

Casino Windsor

COVERAGE SYSTEMS



Powerwave provides security personnel and first responders the ability to communicate wirelessly

Distributed Antenna System

Frequencies: 800 MHz
Coverage Reliability: 98%

Venue Type: Hospitality Center

Challenge

Provide casino security and first responders access to their two-way radios inside the casino to respond to and mitigate disasters like accidents, crimes, fire, and injuries.

Solution

Powerwave's OFR Repeaters designed to simultaneously receive and transmit single narrowband FM channels for reduced noise and interference, and provide high power RF output per channel to ensure maximum coverage.

Result

Provided 98% coverage throughout Casino Windsor to assist security and first responders in improving response times, protecting citizens, and saving lives.

The Customer When legitimate gambling was first established in North America in the lower Mississippi Valley around 1800, Samuel Morse hadn't even begun to figure out how to send the first electrical telegraph. Without the benefit of wired (let alone wireless!) communications, security in such establishments was pretty much confined to the holster belt. Today patrons are strictly forbidden to carry firearms in gambling casinos like Casino Windsor, which is monitored around the clock by highly sophisticated video surveillance equipment and roving on-site security personnel. As well, the area surrounding the casino is heavily patrolled by officers from the Windsor, Ontario police force and various other public emergency service agencies are always on stand-by alert.

The Challenge Overlooking the Detroit River and the Detroit skyline, this 100,000 square foot Vegas-style operation - which employs more than 5,000 local area residents - features two expansive floors of gaming excitement, a four-diamond hotel, a live entertainment venue plus five restaurants. In order to respond to potential criminal activities, emergency situations and other inflammatory incidents efficiently, security personnel at Casino Windsor needed to be able to rely on two-way wireless radio

devices to communicate with each other as well as with local police, fire, ambulance and other public emergency service agencies. Unfortunately, the 90,000 cubic yards of concrete, 3,500 tons of structural steel, 6,000 tons of reinforcing steel and 330,000 square feet of exterior glass and metal panels used in the construction of this world-class complex were all extremely hostile to RF signals and presented formidable barriers to the successful transmission of clear, strong, reliable wireless signals inside. As a result, Casino Windsor was faced with some serious security and safety issues that needed to be addressed.

The Solution Based upon the success of a recent wireless coverage extension solution provided to the Windsor Police Department by Powerwave Technologies, Casino Windsor was confident that the company would be able to deliver a simple, affordable and dependable solution. In order for Powerwave to deliver such a solution, their team of highly experienced engineers performed a thorough on-site survey to assess the needs and conditions of the casino's facility. With the results in hand, Powerwave's engineering team set about designing the optimum solution for extending wireless coverage to those "impeded" spaces where signals typically failed.

OFR™
Repeaters



Powerwave Technology

Powerwave's OFR Repeaters are specifically designed to receive and transmit wireless signals on the same frequency for reduced noise and interference, while providing high power RF output per channel to ensure maximum coverage capacity. This product is an ideal choice for all types of indoor facilities within congested urban or high-density RF environments, as well as isolated outdoor areas.

Key Advantages

- **Reliable wireless coverage that is virtually noise free** by receiving and transmitting single narrowband FM channels - in 25 kHz and 30 kHz FM channel spacing
- **Maximum coverage capacity** through high power RF output per channel capability, which enables reliable coverage to be extended over large distances
- **High system availability** through self-monitoring capabilities on fault conditions of interior circuitry
- **Installation and servicing made easy** by the self-contained modular design that enables them to be housed in a standard 19" EIA open relay rack, typically located in utility rooms where maintenance access is available 24/7

Powerwave ultimately recommended the installation of a series of On Frequency Repeaters placed at strategic points within the casino that would serve to amplify the 800 MHz bandwidth used by their Motorola SmartNet™ trunked radio system for public safety. In addition, a complementary distributed antenna system was recommended in order to extend the signal into the problem areas. This included 20,000 feet of coaxial cable, Powerwave's patented Tap-In™ signal taps and numerous ceiling antennas. Upon approval, the rapid implementation of the recommended solution was completed with minimal disruption to casino activities.

The Results Powerwave provided a complete turn-key solution for extending coverage of Casino Windsor's two-way radio communications. All aspects of the solution - including the design, manufacturing and installation - was completed efficiently and cost-effectively. More importantly, now that more than 98% of the casino has reliable wireless coverage, the responsiveness of security and emergency services personnel has greatly increased, providing greater peace of mind - and peace - all around.

For more about Casino Windsor, visit <www.casinowindsor.com>.

Commercial casino gaming has come a long way since the first casino opened its doors in Nevada in 1931. Today, there are more than 470 commercial casinos operating in 11 states, and the industry has become a driving force in the U.S. economy - providing hundreds of thousands of well-paying jobs, entertaining millions of customers, generating billions of dollars in needed tax revenues and contributing to improvements in communities nationwide.

American Gaming Association

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