

Government Contractor Overcomes Move-In Challenge with DAS In-Building Coverage Solution from Communications Electronics

Akima is a global enterprise delivering agile solutions to governments and has thousands of contracts in the federal, military, and civilian markets. These contracts span across many fields and industries, including:

- Facilities, Maintenance & Repair
- Logistics & Supply Chain
- Systems Engineering
- Information Technology
- Protective Services
- Mission Support
- Furniture, Fixtures & Equipment
- Construction

As a holding company to a diverse portfolio of more than 40 operating companies, Akima employs between 7,500 and 8,000 people. Headquartered in Herndon, Virginia, they occupy four floors of their building with a large workspace of approximately 85,000 square feet.

Before moving into their new Virginia headquarters, Akima conducted an analysis that revealed the mobile device coverage for cellphones, tablets, and laptops in the new building was less than ideal. Akima identified the potential impact of dropped calls, dead zones, the inability to place calls, and potentially no service at all. To proactively address this problem, Akima turned to Communications Electronics (CE) to implement a powerful, cost-effective in-building coverage solution.

"We shopped around quite a bit, and Communications Electronics was able to deliver exactly what we needed without the additional cost and installation of competitive in-building solutions. We can access our portal through the cloud at any time to monitor and resolve issues."

Deputy Chief Technology Officer,
Akima

WHY COMMUNICATIONS ELECTRONICS?

CE has been the Mid-Atlantic's single source for mission-critical wireless communications since 1976. With decades of experience and over 120 employees, CE is uniquely positioned to provide unparalleled professional service to our customers.

Well-versed across a range of wireless and wired solutions, our expertise includes system engineering, design, installation, and maintenance of distributed antenna systems (DAS) and mobile telephony. Our team of certified experts is dedicated to helping you identify your communication problems and resolve them through customized communications systems designed to fit your specific needs and budget.

THE CHALLENGE

Akima recently relocated their headquarters in Herndon, Virginia to a new state-of-the-art building giving their employees a comfortable, open space to work in without being tied to their desks. Prior to moving their employees to the new facility, Akima IT professionals discovered the in-building mobile coverage was inadequate for their operational needs. Several challenges would need to be corrected by Akima, a company that relies on mobile devices to do their job and connect their operation. Akima wanted the lack of reliable service addressed in order to avoid:

- **Dropped calls**
- **Dead zones**
- **The inability to make calls**
- **Reliance on Wi-Fi for data services**
- **Missed calls and messages**

The upper floors of high-rise buildings often have poor RF quality due to the number of cell towers that are competing to provide service or due to the construction materials of the building. Likewise, lower floors often have poor service because they are blocked by buildings, trees, and other "ground clutter" in the surrounding area. Stairwells, elevators, energy-efficient additions, and other fortifications can lead to a lack of service as well. In fact, blocked signal, or "shadowing", is likely why the lowest floor in their new headquarters building had the worst reception of Akima's four floors.

Akima's move to their new office space was necessary to give their employees an environment where they could thrive. Once their move was complete, there was no going back. The lack of mobile device coverage was certainly a challenge, but not one without a viable solution. With the help of CE's in-building coverage solution, Akima was able to ensure employees in the new building could continue to work where they were most comfortable while utilizing their mobile devices whenever and wherever they were needed.

THE SOLUTION

For the challenge at hand, CE recommended a “middleprise” solution: Nextivity Quatra. This distributed antenna system is a hybrid solution that offered Akima a cost-effective, scalable, and timely system perfectly suited for their midsized headquarters.

Nextivity Quatra is an active DAS in-building coverage solution. This digital solution provides a uniform, high-quality mobile signal throughout a building. Unlike older analog mobile boosters and passive DAS technologies, Nextivity Quatra systems independently amplify cellular signals up to 1000x. Nextivity Quatra utilizes Cat 5e or Cat 6 cabling for both RF and Power over Ethernet (PoE) distribution. Its proprietary digital distribution architecture ensures consistent mobile device performance for all desired service providers throughout the office space.

In the case of Akima, Nextivity Quatra proved to be the perfect in-building coverage solution. With Nextivity Quatra installed in just days, CE met Akima’s tight move-in schedule with strong mobile coverage throughout their space. No more dropped calls, dead zones, or connectivity issues.

Nextivity Quatra solved Akima’s initial challenge by providing a high-quality signal for Akima’s preferred service providers throughout the building. Later, when Akima added a floor to their operation shortly before their move-in date, they were able to leverage the existing system and easily expand coverage to the new space.

Nextivity Quatra’s easy scalability, allowing quick and painless expansion of the DAS, provided workers on the new floor the same great coverage experience. Of added benefit, the Quatra solution is covered under a blanket rebroadcasting agreement that allowed Akima to bypass the lengthy coordination process of a rebroadcast agreement with the mobile operators.

THE BENEFITS

The main benefit of CE’s hybrid active DAS solution for Akima is the ability for users to move freely around the building while conducting business. Akima employees are not stuck at their desks but can remain productive anywhere in their Virginia headquarters.

Nextivity Quatra is much less cumbersome than other, older analog boosters and passive DAS technologies, as well as DAS solutions, with the ability to be installed exponentially faster with a unique ability to scale to accommodate growth at any time.

THE BENEFITS *(Continued)*

Some of the other benefits Akima experienced include:

- Uninterrupted phone calls wherever employees are within the office.
- Employees have “full bars” throughout all 85,000 square feet of office space.
- Improved network security as workers can utilize the separate mobile network.
- Workers are no longer required to rely on the building’s internet connection and Wi-Fi to do their jobs.
- Cat 5e and Cat 6 cables are very easy to deploy.
- Cloud access to the system makes monitoring and maintenance easy.
- Scalable system that grows as the business grows.
- Affordable compared to other DAS solutions on the market.

Even with this extensive list of benefits, Nextivity Quatra is more affordable than many other DAS alternatives on the market.

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Nextivity Quatra’s active hybrid DAS solution, engineered by Communications Electronics, was not only affordable but also eliminated the issues with mobile coverage that Akima needed to avoid. The distributed antenna system solved the coverage challenges while simultaneously creating a long list of benefits that Akima will consistently enjoy with their operations in their new state-of-the-art headquarters.

ABOUT COMMUNICATIONS ELECTRONICS

Offering a wide range of electronic communications solutions, Communications Electronics specializes in mobile phone DAS, public safety DAS, Wi-Fi and wireless data, bi-directional amplifiers (BDAs), engineering services, monitoring and maintenance, and more.

Communications Electronics operates from several locations, serving customers in Maryland, Washington, DC, Northern Virginia, and Central Pennsylvania. Call 888-825-5234 to schedule a Free Site Survey and get expert recommendations on a custom in-building coverage solution.

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