DAS Simplified

University of Massachusetts:
Public Safety Wireless for New Dorm Completed Over Summer Break

What is a DAS?

The advent of wireless systems and hand-held devices are quickly causing shifts in how we work, play and live. While most would agree that our productivity and flexibility have improved because of what we can do, there are impediments to quality of service with devices inside of buildings. RF (radio frequency) signals are blocked by energy-saving glass, steel, and brick and mortar. At the same time, end-users now have to also deal with universal building codes mandating complete coverage of buildings for wireless systems used by emergency responders- like fire department and police. The general rule has been to build two different systems to accommodate these wireless needs, but now building owners can utilize a single DAS (distributed antenna system) for both cellular and emergency responder networks, and lower overall cost and drive.

The new University of Massachusetts CHCRC complex is a state-of-the-art dormitory intended to attract the state's best and brightest students to come to the campus for a curriculum with smaller classes and greater assistance from professors. UMass leadership knew that without a functioning DAS system for wireless communications within the campus, they would not be able to get a Certificate of Occupancy for the fall semester, and for a solution they turned to **DAS Simplified**.

The Challenge

Completing a project of the size and complexity of the CHCRC residence over a short period of time would likely prove a challenge for any communications contractor. The scope included seven buildings totaling 500,000 SF, made up of six dormitories containing 1,500 beds and nine seminar-style classrooms, as well as an administrative building and a 400-seat amphitheater.

DAS Simplified

Contact us for more information!
(800) 999-9999
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The Solution

Boston-based Coghlin Electrical Contractors had worked successfully with DAS Simplified on other projects, so they enlisted their help for the critical installation at UMass.

EOS-Riser, DAS Simplified's premier product, was used for several reasons. First, with EOS the design is 100% guaranteed to work, every time. Also, with EOS pre-built cable assemblies are loaded within a rugged NEMA-4 enclosure that is placed in utility areas, allowing Coghlin technicians to quickly pull cables from the enclosure to a pre-determined location.

Several obstacles were overcome in the 90-day design and installation window. Building construction mandated that antennas for these systems had to be located above ceiling tiles- a somewhat unconventional model that required a quick redesign of the system by DAS Simplified's RF engineers- something that was accomplished in a few days, not the weeks typical of many wireless service providers. In addition, building code authorities added requirements for UHF (ultra high frequency) police radio systems- after they had previously only mandated VHF (very high frequency) fire department radios. Midstream, DAS Simplified had to alter their design to accommodate both, or risk that the Certificate of Occupancy would not be granted.

DAS Simplified completed the installation on time, and then coordinated with AHJ (authorities having jurisdiction) for their required acceptance of the design. Because a DAS will rebroadcast the "macro" or outdoor network that public safety entities own and operate, this final coordination and acceptance is crucial for a working system- without it, owners risk fines by the FCC.

Finally, DAS Simplified installed a UPS (uninterruptible power supply) to provide up to 8 hours of system operation in the event of a power outage, and an automatic SNMP-based monitoring system to help ensure 24x7 system performance. At the core of this service is their in-house Network Operations Center (NOC), which provides detailed status of the customer's DAS and the necessary software to manage and satisfy the alarm and monitoring requirements set by local ordinances and fire code.

With the new complex in the heart of the campus, the Commonwealth Honors College now has its own space at UMass for the first time since its initial class was accepted in 1999. Aspiring young adults can focus on academics and collaboration with faculty. For students and their parents, **the system installed by DAS Simplified means a safe environment**, with fire and police radios that work in every corner of their living environment, day and night.

"The team at DAS Simplified grabbed the bull by the horns and figured out everything needed for fire and police systems. Very thorough, very professional."

Matt Logan, PM, Coghlin Electrical Contractors

University of Massachusetts DAS Simplified solution includes:

- 150 MHZ Radio
- 450 MHZ Radio

Warranty & Maintenance:

- One year warranty
- Remote monitor & control