



EnGenius Neutron Series “Makes IT a Utility” While Providing Affordable, Managed Wireless Connectivity to Support Cyber Curriculum

Quakertown Christian School, Quakertown, Pennsylvania



For over 64 years, Quakertown Christian School has equipped its students to be leaders through an exceptional education within a culture emphasizing Christ-like love, peacemaking, and service.

The spacious school campus encompasses separate pre-school and K-12 buildings which house a total of 15 classrooms, and two large sports fields. On campus at any given time throughout the day are approximately 210 students, which range from pre-school through high school, and 35 teachers and administrators. In addition to a long-term lease agreement with two churches that use its facilities, the school also rents out its classrooms, gymnasium, auditorium, and banquet facilities to members of the community.

The Need: A Reliable, Manageable, Affordable Network to Support a Cyber Curriculum

As the school began the transition from a traditional curriculum to a cyber-based curriculum, they quickly realized that their network infrastructure was inadequate to support the network connectivity needs and hired a professional IT person to bring structure to the IT environment.



Ken Herr, the school’s Director of Information Technology, was brought in to bring organization to the technology chaos. “When I came to the school four years ago, we only had about 15 regular wireless users,” Herr explained. “We were anticipating significant growth in the future usage of the network and were challenged with meeting the projected demand with a robust wireless infrastructure.” He stated that since that time, wireless usage has exploded to hundreds of daily users with the introduction of Chromebooks, faculty laptops, iPads, Macbooks, and BYOD.

According to Herr, the high school is now entirely cyber-based. “We run a cyber-based curriculum in grades 9 through 12,” he stated. The program has been so successful that the school is working to incorporate cyber-based curriculum throughout the school. “Since I started at the school four years ago one of the driving forces to upgrade our network has been to build an infrastructure that could support a school-wide cyber curriculum.” When the school had some money left over from their VoIP system deployment, they reallocated the funds for a wireless upgrade.

The Solution: EnGenius Neutron Series Distributed Network Management Solution

“Being a small private school, we have to watch every penny we spend,” Herr said. “We looked at a variety of solutions and manufacturers. We had a limited amount of money and I was looking for a solution that would get me the most out of the few dollars that we had. EnGenius seemed to offer the best performance to cost ratio.”

The school purchased the EWS5912FP 8-Port Gigabit Ethernet 130W PoE+ Wireless Management Controller and Switch, and five (5) EWS360AP Dual Band Wireless AC1750 Managed Indoor Access Points. Herr deployed the Neutron Series access points in the academic areas of the main campus building and uses existing EAP600 Dual-Band Wireless Access Points to “fill in the gaps” until they can finish their Neutron Series deployment during the next

school year, including the planned extension of the deployment to the pre-school building. “The ability to centrally manage the network, the ability to run VLANs over the APs, and the fact that there are no subscriptions required to manage the products were among the main reasons we selected EnGenius.”



The Results: Affordable, Reliable Wireless Infrastructure for Network-Connected Learning



“The Neutron Series solution has allowed me as an IT director to have a single point of control, a single point of monitoring,” Herr said. “And as an outgrowth of that, I’m able to offer reliable services to the classrooms.” He explained that in private schools where families are paying out of their own pockets for their childrens’ educations, they want to know that they’re getting what they’re paying for. The ability to provide reliable high-speed network connectivity that meets our instructional needs, and is at least as good as they get at home, is crucial. “The challenge is that we need to provide that service in a structured, managed environment and the network experience has to be as seamless as possible.” The future-proof solution allows the network to grow and be easily managed as the campus grows, the number of students increases, and new bandwidth-intensive applications are implemented into the curriculum.

The EnGenius Neutron Series Distributed Network Management Solution has helped Herr to realize an important goal that he had set for himself when he took over the IT responsibilities at Quakertown Christian School. “My goal here as an IT person was to make my position unnecessary. By that, I mean make IT a utility,” he explained. “IT at the school should be like heat, light, and running water – it should just work.”

“The EnGenius solution has helped me by greatly minimizing the amount of attention that I need to pay to my wireless network. It returns to me time every day that I can devote to more productive activities.”