



Wireless Broadband Connectivity Combined with Voice Technology Brings Campus Safety into Sharp Focus



How a premiere undergraduate university, in coordination with one of the fastest growing communications companies in South Carolina's Myrtle Beach area, designed and deployed a comprehensive solution consisting of a cost-effective high speed wireless broadband network; 2-way radios; call boxes; and IP cameras.

Background

Coastal Carolina University (CCU) is a public liberal arts institution located in Conway, South Carolina just nine miles from the Atlantic coast resort Myrtle Beach. Home to nearly 300 faculty members and more than 8,000 students from 44 states and 32 foreign countries, CCU serves six counties on a campus comprised of 52 main buildings spread across 302 acres. As a major intellectual and cultural center for the Waccamaw region, the University enriches the quality of life for the surrounding area through the performing and fine arts, community service, external programs, distance learning, and continuing education programs.

CCU has taken several steps to ensure campus safety across its widespread network for their community and visitors. The University Department of Public Safety is available 24x7 and works closely with Police Departments from the surrounding counties to handle off-campus incidents. The campus emergency phone number directly connects any campus phone with the Department of Public Safety & Campus Police. CCU has experienced remarkable institutional growth and has initiated a commensurate expansion of University programs and services to meet student, faculty, and community needs. CCU identified several goals related to expanding the campus safety program and enhancing communications:

- Maximize opportunities for dorm safety by installing a video surveillance network
- Provide connectivity and internet access for remote buildings that do not have phone lines or fiber
- Replace leased T1 lines
- Support VoIP applications

Coastal Carolina University made the decision to partner with locally based Myrtle Beach Communications to help meet its campus safety and communications challenges - via wireless technology.



“Education - the business of Coastal Carolina University - can take place only in an environment in which each student and employee feels safe and secure. Coastal Carolina University recognizes this and employs a number of security measures to protect the members of its community”.

Richard Weldon, Vice President, Finance & Administration

About Myrtle Beach Communications

Myrtle Beach Communications (MBC) is one of the Myrtle Beach area’s largest and fastest growing communications companies. Established in 1954 as a Motorola service center, MBC has maintained a leadership role in wireless communications services.

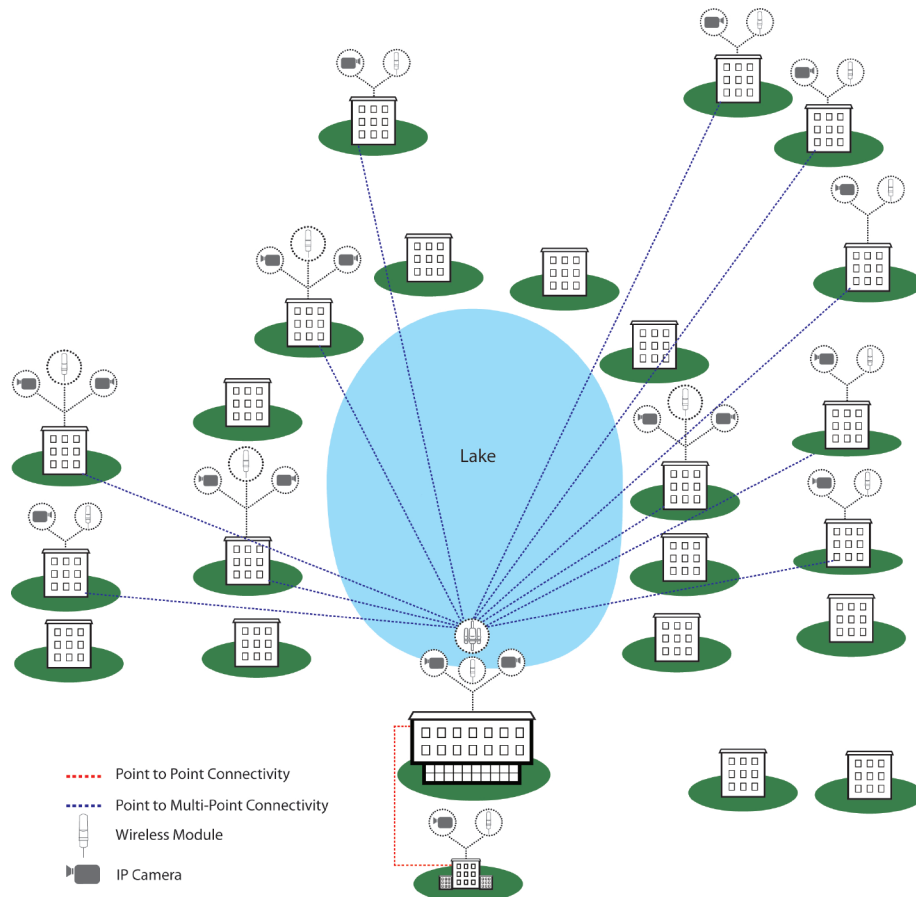
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Wireless Broadband for Campus Safety and Communications

