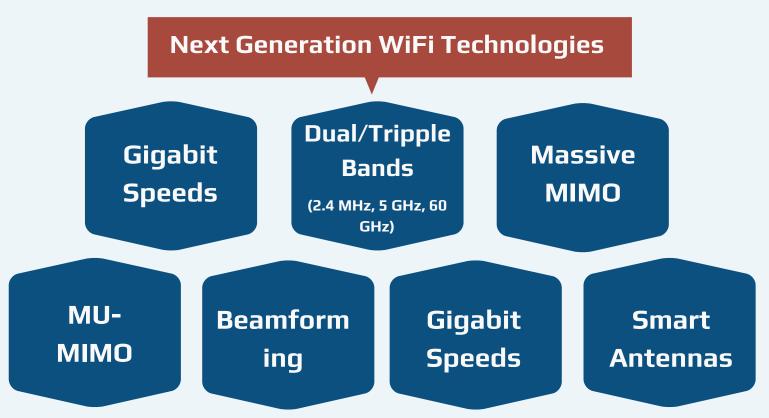# EION BYTES

Smart Campus WiFi Coverage Solution
Designed for Students to Succeed

WiFi-enabled campuses are becoming common place which allows students and teachers to access a wealth of information over the Internet. It also allows them easily collaborate with each other and automate the traditional learning methods.

Next Generation WiFi Technologies

Gigabit Speeds

Dual/Tripple Bands
(2.4 MHz, 5 GHz, 60 GHz)

Massive MIMO

MU-MIMO

Beamforming

Gigabit Speeds

Smart Antennas

Target Locations in the University

The important locations are distributed between outdoor and indoor to cover a large percentage of the university. Typical locations are:

- **Classrooms**
- **Sports Arena - Basketball and Volly Ball Games**
- **Library**
- **Residence Halls**
- **Administrative and academic offices**

Challenges

High-Density Location
The campus is considered to be a High-density location requires a Wi-Fi design strategy for large deployments to provide pervasive connectivity to clients when a high number of clients are expected to connect to Access Points within a small space

Security Concerns
A Wi-Fi solution for education must guarantee information security, especially that of students, staff, and the educational institution

Resource-Demanding Applications
A Wi-Fi solution for education must be capable of keeping hundreds of end devices connected simultaneously.
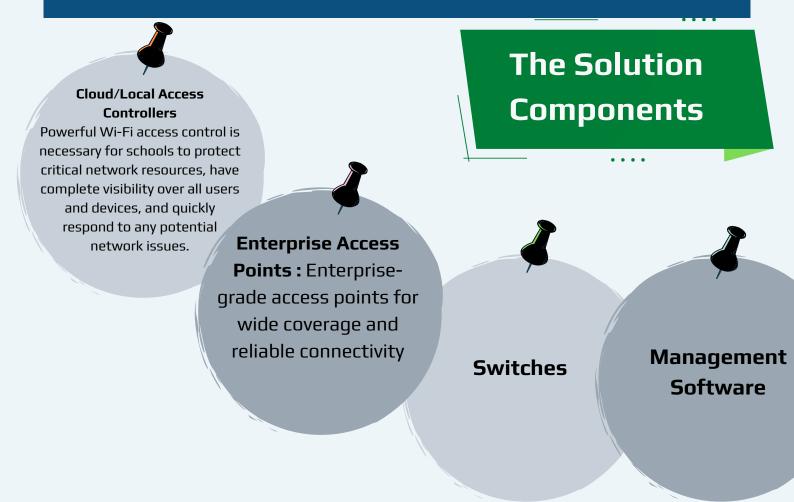
Challenges(cont.)

Universal Coverage
A Wi-Fi solution for education must provide reliable connectivity throughout the entire campus.

Budget Constraints
A Wi-Fi solution for education must have an optimal price-to-performance ratio to meet budgetary needs.

Supporting BYOD
Bring Your Own Device is not a new concept, however, the challenge is still the same. How do you safely manage devices you don't own?

The Solution Components

Cloud/Local Access Controllers
Powerful Wi-Fi access control is necessary for schools to protect critical network resources, have complete visibility over all users and devices, and quickly respond to any potential network issues.

Enterprise Access Points : Enterprise-grade access points for wide coverage and reliable connectivity

Switches

Management Software

Design Consideration

- **Universities Add More APs to Increase Network Density**
- **Optimizing Wi-Fi Performance for High Density**
- **Traffic Prioritization for Reliable E-Learning**
- **Schedule & Role-based User Access Control**

Recommended Products

EION E-Link Gateway Controller 1000

EION Enterprise E-Link Rapid 6 WiFi AP

EION PoE Switches

Visit our website