

Case Study: The Reality for Education Today



A New Approach to Safety & Security Management in Schools

Every school campus is unique and has its own challenges. Administrators have several priorities they are tracking daily budgets, illnesses like COVID-19, staffing, and changes in technologies — while maintaining daily operations and managing emergencies. To support a productive learning environment, the safety of students and staff is always a top priority. Being able to identify and respond to potential risks before they become major incidents is critical to the security of your campus.

School shootings and major incidents on campuses are on the rise, and it's more important than ever to ensure that your school is safe. It is estimated that more than 48 million children attend American public schools each day, and the severity of significant events has increased dramatically in recent years. Many schools rely on antiquated security or have no technology at all to manage the threats experienced today, putting students and staff at risk.

To meet the increasing demands of safety and security in schools, you need a trusted partner for interoperable voice connectivity, video surveillance, and access control, but finding an experienced and reliable provider can be challenging. Communication Electronics is one of the most recognized names in the Mid-Atlantic with over 45 years of experience, which means that you're getting expert advice from people who know the education industry. In addition, we have solid partnerships with some of the most recognizable technology manufacturers in voice, video, and data, including Motorola Solutions and Avigilon.

A Turnkey Technology Partner for School Operations, Security, and Safety

End-to-end wireless solutions are changing faster than ever, and it can be hard to keep up with the latest trends and technologies. Regardless, you need a reliable partner focused on school safety.

Communications Electronics offers a wide range of solutions, while also providing expert consulting services for our customers' specific needs. By combining technology expertise, personalized service, and superior customer support, we have built lasting relationships with satisfied education customers across the Mid-Atlantic region.

Communications Electronics has been working with K-12 and higher education for over 45 years and we have developed a comprehensive plan that includes steps to implement a safe learning environment in any district or across any campus. These solutions help you manage every aspect of your school's security and safety program from one unified platform — helping you protect what matters most by detecting, analyzing, communicating, and responding automatically for daily events and major incidents. Motorola's Safety Reimagined platform helps to keep students, faculty, and staff safe, while allowing them to focus on their education rather than potential security issues.

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Motorola Digital Radio Systems to Enhance Safety for Your School

There are several challenges that can impact the safety and efficiency of your school, and outdated or unreliable two-way radio systems are one of the most prevalent. With an outdated analog two-way radio system, you will experience coverage issues in your buildings and missed or unclear communications — all of which puts you, your students, and your staff at risk. You need a reliable two-way radio system that will work throughout your campus and across your district, allowing you to communicate clearly and instantly when needed.

Communications Electronics has partnered with Motorola Solutions to provide MOTOTRBO Digital Two-Way Radios Systems that can help you quickly respond to both daily and emergency situations. Our Motorola [MOTOTRBO Digital Radio Solutions](#) are reliable, operate across multiple locations and facilities, and have a trusted record of success in K-12 and higher education. Motorola digital radio systems provide crystal-clear audio with excellent wide-area coverage, which enables you to connect with school buses across your district as well as staff and administrators. At Communications Electronics we can even create interoperable radio connectivity with your local first responders, enabling real-time communication with staff on-site. By choosing Communication Electronics as your trusted partner for school safety communications solutions, you'll get peace of mind knowing that our solutions are designed specifically for educational organizations like yours.

In-building Coverage Solutions for Public Safety Radios and Wireless Voice and Data Systems

A recent survey showed that 1 in 3 parents are concerned about a major emergency happening at their children's school. Today's schools are frequently complex, sprawling campuses with multiple buildings and many different areas where wireless connectivity is essential for both safety and security, as well as the necessity to access the internet to share the latest curriculum and resources.

Public safety radio communications coverage is legislated in most areas of the country for larger buildings like school campuses. Leveraging our extensive experience, Communications Electronics can design, install, and maintain your Public Safety — Distributed Antenna Systems (DAS) or Bi-Directional Amplifiers (BDA) for your facilities. Ensuring these systems are operating properly is important for emergency preparedness. Communications Electronics can help to establish an ongoing maintenance schedule, including annual testing and certifying the system operation for regulatory requirements.

