

# Hardworking Wi-Fi for intelligent learning

Alcatel-Lucent OmniAccess Stellar WLAN solution for education

# Next generation Wi-Fi for next generation education

Blended learning and 1:1 learning programs are enabling students to learn anywhere, anytime. With a mix of traditional class-based techniques and personalized, digital schooling it's opening a new world of education that's far more tailored to students' individual requirements.

But while improving student outcomes, it's also leading to a huge rise in BYOD (with every student needing access to a device) and increasing traffic on the network.

- 94% of students say that their laptop is very or extremely important to their success<sup>1</sup>
- 55% of students prefer a blended classroom environment<sup>1</sup>
- 77% of students believe that technology increases engagement in learning<sup>2</sup>



OmniAccess Stellar AP1231 indoor Wi-Fi access point

1 EDUCAUSE Technology Research in the Academic Community 2018

2 EDUCAUSE Center for Analysis and Research -Student Technology Experiences Study 2017 Teachers and lecturers alike rely on robust, reliable Wi-Fi across their campus to access the full range of teaching tools available to them. And in higher education and universities, the standard of available digital services could play a major factor in a student's choice of where to attend.

This is why high performance, reliable Wi-Fi is moving to the top of the agenda for education institutions, looking to not only deliver the connectivity that teachers and lecturers are demanding, but also the integrated security to keep students safe.

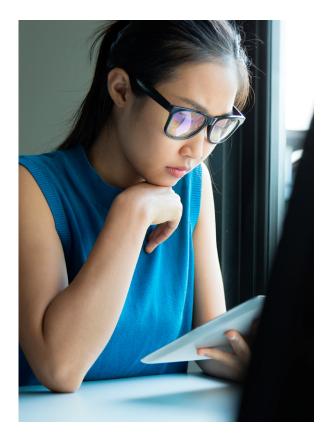
The Alcatel-Lucent OmniAccess<sup>®</sup> Stellar WLAN product line which now includes indoor and outdoor Wi-Fi 6 access points, meets all these demands, and more. Its next generation access points deliver enterprisegrade connectivity, with operational-manageability – creating a new paradigm in wireless networking that's efficient, secure, simple and affordable. And with our local, personalized approach, a tailored solution can be built to suit every learning environment.

The OmniAccess Stellar WLAN solution offers:

- **Simplicity:** High speed Wi-Fi using the latest standards, yet simple to deploy and scale
- **Performance:** Distributed intelligent architecture for better performance and high availability
- User centricity: Easy to connect to, leveraging automatic security profiles, provide an exceptional and secure user experience for students, teachers and visitors
- **IoT readiness:** Unique IoT containment technology, securely and automatically connect any device
- Analytics capability: Smart analytics monitor and control applications, help analyze students' behavior and establish strategic initiatives
- Unified management: Native unified access for LAN and WLAN with a cloud enabled management that guarantees the best quality of service
- **Evolution:** Future-proof solution built on latest technologies, innovations and services, protected investment



Education At-a-Glance Guide Alcatel-Lucent OmniAccess Stellar WLAN



### **Built for efficiency**

With the OmniAccess Stellar WLAN solution, students can access learning apps or get online to research subjects wherever they are around the campus using their own devices. And teachers are empowered to deliver more interactive in-classroom learning experiences. The enterprisegrade solution supports multiple access points, managed from a single interface. Smart devices such as connected CCTV, smart boards, projectors can all be secured and managed from the same interface.

- Distributed controller architecture
- Unified Policy Authentication Manager (UPAM)
  - Teachers secure authentication
  - Visitor/student access self-registration, teacher sponsored login
  - User based policy enforcement
  - Extensive captive portal customization
- Simplified management of access groups
- Up to 256 access points in a cluster in Stellar Express (32 or 64 for clusters managed by AP1101, AP1201 or AP1201H) and up to 4000 access points in Stellar Enterprise

#### **Built for security**

Education institutions hold a wide variety of confidential student data. And every new app, personal device, or IoT device deployment creates a potential new gateway for cyberattack.

With OmniAccess Stellar WLAN solution's IoT containment feature, education establishments get not only simplified deployment and configuration, but also a dramatically more secure network architecture.

Using a secure, simple, distributed environment, separate contained virtual network areas can be created that are only accessible by compliant devices. This means that instructors, staff and administrators can have a separate network from students, policies can be used to limit P2P or other irrelevant site access from the student network, and IoT devices like HVAC, POS terminals, CCTV and building access controls can be kept on a separate network, ensuring that a compromised section won't affect others.

- Secure network access control (NAC) with Unified Access technology
- Smart Analytics application monitoring and enforcement
- IoT enablement that makes connection to any device easy and secure, leveraging a cloud-based fingerprinting service with the signature of millions of IoT devices
- Improved Wi-Fi security with the latest WPA3 standard





OmniAccess Stellar AP1101 indoor Wi-Fi access point



OmniAccess Stellar AP1201-H dormitory specialized access point

#### **Built for simplicity**

The OmniAccess Stellar WLAN product line is designed to enable automatic onboarding of user devices and IoT devices to support the connected learning experience, wherever people are on the campus.

- Policy-based management
  - Rules created based on:
    - Location
    - User group
    - Identity
- Easy discovery of Bonjour/UPNP service devices
- Highly integrated solution
- Automated deployment and integrated with Alcatel-Lucent OmniSwitch<sup>®</sup>

#### **Built for affordability and low TCO**

The OmniAccess Stellar WLAN product line is designed to be affordable, with a low TCO thanks to its simple management features and distributed intelligent capabilities.

- Secure web management portal, for small deployments
- Wizard configuration tool
- Visitor captive portal
- Optional cloud-based or on-premises management system
- Distributed RF for automatic radio channel optimization
- Smart load-balancing intelligent connection to best APs
- Self-healing dynamic coverage adjustment to counteract access point failures
- Easy to scale automatic management of new access points

ALE connects the campus, helping educators provide the digital learning environment today's students need to thrive.

The OmniAccess Stellar WLAN portfolio, with a choice of entry level, mid level and high end access points, can grow with your needs.

To find out more about the Alcatel-Lucent OmniAccess Stellar WLAN solution visit www.al-enterprise.com/en/stellar-mobility-wifi



## **Connected Education**

Where Education connects with technology that works. For your school, college or university. With global reach and local focus, we deliver purpose built networking and communications for the education environment that enable secure, reliable collaboration between your faculty and students.



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