

Overview | In-Building Wireless Solutions

Enhancing Connectivity: MCA's IWS Group — Premier Integration of Cutting-Edge Wireless Coverage and Capacity Solutions

Our Team

The In-Building Wireless Solutions (IWS) Group within MCA is a leading force in the integration of in-building and campus - wide wireless solutions. At MCA, we are committed to delivering top-tier engineering design, project management, implementation, commissioning, and maintenance services.

Our dedicated team specializes in the installation of Commercial Distributed Antenna Systems (DAS), Private LTE/5G solutions, Public Safety ERRCS, Wi-Fi, and both multi- and single-operator systems across a diverse range of public and private venues.

With our profound expertise and innovative approach, we tailor future-ready solutions that perfectly align with our clients' unique wireless coverage and capacity requirements.

Our commitment to neutrality in network development allows us to engineer pioneering, multi-operator DAS networks for a variety of settings including corporate campuses, hospitals, universities, airports, and shopping centers throughout the United States.

Our Mission

Our IWS team was founded with a mission to ensure reliable radio communications and quality cellular user-experiences by providing innovative, practical, and exceptional design and integration of campus-wide and in-building wireless solutions.

Our Vision

To be the premier provider of engineering and implementation Services of Distributed Antenna and Wide Area Coverage and Capacity enhancement solutions. Our experience at designing and implementing diverse mobile networks is unmatched in the industry. We offer a full array of services to provide our customers with systems tailored to meet their requirements today and well into the future.

Our Guarantee

From basic wireless coverage improvement to campus wide coverage and capacity enhancement, MCA guarantees that the system will perform as specified in our custom tailored design documents.

In-Building and Campus-Wide Wireless Communications Solutions

Creating Safe, Secure, Fast, And Highly Efficient Networks

Emergency Responder Radio Communication Systems (ERRCS / ERCES)

Public Safety Distributed Antenna Systems (DAS)

Neutral-Host Distributed Antenna Systems (DAS)

Private 4G and 5G Wireless Networks

Non-Emergency Radio Coverage Enhancement

4G / 5G / CBRS / Wi-Fi GSM / CDMA / TDMA / iDEN

Coax / Fiber / Cat5 / Cat6 Cabling Solutions

Small Cells, Access Points, Remote Units, and More



Our is dedicated to enhancing cellular and radio communications through the expert design and integration of wireless systems across buildings and campuses. As industry leaders, we strive to provide unmatched engineering services, ensuring our solutions meet clients' needs today and in the future.

OUR SOLUTIONS

Public Safety DAS (ERRCS / ERCES)

A Public Safety Distributed Antenna System (also known as an ERRCS and ERCES) is an in-building network of antennas and repeaters that enhances the radio coverage for emergency communication devices inside structures, ensuring first responders can communicate effectively during emergencies. Our solutions meet the stringent demands of public safety agencies and guarantee buildings have sufficient radio coverage on the Public Safety Radio System, the primary communication channel for first responders.

Our team is dedicated to ensuring that buildings comply with international, federal, and local regulations critical for emergency responder communications. The International Fire Code (IFC-510) mandates radio coverage for emergency responders within new buildings, mirroring the public safety communication systems' coverage levels at a building's exterior. Similarly, the National Fire Protection Association (NFPA) codes, specifically NFPA-72 and NFPA-1225, stipulate requirements for fire detection, signaling, mass notification, and emergency communications, emphasizing the need for comprehensive emergency responder radio coverage systems (ERRCS/ERCES).

Local municipalities often align with these standards but may enforce stricter regulations. MCA offers tailored guidance to navigate these local code regulations concerning radio communication, ensuring buildings meet all necessary safety codes for emergency communications.

Our expertise assures your buildings adherence to varying regulations and preventing the costly consequences of failing to meet the standards. By partnering with MCA, you ensure your facility is not only compliant but also prepared for any emergency, safeguarding both employees and customers.

