

AES: from Wired to Wireless

While numerous types of alarm communication are prevalent (cellular, private radio, telephone line), patented AES-IntelliNet technology is quickly becoming the future trend.

BY GINNY LU

AES Corporation, headquartered in Peabody, Massachusetts, has three divisions, including AES-IntelliNet (AES), Advanced AMR Technologies, and AES-Government Security. AES-IntelliNet has offices across the U.S., and in Europe, Thailand, and Latin America. AES Corp. is a private company whose alarm business division—the provider of wireless mesh products—is the largest. The other two divisions provide wireless mesh communication products to the energy industry, and security products and services tailored specifically to federal and national-level government customers.

"While AES Corp. has been in business for over 33 years, its reputation for security products and services was primarily recognized only within the government sector for the first 20 years," recounted Dee Frazier, Marketing Communications Manager, AES Corp. With commercialization of its U.S.

government-oriented security communication products in the early 1990s, AES Corp. rapidly established a reputation for innovative alarm communication products via its AES-IntelliNet wireless mesh alarm communication

systems for commercial and residential fire and security monitoring. The company developed due to its ability to adapt to the needs of domestic and international customers.

The largest portion of revenue comes from sale of products to central monitoring station operators, who provide remote central monitoring for commercial businesses, residences, and government entities. The second-largest portion comes from sale of products to multi-building organizations that provide monitoring of buildings. These products are usually sold and supported via systems integrators or value-added resellers in the fire and security industry.

The difference between major and minor distributors and/or systems integrators is distribution and product reach, explained Mark Brandstein, Chief Operating Officer, AES Corp. A major entity has many offices in important locations; and multiple people with functional expertise in areas such as sales, alarm communications, and fire.

AES considers its customers to be mostly central monitoring stations (alarm dealers, alarm receiving centers, monitoring companies) and large, multi-building entities such as banks, universities, municipalities, government facilities, military bases, police departments, chemical plants, and corporate campuses. AES's alarm communication products are tailored to multi-location and multi-building security monitoring situations that require alarm signals to be sent relatively long distances (several miles

or kilometers). Some of the company's most distinguished customers include the MIT, the NASA Kennedy Space Center, and the U.S. Department of Homeland Security.

EXPERIENCED AND WELL-TRAINED

AES Corp.'s managers at all levels have extensive experience in the security industry, some going back over 30 years. Leading the firm is President and CEO Michael Sherman, who pioneered wireless applications for military, government, and commercial applications. He is given strong support by Brandstein, former General Manager of healthcare communication service provider Ring Medical as well as serving as RF Design Engineer and Product Manager at Hughes Aircraft; Tom Kenty, General Manager, Alarm Products; and John Aiken, Director, Manufacturing.

The company carries out on-the-job training, including mentoring, classes, and seminars. It also provides training to all customers on systems, such as how they work, how to install them, and how to support them. It sends manuals with each shipment, providing online download of all manuals as well. Its field service people provide training onsite as part of the company's site-certification services. AES also provides webinars for not only technical, but also sales training.

Its products include the AES-IntelliNet solution, an alarm communication system that communicates alarm signals from many monitored locations to a central

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■ Mark Brandstein, Chief Operating Officer, AES Corporation

monitoring location across a campus, city, region or even entire country. The basics of the system are radio subscribers and a central receiver. Radio subscribers take alarm signals from alarm panels and send the signals via radio to the central receiver located at the central monitoring station. From there, signals are outputted to alarm automation software, which notifies operators of alarm situations and of steps to take to respond. Within three to six seconds, alarm messages are received and confirmed back to the alarm site.

AES's most popular products are its multi-region coverage central receiver and security subscribers, said Brandstein. The receiver allows central monitoring stations to monitor alarms from multiple cities or regions while utilizing just one 24/7 operator. Security subscribers are a general, all-around security product, rather than one designed for special applications such as the company's other subscribers.

Frazier enumerated the many benefits of the AES-*IntelliNet* system, including the fact that it has no monthly communication costs—unlike global system for mobile communications (GSM) and telephone lines—is not prone to being disabled in the form of line cuts and GSM-frequency jamming, and has up to eight redundant communication paths—unlike any other communication system. In addition, it is a two-way communication system that gives assurance that all signals are received, is UL-listed and U.S. National Fire Protection Association (NFPA)-compliant, and delivers signals up to 10 times faster than traditional phone lines. Finally, it requires no special knowledge of radio technology, is low-maintenance because it self adapts and self heals to changing conditions, and it requires no cabling or wiring.

PUSHING TO THE FOREFRONT

AES's marketing strategy includes positioning its products as the premier reliable and cost-effective solutions for alarm communications for those who require the assurance of security for their business or customers' businesses. This begins with identifying segments of target markets for those who meet AES's profile of protecting and monitoring multiple buildings within a geographic area.

After identifying its targets, AES then



■ AES Corporation corporate office building

spreads its budget over a broad range of vehicles in order to reach them and penetrate these markets. These vehicles include advertisement placements in publications that meet specific readership and geographical criteria within the company's budget restraints; as well as use of PR tools such as releasing case studies, press releases and published articles or setting up news conferences and interviews with editors. Then, there are promotions and email campaigns, which have proven to be very effective in showcasing the company to potential customers. Finally, attendance at trade shows, its Web site, detailed and regimented followup with customers, and maintenance of a detailed and targeted database, all help.

AES is clear about its role and responsibilities, stressed Frazier. "When companies make claims that are too good to be true, they are not able to maintain lasting success, especially in the life safety industry. We are very careful not to make false claims or promises that we cannot keep. We take life safety, as well as our company's credibility, very seriously. Our goal is make sure that alarms are transmitted in the most reliable, fastest way possible, when every second could mean life or death."

UP AND COMING TRENDS

Trends occurring in the area of alarm communications include the move away from telephone line mobile services—due to unreliability—along with the explosion of IP communications, said Frazier. With homes going to the Internet for phone service, this is reducing reliability—and, in some cases, availability—of a properly-working alarm communication system. This is where wireless is coming into play more than ever, Frazier believes.

Another trend is growth of terrorism

and increased visibility and need for security, Frazier added. Increasing sophistication of criminals means that more reliable and foolproof ways of securing alarm communications are necessary to avoid line cuts and frequency jamming. This is where wireless mesh radio alarm communications is ready to meet demand.

Asked what makes the company stand out, Frazier replied: AES does very well when it comes to innovating technology solutions around the needs of wireless security communication solutions. The company does this by listening to customers and staying close to the market. For example, in its earlier years, it developed the AES-*IntelliNet* system to meet the needs of primarily small- to medium-sized monitoring companies.

The trends in the industry, though, were such that the industry and customers were growing by both buying other companies and expanding service reach to other regions. This, combined with emergence of the Internet for low-cost, long-distance communications, seeded the need for AES Corp. to develop a product that allows central monitoring station customers to serve all service territories with a single product that can consolidate all signals back to the central location via both radio and the Internet. AES continues to engineer products to grow with the demands of the industry. The challenge this brings is to prioritize engineering development efforts appropriately, since there are numerous innovations and projects "worth doing," said Brandstein.

AES is expanding in several dimensions, including significantly growing its international business. While AES has customers in over 50 countries, its non-U.S. customer base is still smaller. It is also expanding product lines to encompass other types of wireless and security communication products.

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