A Motorola fixed broadband wireless network is the backbone for transporting video from surveillance cameras, providing internet access, and supporting VoIP applications. CCU maintains 31 residence halls which house approximately 2,200 students. Eighteen of the dorms are located at University Place, a ½ mile from the main campus, where there is no fiber or wired network. Using the Motorola Canopy® platform MBC deployed a point-to-multipoint network carefully designed to transport real-time video traffic from IP cameras and IP video recorders manufactured by Panasonic. All camera video is recorded and viewed at the University Place security guardhouse and the campus police station. The wireless video surveillance network provides peace of mind and allows students to focus on the cultural and intellectual exchange that surrounds them daily while living in the residence halls. MBC was able to complete this project easily and in a short amount of time. “We were able to purchase the complete solution from one source,” said Sam Hocutt, Manager, Myrtle Beach Communications. “Motorola’s expertise in video surveillance and network design made the project seamless.”

UNIVERSITY PLACE

University Place is an apartment style student residence complex located ½ mile from the main campus. This is the area’s only university-supported secured community.



“The broadband wireless (network), video surveillance system and call box systems have had a positive impact on our campus security. The cameras placed in our dormitories have served not only as a deterrent to vandalism, but have helped our Public Safety and Facilities Departments in recovering lost, damaged and stolen property. Parents visiting our campus and our entire student population have expressed a greater sense of security in knowing that the solution has helped our Public Safety Department monitor traffic on campus and provide witnesses to traffic accidents and violations.”

Richard Weldon, Vice President, Finance & Administration

Approximately 82 Panasonic cameras were added to an existing 150 camera network to provide indoor and outdoor surveillance coverage for every single campus building. MBC upgraded analog camera recorders to digital IP recorders which offer video content analysis capability. As a result, the need to search multiple tapes and all of a tape's content to uncover an incident has been eliminated. Instead, video content can be quickly scanned by day and time to locate specific incidents and provide faster resolution of security issues.

Beyond the borders of CCU's main campus are two satellite campuses. Each of these campuses now has cameras with IP recorders installed, supplementing the staff and providing remote monitoring of doors and perimeters.

Like many expanding colleges, CCU was challenged to provide communications and connectivity to new buildings. The trenching cost to extend the fiber network was prohibitive. MBC chose the Motorola Point-to-Point Wireless Ethernet Bridge – 100 Series to backhaul camera video to a security guardhouse that had no communications infrastructure. Guards can now quickly transmit any type of IP correspondence to the dispatch center. Similarly, a Motorola Point-to-Point 58400 Wireless Ethernet bridge was chosen to extend the campus network to a new multi-purpose building located 1 mile from campus. Motorola's PTP bridges achieve high-quality, reliable connectivity in non-line-of-sight environments, enabling CCU to overcome path interference from trees and foliage. Even in obstructed and high-interference locations, 400 Series solutions succeed more than 99.999% of the time. Integrated PTP 58400 bridges have built-in antennas which provide throughput of up to 43 Mbps. CCU is able to cost-effectively support bandwidth intensive VoIP and video surveillance applications.

