

# Guglielmo Marconi Institute

## WiFi 6 APs and USG FLEX Security Gateways School Italian College in Network Coverage, Security

### Customer at a glance



**Customer Name**

Guglielmo Marconi Institute



**Industry**

Education



**Organization Size**

900 students, 39 classrooms, 11 laboratorie



**Country**

Italy



### Customer Background

The college's mission is to ensure students are prepared to enter the job market and get to work immediately upon graduation. It does this by providing an enriched education that integrates theory and practical skills, such as hands-on lab courses.



### Summary

The institute needed to upgrade its network on multiple fronts. Specifically, it needed to support more devices, better protect data security, and allow easier, centralized network management. Putting security first, the school's IT service provider, Sedecom, turned to Zyxel's USG FLEX 700 firewall. By integrating UTM services with a wireless controller, the solution gives the institute's IT staff simple and secure centralized management of APs. The Nebula Control Center allows staff track traffic and manage authentications for both workstation PCs and wireless devices through captive portals. The SecuReporter cloud-based analytics and report also comes integrated within the gateway to guard against cyberattacks and generate security reports. To ensure seamless, high-speed connectivity in every inch of the institute, NWA5123-AC HD APs were deployed in classrooms while WiFi 6 APs were installed in auditoriums and laboratories to ensure sufficient speeds and coverage in these higher-density environments. The school also now uses multi-SSID mode and VLANs to separate wireless connectivity for internal and external access plus for different uses like education, administration, VOIP, and guests. Finally, XGS1930 smart-managed PoE switches were deployed to deliver 10G speeds, while LACP and SRTP configuration protocols ensure greater throughput and continuity in case of breakage or maintenance.

### Challenges

- Simplify network management as well as authentication for faculty and students
- Provide seamless high-speed wireless connectivity that is secure and GDPR-compliant
- Establish an efficient management system for internet traffic and application control

### Benefits

- USG FLEX firewall provides UTM traffic control and centralized management of all APs
- High-performance WiFi 6 APs deliver fast, uninterrupted connectivity which can be centrally managed and configured easily
- VLAN network segmentation allows greater security and performance for education, administration, VOIP, and guests
- Smart-managed PoE switches with redundant network infrastructure ensure non-stop network continuity with speeds of up to 10G

### Solutions

- USG FLEX 700 UTM Firewall
- NWA5123-AC HD 802.11ac Access Point
- WAX510D 802.11ax Access Point
- GS1920 / XGS1930 Series Smart Managed Switch