



Powerwave Coverage Solutions

Township Heritage

Powerwave & ClearLinx (Now ExteNet Systems, Inc.) Deploy Wireless Services

Located in the heart of “Automation Alley,” an area that includes Detroit, Mich., and eight surrounding counties, these Michigan townships are part of a region that is home to a growing number of high technology industries. Entrepreneurs, top-ranking executives, and their families are attracted to this region due to its tranquil, rural setting; first-rate educational institutions; high-quality healthcare facilities; world-class shopping and dining venues; vibrant cultural and recreational programs; and, outstanding public services.

Unlike other high tech corridors in the United States, some areas of “Automation Alley” had been slow to develop the infrastructure that would support advanced wireless voice and data services. The two townships were two such areas that did offer public access to cellular, PCS and AWS.

In 2005, local wireless service providers in collaboration with township governmental bodies, including the Historic Commission of one of the villages, commissioned ClearLinx Network Corporation, now ExteNet Systems, Inc. and its partner Powerwave Technologies, Inc. to design and implement a wireless network that would support the coverage and capacity needs of a community that was rapidly becoming more technologically savvy.

After evaluating the needs of the residential communities in the townships, as well as the requirements of the wireless operators, local governments and the Historic Committee, ExteNet and Powerwave determined that an open DAS network would provide the area with the coverage and capacity needed to support ubiquitous access to wireless voice and data services, including cellular, PCS and AWS.

Modern Blends with Traditional in a Rural Setting

Because residents are attracted to southeastern Michigan due to its quiet, tranquil setting, government officials go to great lengths to preserve its serenity and visual appeal. Prior to implementing the open DAS network, ExteNet and Powerwave had to meet one specific requirement put forth by local officials, the historic committee and city residents – the system had to be aesthetically pleasing.

ExteNet and Powerwave leveraged their combined experience in working with local governments to gain a better understanding of the requirements of the town's citizens and local officials, and created a solution that met those needs. To provide the proper aesthetics, the WCS units were mounted next to existing utility boxes on telephone poles and a special antenna cover was developed to protect the antennas which were located at the top of the poles.

Repeater-Based Solution Improves Access, Lowers Costs

The ExteNet/Powerwave open DAS network is designed to support multiple wireless services including cellular, PCS, and AWS using a single cost-effective, flexible and scalable wireless network platform.

The open DAS network is comprised of a series of repeaters that are used to distribute signals from the base stations and remote nodes placed strategically within the coverage areas of the two townships. Each repeater system supports multiple carriers and consists of a base station master unit (BMU); a fiber-optic distribution system; fiber-optic repeaters and wideband radio heads (WRH); and, a passive antenna system connected to the repeaters and radio heads.

Powerwave offers a technically superior, upgradeable, flexible and adaptable network that can transmit any wireless signal from any wireless service provider. ExteNet open DAS networks are an attractive solution for meeting wireless service provider coverage and capacity requirements. Integrating Powerwave's repeater solution in open DAS solutions helps customers reduce operational expenses with a small form factor that minimizes site rental costs, and eliminates the need for expensive transmission lines, special cabinets, oversize battery backups and extra cooling.

Conclusion

In the Spring of 2006, ExteNet and Powerwave completed the build-out of the outdoor DAS for the two townships.

"Powerwave's proven track record in providing state-of-the-art outdoor coverage systems for complex environments worldwide, coupled with ExteNet's expertise in the implementation of open DAS networks is a winning combination when it comes to the design and implementation of wireless network infrastructure," said Steve Damewood, Vice President, Network Service Group, Powerwave Technologies. "With the design and implementation phase of the open DAS network now complete, residents can now experience all the benefits associated with access to voice and data services anytime, anywhere throughout the coverage areas."

About Powerwave Technologies

A global leader in end-to-end wireless coverage and capacity solutions, Powerwave Technologies, Inc. offers cutting edge wireless infrastructure to address the demands of enterprise and commercial customers. Powerwave offers a comprehensive suite of solutions, including Antennas, Base Station Solutions and Coverage Solutions. Powerwave's product line supports all wireless network protocols and frequencies including Next Generation Networks in 4G technology such as WiMAX™ and LTE®. Powerwave solutions, products and services also help wireless operators and OEMs reduce capital and operating expenses, speed rollout of services, improve coverage and capacity, and reduce environmental impact. For more information, visit us at www.powerwave.com.



www.powerwave.com

Worldwide Corporate Headquarters

1801 East St. Andrew Place
 Santa Ana, CA 92705 USA
 +1 714 466 1000
 +1 714 466 5800 FAX

Main European Office

Knarrarnasgatan 7 8tr.
 164 40 Kista, Sweden
 +46 8 540 822 00
 +46 8 540 824 91 FAX

Main Asia-Pacific Office

2018-2019 Chevalier Commercial Building
 8 Wang Hoi Road, Kowloon Bay,
 Kowloon, Hong Kong
 +852 2512 6123
 +852 2575 4860 FAX