

### CASE STUDY: RENAISSANCE MIDTOWN HOTEL

## The Renaissance Midtown Hotel Provides the Ultimate Mobile Communications Experience

### **OVERVIEW**

## A digital masterpiece deserves the best in cellular connectivity

The Renaissance Midtown Hotel in New York City is unlike any hotel currently. This digitally enhanced structure allows guests to have a truly unique experience. The interactive hotel visually changes with the seasons and offers the largest rooftop deck in the city, which transforms every hour. To guarantee an extraordinary stay, it knew it needed to provide the best cellular experience for its guests. To ensure this goal, system integrator, Cell Signal Solutions, partnered with JMA Wireless to deploy the JMA DAS (distributed antenna system).

### SITUATION

## Overcoming obstacles to offer a truly unique stay

The 40 story Renaissance Midtown Hotel is located in the bustling fashion district, and across the street from Madison Square Garden, Penn Station and the world famous Macy's. Guests from all over the globe stay at this centrally located hospitality venue. The goal of JMA Wireless and Cell Signal Solutions was to ensure cellular connectivity that matched the truly unique stay guests experienced at the Renaissance Midtown.

However, the team also knew that as part of the planning process many obstacles to be resolved before the wireless network ensured robust cellular communications.

New York City's first "Living Building" blends chic design with innovative technology

## Renaissance Midtown Hotel

**8,000 sqf deck** with retractable roof

**348** luxury rooms













Based on this project I do not think Cell Signal Solutions needs to consider other DAS equipment manufacturers going forward. The commissioning process was so simple. The customer service we received from JMA Wireless was exceptional. Plus the total cost of ownership is much better than competitive offerings."

DAN HOFFMAN, PRESIDENT CELL SIGNAL SOLUTIONS

First, the Renaissance Midtown Hotel is a LEED (Leadership and Energy in Environmental Design) certified building, which is part of the world's first LEED Volume Program piloted by Marriott and now part of the company's own design specifications for new construction. A LEED certified building provides energy efficiencies and reduces the carbon footprint, but it also presents obstacles to cellular coverage. In order to be considered LEED certified, the hotel installed "low-E" (low emissive) glass, which reduces operating costs and increases the comfort for a guest by transmitting visible light while controlling the amount of solar energy that enters the room. However, this low-E glass also acts as a barrier to cellular signals entering the hotel. It is almost like the structure is wrapped in tin foil!

Next, being centrally located in New York City meant that the hotel had to contend with the issue of densification, which is defined as a dense area of mobile subscribers with a high demand for cellular connectivity. New York's iconic Fashion Week, sporting events and peak shopping times heightened this concern for the hospitality venue.

Mobile applications are revolutionizing many industries, and hospitality is no exception. Hotels are deploying different applications such as ShiftPlanning, which permits supervisors to staff and manage shifts more efficiently. Performance Appraisal is another useful tool, which enables managers and supervisors to conduct and manage staff performance reviews. Guests may use OneTab, which allows them to set up a tab, track its total and pay it at the end of the evening easily. However, these innovative applications can only be effective if a powerful and secure wireless network is available.



Finally, safety is a major concern of hotels around the world, particularly those located in major metropolitan areas such as New York City. The wireless network must be able to support staff, guests and first responders during times of crisis. Lack of connectivity for first responders, in particular, is critical and can make an emergency situation even worse.

### SOLUTION

# JMA Wireless delivers in more than one way

Integrator, Cell Signal Solutions, realized that the cutting-edge Renaissance Midtown Hotel needed a powerful and efficient mobile communications solution such as the JMA DAS. Even with a 40 floor structure only three 20 watt Remote Units (RU) were deployed to ensure robust cellular coverage throughout. To guarantee this same level of coverage, competitive solutions needed ten Remote Units and more room, which just was not available. Additional savings were experienced thanks to a single optical fiber being used to connect the RUs. Most competitive offerings need up to 50 percent more fiber. In addition, the Remote Units are very slim and unobtrusive in this chic hotel, which prides itself on its unique style.

The JMA DAS provided further cost savings by minimizing the amount of space needed for its Head End room. The architectural design of the Master Unit allows it to fit compactly into a half rack, which is located conveniently on a wall. This saved space can be used for revenue generating activities, not housing network equipment. The JMA DAS platform includes the Multiband Spectrum Analyzer (MSA), which is an innovative and efficient solution that enables the hotel's IT department to remotely monitor and optimize the Quality of Service (QoS) delivered by the network. During the deployment at the property it was useful for commissioning, verification, and determining accurate power levels.

Finally, the entire deployment process was very intuitive. Originally, Cell Signal Solutions assigned two technicians for an entire day to commission the system. Instead it was deployed in less than two hours. Not only was the fast deployment time appreciated, but the supporting JMA Wireless team was technically astute, making the entire process even more simple and hassle-free.



This LEED certified
40 story structure provides
powerful cellular coverage
and capacity for its guests
and staff.



#### **RESULT**

# From start to finish – a project like no other

The Renaissance Midtown Hotel project is memorable in many ways. The hotel is not only the first "living building" in New York City, but it also provides the ultimate in wireless communications thanks to the JMA DAS. This LEED certified 40 story structure provides powerful cellular coverage and capacity for its guests and staff.

This project has been memorable for Cell Signal Solutions too. The deployment only took two technicans two hours to finish. Furthermore, this future proofed wireless network is already receiving its share of mobile activity and is ready for additional carriers and bands as they come on board.



### **About JMA Wireless**

JMA Wireless is the leading global innovator in mobile wireless connectivity solutions that ensure infrastructure reliability, streamline service operations, and maximize wireless performance. Employing powerful, patented innovations their solutions portfolio is proven to lower the cost of operations while ensuring lifetime quality levels in equipment and unrivaled performance for coverage and high-speed mobile data.

JMA Wireless solutions cover macro infrastructure, outdoor and indoor distributed antenna systems and small cell solutions. JMA Wireless corporate headquarters are located in Liverpool, NY, with manufacturing, R&D, and sales operations in over 20 locations worldwide.

#### FOR MORE INFORMATION:

jmawireless.com

### **About Cell Signal Solutions**

Cell Signal Solutions (CSS) was founded by a group of energetic young entrepreneurs with a vision of an interconnected world. They devoted their energies to carefully selecting skilled engineers with extensive experience in RF and wireless engineering, and the experts in each field. Today, CSS prides itself on offering in-building wireless solutions that are planned by the industry's most innovative and skilled team. Cell Signal Solutions' team features a conglomerate of wireless and utility industry experience that works to deliver turnkey solutions and best-in-class services to wireless carriers and enterprise clients.

CSS clients experience unhindered transmission of key wireless connections including 3G and 4G networks, PTT capabilities, medical telemetry and other vital services. Whether working with healthcare facilities, hospitality, Fortune 500 enterprises or other industries, CSS looks to deliver a DAS that will satisfy industry-specific requirements. We are constantly adjusting to the tides of change, remaining a step ahead of evolving technology for an in-building wireless solution that fuses current conveniences with the future's technological advancements.

### FOR MORE INFORMATION:

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