Cellular DAS (Neutral-Host)

A Cellular DAS is a network of spatially separated antenna nodes connected to a common source that enhances cellular network coverage within a building or area. This system ensures uninterrupted cellular service essential for the operations of public and private organizations alike, addressing challenges posed by the proliferation of wireless devices and structural impediments.

Our solutions specifically address challenges posed by construction materials like steel and concrete, rural signal spread, urban network congestion, and RF interference from internal machinery. These factors can compromise signal integrity, hampering productivity, visitor satisfaction, and safety.

For safety, our Emergency Responder Radio Communication Systems (ERRCS) ensure robust communication for first responders during emergencies. Simultaneously, our cellular DAS systems optimize coverage for all other building occupants, ensuring that crucial calls for help reach 911 services without delay, even within problematic areas such as hallways and parking garages.

From a satisfaction standpoint, today's smart device users — whether guests, visitors, or employees — expect continuous, reliable service to stay connected. Inadequate coverage can lead to frustration, affecting your business and operational success.

On the operational front, MCA's Cellular DAS solutions support business operations by maintaining critical systems dependent upon LTE/5G failover, thus providing redundancy for payment systems and business communications. This added layer of reliability ensures operations maintain over 99.99% uptime, crucial for businesses that rely on continuous connectivity.

Private Wireless (LTE / 5G / CBRS)

In today's rapidly evolving digital landscape, MCA's private wireless solutions provide essential connectivity that exceeds traditional Wi-Fi in coverage and capacity, ensuring reliable and secure communications for modern enterprises.

Private LTE and 5G (commonly referred to as PLTE) networks offer strategic advantages by enhancing security and minimizing external interference, which keeps confidential data protected and maintains reliable connections under high demand.

These networks are customizable, allowing enterprises to optimize performance for critical applications and manage high-bandwidth operations with reduced latency. Additionally, PLTE provides comprehensive control over network management, facilitating efficient resource allocation and responsive adjustments to meet dynamic demands.

Particularly beneficial for sectors with specific operational needs such as manufacturing, logistics, and healthcare, MCA's PLTE solutions are pivotal for businesses seeking robust wireless connectivity to support real-time monitoring, automation, and efficient data management, ensuring they remain at the forefront of industry advancements.

Non-Emergency Radio Coverage (Private Radio Systems)

MCA's radio coverage solutions, including our digital repeater systems, play a pivotal role in enhancing safety and improving operational efficiency by providing clear and reliable communication within your organization. Our systems are designed to penetrate obstacles like walls, ceilings, and floors to ensure robust coverage across various facilities. This capability is vital for routine, emergency, or mass notification communications, ensuring effective information dissemination throughout your organization.

For organizations looking for cost-effective communication solutions without the extensive infrastructure requirements of a Distributed Antenna System (DAS), MCA's digital repeaters and base stations offer a flexible and scalable alternative. These systems are particularly advantageous for private enterprises that need targeted coverage enhancements without significant capital expenditures.

Digital repeater systems offer comprehensive coverage, overcoming gaps and dead zones crucial for expansive areas where seamless communication underpins day-to-day operations and team coordination. They are not only fast to deploy but also scalable, allowing adjustments and expansions as business needs evolve, making them ideal for dynamic business environments.



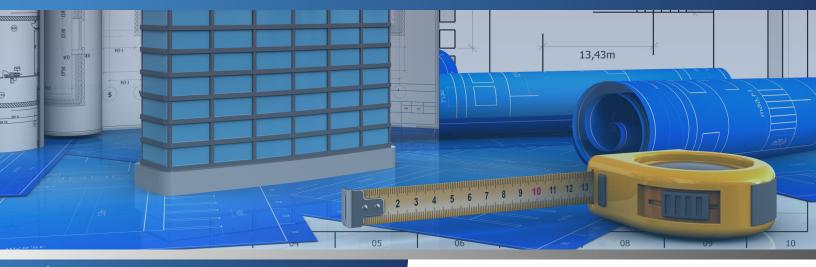
OUR TOP-TIER PARTNERS

At MCA, we are committed to excellence in delivering in-building wireless solutions. This commitment is exemplified by our strategic partnerships with leading manufacturers, ensuring that each component we integrate into our systems meets the highest standards for reliability, performance, and compliance with industry regulations.

