





# Revolutionizing Education: A Legacy Institution's Journey to Innovation

## **Overview**

The esteemed educational institution in Nepal, committed to delivering exceptional learning facilities envisioned transforming its campus into a modern, technology-driven hub for education. With a strong belief in the importance of innovation and infrastructure in fostering academic excellence, the institution decided to upgrade its networking and security systems to match its ambitions. Seeking a trusted partner for this endeavor, they turned to Zyxel Networks, a global leader in networking and security solutions, to bring their vision to life.

## Challenges

The institution encountered several critical challenges while striving to achieve its goals. Integrating a diverse range of network components across classrooms, hostels, and server rooms required meticulous planning and precise execution. A key concern was ensuring comprehensive security measures to protect the network infrastructure from potential cyber threats and data breaches. Additionally, the institution sought to deliver wireless connectivity across its sprawling premises, enabling students and staff to access high-speed internet seamlessly from anywhere on campus. These challenges demanded a robust, future-ready solution that could address their immediate requirements while scaling to meet future demands.

## Solutions

To address these challenges, Zyxel Networks implemented a tailored solution that combined advanced networking products with strategic deployment. To ensure seamless wireless connectivity, WAX650S WiFi 6 Access Points were strategically installed across classrooms and hostels. These high-performance devices allowed students and staff to enjoy uninterrupted and fast internet access, even in high-density environments. To power the access points efficiently and ensure their smooth functioning, Zyxel Networks deployed PoE12-30W and PoE12-60W PoE Injectors, ensuring a reliable power supply.

#### **Customer** Visionary education hub

**Industry** Education

Location Nepal

**Partner** iTech Office Support

#### **Customer Background**

The visionary educational trust was established to drive societal transformation through education. Expanding its presence to other cities in Nepal, the trust partnered with a leading organization to create institutions committed to quality education and holistic development.





For the institution's network infrastructure, GS1920-24v2 Smart Managed Switches create a robust LAN network. These switches facilitated high-speed internet access across the campus, supporting both academic and administrative operations. In the server room, XGS4600-32 L3 Aggregation Switches were installed to provide a stable, high-speed backbone for the institution's critical applications. In classrooms, GS1008HP and GS108Bv3 switches were implemented to support multimedia and e-learning tools, empowering both teachers and students to leverage digital resources effectively.

Recognizing the importance of security, the USG40W Unified Security Gateway and ATP800 Firewall were deployed to safeguard the campus network. These solutions were installed in key locations, including the student hostels, to protect against cyber threats and unauthorized access. The deployment ensured that sensitive institutional data and online activities remained secure at all times.

## **Product List**

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- WAX650S WiFi 6 Access point
- XGS4600-32 L3 Aggregation Switch
- GS1920-24v2 Smart Managed Switch
- GS1008HP Unmanaged PoE Switch
- GS-108B v3 Desktop Gigabit Ethernet Switch
- PoE12-60W 5G PoE++ Injector
- PoE12-30 2.5G PoE+ Injector



- ATP800 Firewall
- USG40W Unified Security Gateway

## Results

Zyxel Networks' solutions transformed the institution into a modern educational hub where technology and learning intersect seamlessly. By addressing its networking and security challenges comprehensively, Zyxel Networks enabled the institution to create an environment that fosters innovation, collaboration, and academic excellence. This transformation not only met the immediate needs of the institution but also prepared it for future growth and opportunities in the ever-evolving landscape of education.

- Seamless and robust network infrastructure across the entire campus
- Strengthened security protection against potential cyberattacks and viruses
- Enhanced education quality and operational efficiency through streamlined network management

