PROJECT CASE STUDY

Emergency Warning System for the University of Massachusetts Amherst Campus

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Fourteen years later after its initial installation in 2009, the public emergency warning system on the University of Massachusetts Amherst campus is still fully operational and functioning to alert students, faculty, staff and visitors. This longevity is typical for Acoustic Technology, Inc. (ATI Systems) products, which are designed for maximum reliability. The eight 3200-Watt High Powered Speaker Stations (HPSS32) used for this project include ATI's proprietary Class-D audio amplifiers, which can output over 1600 RMS watts of audio power, minimizing the number amplifiers typically required in each siren. The use of fewer amplifiers and components in this system contributes to higher equipment reliability and the Mean Time Between Failures (MTBF) for ATI Systems components is among the highest in the industry.

ATI Systems was awarded the contract to install this system in February 2009. UMass Amherst is the flagship campus of the University of Massachusetts system with over 26,000 students on nearly 1,450 acres in western Massachusetts. The university needed an effective notification method to ensure the safety of its community. ATI Systems was one of ten vendors bidding for the project and was selected through a very competitive process. The system was manufactured and installed over the spring and summer and fully operational in time for the start of the fall semester in 2009.

The eight HPSS32 sirens are controlled by a control station, which consists of a Central Control Unit (CCU) and a computer running ATI Systems' Advanced Software Package. The control station can activate, test and monitor the outdoor alerting units all from one central location. Activation options include tone alerts, pre-recorded voice messages and live public address, giving the university security staff the ability to immediately notify everyone affected by an emergency and give instructions on how to respond.

UMass Amherst's emergency warning system was designed using ATI Systems' proprietary acoustic model, which ensures optimal placement of the speaker stations to maximize sound audibility and voice intelligibility throughout the campus. In addition, ATI Systems' equipment

uses encrypted and time-synchronized Frequency Shift Keying (FSK) radio communication, which provides enhanced security against unauthorized access to the system. Communication is further supported by a robust digital data packet designed for wireless applications, that minimizes potential interference providing extra assurance the system will activate in heavy RF environments.

All of the critical equipment in the emergency warning system has battery backup, so that the system will be fully functional in the case of a power failure. It includes two ways to activate; point and click activation from the computer running ATI's software or activation through simple push-button front panel of CCU, which is equipped with at least 8 hours of battery back-up. To further ensure the system is always fully functional, silent tests can be programmed to periodically check sirens, which will report back to the control station with their status. In addition, the system is programmed for automatic reporting of unsolicited messages in the case of any adverse event at the siren such as a door intrusion, low battery, or power failure.

About ATI Systems

ATI Systems (Acoustic Technology, Inc.) designs, manufactures, and installs dependable emergency warning and notification systems. ATI Systems' advanced technology is currently protecting military bases, industrial facilities, campuses, and communities worldwide, with an innovative and flexible wireless system that reliably provides audible and visual warning messages. The systems utilize a compact hardware design, user-friendly software, and the latest advances in communication methods, including radio frequency, IP Ethernet, and satellite technology. Through product design enhanced by years of experience in acoustic modeling, ATI Systems' products provide exceptional sound coverage and voice intelligibility in both outdoor and indoor settings. Their systems can be found throughout North America, Europe, the Middle East, and Asia. To learn more about ATI Systems, visit http://atisystems.com.