Our rigorous selection process for manufacturing partners across all areas—from ERRCS and Cellular DAS to Private LTE and Motorola Solutions' radio systems—allows us to customize solutions that not only meet the specific coverage needs and budgets of our clients but also offer maximum return on investment.

This approach ensures the delivery of robust, future-proofed networks that provide seamless operation and unparalleled connectivity, enhancing our clients' operations and communications infrastructure.





OUR PROCESS



Discovery

MCA consultants work with organizations, both big and small, to fully assess, determine scope, and gather the necessary requirements to provide a complete solution to fit their specific budget.



Site Survey + Design

RF Coverage is then tested, and if determined that a solution is required, MCA will formulate a plan and an iBwave design. Our design engineers are iBwave certified and have years of in-building design experience.



System Installation

With 30+ years as a tier 1 DAS Integrator, MCA's project managers and technicians have a vast amount of expertise in installing any system, from one for a small office to a large campus-wide DAS fiber solution.



System Commissioning

MCA's In-Building Wireless Solutions engineering group will optimize each component of the system to ensure peak performance using advanced RF test tools and bring the system fully on air. MCA installers are certified in all DAS OEMs.



Inspection + Approval

Once the system is on-air and tested, the system is ready for AHJ inspection and final signoff. MCA project managers will handle all upfront permitting and back-end approvals required to assure NFPA and IFC compliance.



Ongoing Support

Our equipment service agreements (ESA) include ongoing system support and annual site visits, and our in-house Network Monitoring System (NOC) notifies MCA of any issues for quick maintenance response.

Our In-Building Wireless Team

30+ Years of Experience with 10,000+ Successful DAS Deployments

With over three decades of expertise, MCA's In-Building Wireless Solutions (IWS) team has successfully completed more than 10,000 Distributed Antenna System (DAS) projects across diverse industries. Our team comprises over 30 degreed RF engineers, all certified in iBwave design and proficient across all DAS OEMs. We emphasize stringent processes and controls to ensure excellence in every installation. Enhanced by our team's Secret Clearance for accessing Controlled Unclassified Information (CUI) and our industrial hygienist's specialization in confined space work, we are uniquely equipped to handle complex wireless challenges.

Operating 24/7, our in-house system monitoring supports our highly skilled, DAS-specific installation crews and technicians, ensuring flawless execution and the highest safety and efficiency standards. Our team's profound knowledge and innovative approach allow us to craft customized, future-proof solutions that meet precise wireless coverage and capacity needs. Using a carrier-neutral strategy, we deliver state-of-the-art, multi-operator DAS networks across a range of venues including corporate offices, hospitals, universities, airports, and shopping centers nationwide.

Our comprehensive expertise and commitment to quality reinforce MCA's position as a leader in in-building wireless coverage enhancement.

>> Contact Us Today

OUR CUSTOMERS















Hospitality

Hospitals



About MCA

MCA is one of the largest and most trusted technology integrators in the United States, offering world-class voice, data, and security solutions that enhance the quality, safety, and productivity of customers, operations, and lives.

More than 65,000 customers trust MCA to provide carefully researched solutions for a safe, secure, and more efficient workplace. As your trusted advisor, we reduce the time and effort needed to research, install, and maintain the right solutions to make your workplace better.

Our team of certified professionals across the United States delivers a full suite of reliable technologies with a service-first approach. The MCA advantage is our extensive service portfolio to support the solution life-cycle from start to finish.

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