Operating voice technologies, video surveillance, and access control systems on a private wireless network that is robust, stable, and scalable is not a luxury, but a necessity for schools today. Communications Electronics and our partner Motorola Solutions understand this requirement and developed Motorola Nitro — a Private LTE network operating on the Citizen Broadband Radio Service (CBRS) frequencies. Motorola Nitro not only has the capacity to handle your onsite wireless voice, video, and data requirements, but can also be expanded to accommodate distance learning requirements for students at home and across your community.

Communication Electronics Security Solutions

Protecting Your Students, Staff, and Campus With AI-Powered Safety & Security Systems

Today's schools and universities face myriad challenges, but protecting their students, faculty, and administration is their highest priority. Most schools use traditional video surveillance systems that have low-quality video cameras and require constant monitoring to identify suspicious activity. Additionally, these legacy security systems are not integrated with other technology platforms in use on campus. This means that most of the time these solutions are not being used effectively and are missing potential threats - leaving your school vulnerable to major incidents.

Communications Electronics has partnered with Avigilon, which offers end-to-end video surveillance systems, access control, and [AI-powered analytics software](#), such as facial and license plate recognition. Avigilon's security and safety systems learn automatically, without human intervention or programming knowledge. This makes our high-quality video and analytics easy to use, scalable, and incredibly accurate — even in crowded environments like schools where people move around quickly, making detection challenging for traditional cameras. Avigilon's analytics can even trigger audio or text alerts to MOTOTRBO radios when unusual activity is detected, expediting response times to mitigate an incident from escalating.

Furthermore, Avigilon-powered security systems have cloud storage and searchability functions. This means you won't be spending hours on searching endless footage when time is critical.

Communication Electronics Technical Services

Experienced Engineering, Installation, and Maintenance to Minimize System Downtime

End-to-end wireless voice, video, and data solutions play a critical role in the day-to-day operation and emergency preparedness of a school, and avoiding downtime is critical. With limited budgets and technical expertise, educators need to rely on reliable technology providers to partner for service and support. Unfortunately, finding a dedicated and knowledgeable partner that understands the educational landscape can be challenging and the consequences are potentially devastating if a system fails or does not perform well.



At Communications Electronics we are extremely proud of the relationships and our involvement in the education industry. Our dedicated team of engineers and technicians has years of experience in the wireless industry to provide professional services to our K-12 and higher education customers. We work closely with our customers every step of the process, from selecting the right technology for today and tomorrow to designing solutions to meet your requirements to deploying the system for minimal disruptions, and maintaining your telecommunication systems to protect your investment. Communications Electronics offers comprehensive technical services for your school, including [maintenance contracts](#) so you can prevent issues before they happen, FCC licensing assistance, and [system design and engineering](#). By partnering with Communications Electronics, you'll be able to focus on what matters most; providing an education environment for your students and staff to succeed.

Benefits of Working with Communication Electronics

Unified Technology Platform That Transforms School Security and Safety

Comprehensive voice, video security, access control, and data solutions streamline operations, increase security, and improve safety for everyone.

By partnering with Communications Electronics on developing your Motorola Safety Reimagined Platform, you can prevent threats before they become major incidents. If an emergency does happen at your school, you can immediately respond to manage the event, giving public safety agencies real-time information on the situation. Motorola's Safety Reimagined ecosystem integrates voice, video, data, and analytics technologies in a cohesive security and safety platform, providing a complete 360-degree view of your campus and giving students and staff a positive learning environment.

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PREVENT THREATS BEFORE THEY BECOME MAJOR INCIDENTS.**

Learn How Communications Electronics Can Improve the Safety and Security of Your School

The reality is that you need to be prepared for the worst-case scenarios. From emergency incidents like severe weather, fires, or school shootings to daily events like fights, injuries, and bullying — issues can happen at any time. Training, vigilance, and technology all play a role in helping you manage your campus.

We hope that these insights about school security and safety technologies have been helpful in understanding how to create an environment for your students and staff to achieve their goals. If you want more information on Communications Electronics' Safety Reimagined platform, [contact us](#). Not only will this give you the opportunity to learn more about the benefits on unified technology, but also stay up to date with any new technology solutions we offer for education.