

# The Wireless World Indoors

... for Education 

Provision of enhanced in-building wireless services to cover a multitude of wireless services to meet the needs of the students and faculty staff

## The Challenge

Today's student expects to have the world at their fingertips. Whether they're accessing emails and surfing the internet from their Smartphone, receiving text alerts with the latest campus news or researching their dissertation on their wireless laptop; they expect coverage at all times, in all areas. As Fouad Yatim, CIO at Suffolk University, Boston, USA commented, "Originally, in-building wireless was not even on our radar, but it quickly became an issue when we realized that poor cell phone coverage was hindering the ability for students to receive important in-campus notifications via e-mail and text when they were located in certain buildings." Universities and colleges are increasingly under pressure to attract the brightest students and faculty staff through the provision of a first class education; wireless coverage across the entire campus ensures access to state-of-the-art amenities and therefore cements an establishment's profile as a cutting edge innovator, providing a strong, progressive learning environment.

Security of all students and staff on campus is an additional concern and one which can be enhanced with in-building wireless coverage.

Wireless services may include:

### Commercial cellular communications

The emergence of pioneering, new mobile applications has dramatically increased the mobility and expectations of students and staff for ubiquitous coverage wherever they may be on the campus.

### Public safety communications

Education providers have the need and very often the regulatory requirement, to improve the provision of wireless services in their facilities. This is most apparent in the area of public safety. In recent years, ensuring the safety of emergency service personnel entering a building in their day to day work and in emergency or disaster situations has become critical.

## The Benefits of Enhanced Wireless Coverage

Many education providers are now embracing in building wireless technology as a means to solving the issues of security and network access across the campus. The provision of seamless, reliable coverage ensures that everyone from students to faculty staff can benefit:

- Optimisation of IT expenditure
- Staff and students work more effectively, productively and conveniently.
- Strengthen the image of the educational institution as being pioneering and technologically innovative to attract the finest students and faculty staff.
- Provision of a safe, secure environment through ubiquitous public safety coverage.
- Selective streaming of services to certain areas within the building or campus.

How can you, as an education provider, effectively achieve coverage for commercial and public safety wireless to meet student's & faculty staff demands and regulatory requirements?

## The Solution

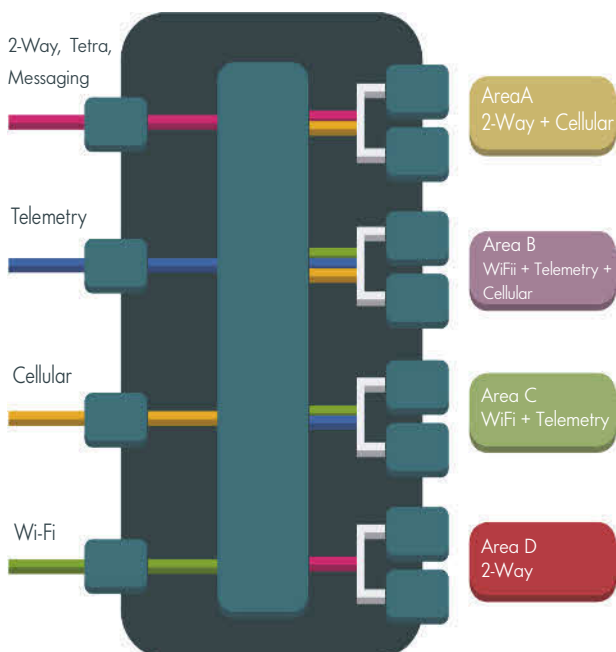
The wide variety of structures on a college campus brings their own unique set of challenges for the provision of in building wireless coverage. Different building shapes and different materials such as steel and tinted glass, cause in-building penetration of RF signals to weaken resulting in reduced data rates and even complete loss of signal. In addition to this, a number of the older buildings or constructions that may contain asbestos may preclude them from being wired, so their only option for network access is through wireless technology.

Zinwave's unique 3000 Wideband Active Distributed Antenna System (DAS) removes many of the traditional issues and considerations associated with delivering multiple RF services in buildings. It provides ubiquitous coverage for all wireless services on one easily installed system. In addition, services can easily be routed to the areas of the building where they are required ie WiFi can be routed into the library, lecture theatres, classrooms; but may not be needed in food preparation areas - see diagram.

## Summary...

By enabling the latest exciting advances in wireless technology and emerging mobile applications, the university or college distinguishes itself as secure, cutting edge and an educational leader. However, in order to take advantage of these exciting new developments, it is essential that there is ubiquitous, reliable in-building wireless coverage in place.

## One solution, one system for all your wireless needs...



## Key benefits:

**True Wideband** - Supports any service, protocol and modulation scheme from 150MHz to 2700MHz

**Low component count** - With as few as four components, an in-building wireless network can be built to support any mix and any number of services

**Lowest cost per sqm** - Comprising of a single hardware layer, the Zinwave 3000 system becomes more and more cost effective compared to a traditional solution with each additional service

**No costly upgrades** - Additional services can be added without the need for supplementary hardware, therefore avoiding further cost & disruption

**Easy planning & installation** - Self-calibration and auto-configure features simplify design & deployment

