Advanced troubleshooting gives remote analysis of network connectivity from the guest's perspective. This unique troubleshooting tool tests the network by logging into each access point and verifying end-to-end connectivity Internet connectivity and DNS resolution from a wireless perspective. The automatic diagnostics greatly reduces helpdesk calls and provides a reliable, always on network for hotel guests.

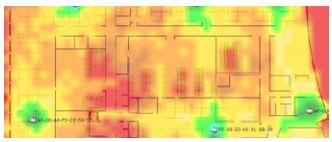


Spectrum Analysis

Identify and classify possible sources of interference and their impact on network performance. Spectrum analysis can be done using wireless sensor radios already deployed.

Advanced Forensics

Historical data is maintained for playback analysis. The tool is useful in locating and remediating the source of a performance issue reported long after it impacted the end user. It also helps in identifying trends with network performance and utilization and can be used to provide detailed information on guest usage of the network



Live RF

Visualize wireless coverage in real time. Quickly identify the impact of an application on the network, or the impact of a high density wireless conference. See the precise performance of wireless applications in your environment.

AirDefense Advantages:

- Service Assurance guarantees with wireless forensics
- Advanced troubleshooting reduces truck rolls
- Vendor agnostic support means it's compatible with existing deployed WLAN
- Integrated planning tools and RF spectrum analysis

Hotel Staff Productivity Enhancements

The hotel staff is always on the move, taking care of guests and ensuring all operations run smoothly. Motorola's TEAM VoWLAN solution keeps staff productive and accessible at all times. The TEAM VoWLAN solution enables mobile desk-phone services and office applications so hotel managers can always be reached while providing service to guests across the entire property. The TEAM Radio Link Solution (RLS) allows push-to-talk communications between TEAM VoWLAN smartphones and two-way radios** used by shuttle bus drivers and property engineering staff. Task management becomes more efficient, with opportunities to manage work flow on the move, and enhance the overall staff collaboration and coordination.

TEAM VoWLAN

Mobile concierge staff can easily take calls from guests and respond to engineering staff inquiries from 2-way radios**; they can send requests for bellhop dispatch, or use business applications to access data on a remote server.

Key Differentiators:

- Fully featured toll-quality telephony
- Full shift battery life (9/200 talk/standby*)
- Semi-Rugged design to endure a demanding environment including four foot drop to concrete
- PTT interoperability with two-way radios via the Radio Link Solution
- Microsoft® Windows Mobile® operating system enables robust line of business applications

* battery life will vary based on user and infrastructure profiles
** requires TEAM Radio Link Solution (RLS)

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