Emergency Video Communications

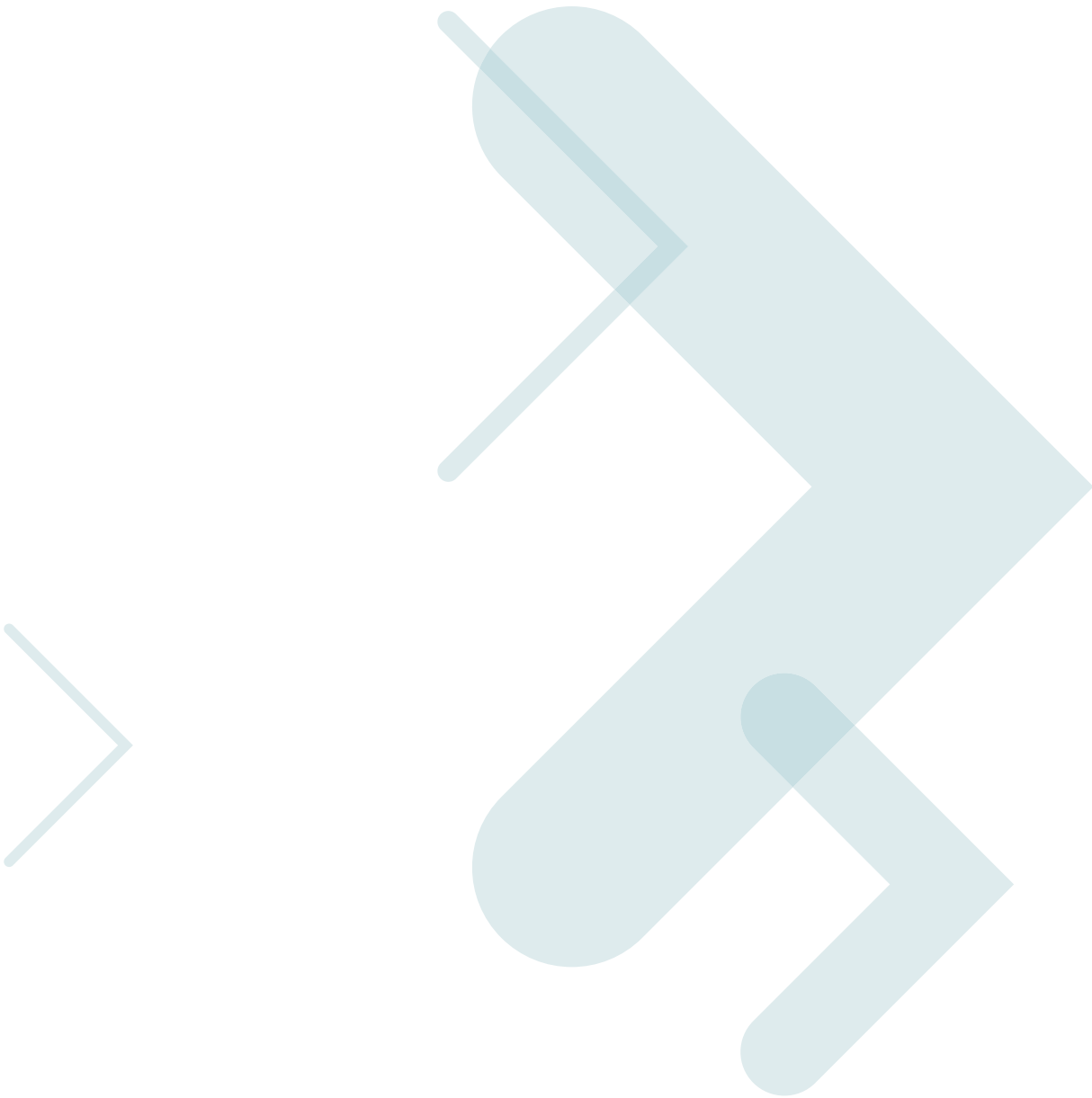
CCU's wireless video surveillance system complements voice communications. MBC installed 48 Motorola Call Boxes in all parking lots and other isolated areas around campus, for instant emergency communication with the Public Safety Department. Call Boxes provide a swift and reliable indoor or outdoor way for individuals to quickly communicate to a monitoring station. When the call button is pressed, an alert is sent to the University Police Dispatch Center, and communication is maintained with the individual requiring assistance. In addition, cameras with pan-tilt-zoom features can be pointed at the call boxes to monitor and record incidents.

Greater Sense of Security – Today & Tomorrow

“The broadband wireless (network), video surveillance system and call box systems have had a positive impact on our campus security. The cameras placed in our dormitories have served not only as a deterrent to vandalism, but have helped our Public Safety and Facilities Departments in recovering lost, damaged and stolen property,” commented Richard Weldon, Vice President, Finance and Administration, “Parents visiting our campus and our entire student population have expressed a greater sense of security in knowing that the solution has helped our Public Safety Department monitor traffic on campus and provide witnesses to traffic accidents and violations.” As CCU extends its physical presence to accommodate enrollment increases, the wireless broadband network can be easily expanded. Future plans include adding additional wireless access infrastructure and cameras at a new sports arena and replacing other leased T1 lines with wireless Ethernet bridges.

MOTOwi4 Solutions

Motorola's MOTOwi4 portfolio of wireless broadband solutions delivers connectivity to help our customers extend their reach to virtually any environment. With its unique combination of advanced technology, superior performance, flexibility, ease of installation and cost effectiveness, wi4 Fixed solutions connect people to the Internet and applications, increase the productivity of enterprise workforce teams in more places, strengthen communities by connecting more residents, businesses and public services and increase efficiencies of public service agencies wherever they may be. The wi4 Fixed portfolio is supported by Motorola's foundation of unique technology expertise and heritage in wireless mobility, innovation and value.



MOTOROLA

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