



Smart

Our PDS-104GO outdoor Power over Ethernet (PoE) switch enables remote monitoring and control of the devices' status, including remote reset.



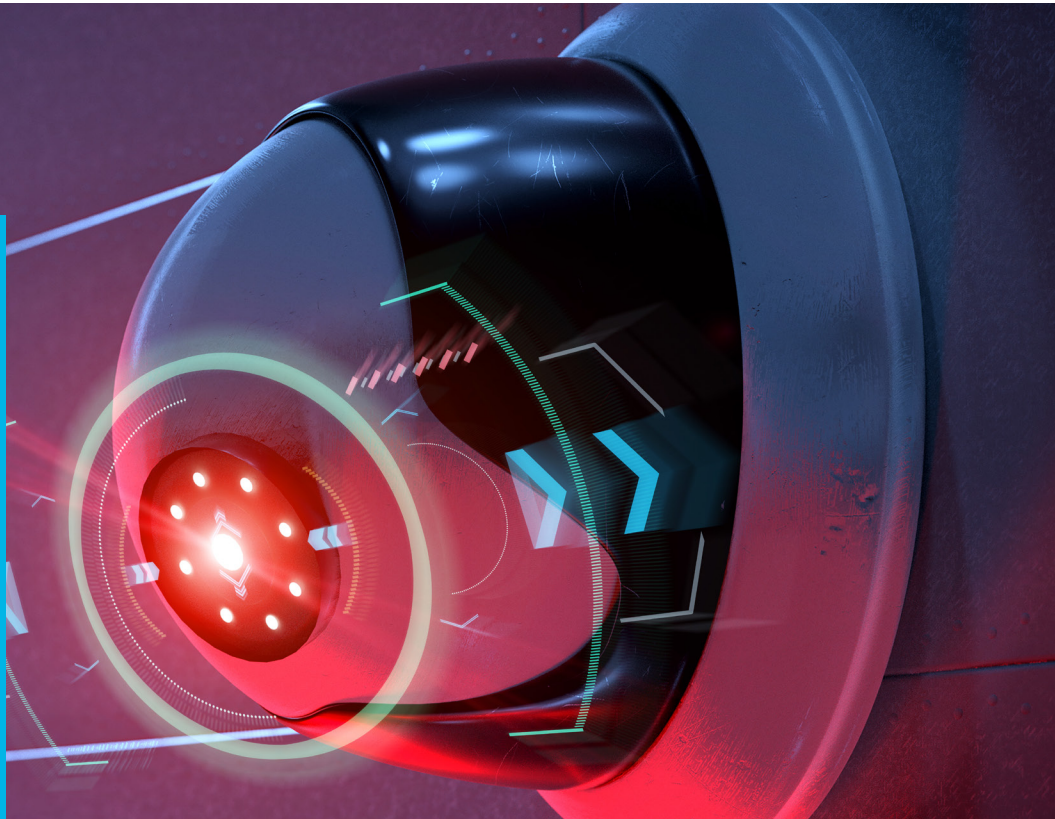
Connected

Our IEEE® 802.3at-compliant solution delivers PoE and is an ideal solution for outdoor WLANs, IP cameras and P2P radios.



Secure

With VLAN and RADIUS support, our PDS-104GO brings improved security, performance and safety via centralized management of user profiles.



Active Solutions Addresses IP Video Deployment Challenges With PoE

Security cameras are becoming as common as stop signs in many communities. Many of us have become accustomed to the idea that we're probably visible on one camera or another whenever we go out in public. Wherever opportunities for accidents or incidents that could adversely impact the lives of citizens or visitors exist, the debate over video capture technologies intensifies. With the appropriate technology and open communication among local stakeholders, the potential for video security solutions to deliver positive outcomes is considerable. Municipal leaders and community advocates understand the advantages that real-time video streams and archived multimedia footage can contribute to public safety initiatives. Reducing violent crime, increasing the efficiency of first responders, generating situational awareness data for emergency medical personal, locating missing children or elderly patients, contributing visual evidence in judicial and insurance matters, monitoring real-time traffic patterns and adjusting to spikes in tourist counts or crowds for major sporting and cultural events are some of the well-defined merits of these systems.



Active in the Community

Active Solutions LLC is a leading networking and communications systems integrator that is well known for designing security systems, deploying access control systems for buildings and developing products such as the SafeCity Cam™ for street-level public video programs.

Their tools are used to monitor and protect parks, streets, neighborhoods, businesses, school campuses, stadiums and entire cities. Public safety organizations also utilize live video monitoring services provided by the company to facilitate immediate responses in emergency conditions. They have led the development of smart city solutions to help public safety officials leverage video technology which can enhance the quality of life for residents and boost a city's reputation among tourists and visitors.



The Challenge

A municipal client approached Active Solutions to design and install an outdoor IP video system featuring cameras in high-profile locations across multiple city sites, including some in very hard-to-reach locations. To enhance street surveillance, the client required cameras with maximum coverage capabilities, variable zoom features and state-of-the-art panoramic Pan-Tilt-Zoom (PTZ) mounts. Requiring significantly higher power consumption than traditional security cameras, these devices are even more complex and the client needed a supplier that could address this complexity.

In addition to IP video cameras, the overall network scheme mandated the installation of Point-to-Point (PTP) and Point-to-Multipoint (PTMP) antennas for

wireless connectivity in areas with no local power source, which further increased the complexity of the installation.

To guarantee a reliable and high-quality video surveillance network, the system needed to withstand the harsh environmental conditions common to states in the southern U.S., including temperatures over 100°F (37.7°C) with nearly 100% humidity in the summer months.

Active Solutions worked with their client to study all available options before concluding that deploying Power over Ethernet (PoE) switches would provide the highest levels of performance and security while lowering the total cost of ownership.



The Solution

After a detailed analysis of the client's business requirements, the Active Solutions team looked for the best PoE solution in the industry to address the outdoor and power-related deployment challenges they faced. They considered several PoE solutions based on features, technical specifications and lab tests. As a leading PoE innovator, we were among the first technology vendors they approached. Our industry-leading outdoor PoE switch (the PDS-104GO) is ideally suited for wireless PTP, PTMP and IP surveillance camera installations in extreme weather conditions and was ultimately selected by Active Solutions because it addressed all of their client's requirements.

These included:

- Powering up to four devices with power consumption of up to 60W per port
- Supplying SFP inputs to cover longer distances and extend the reach between the switch and the Powered Device (PD) by an additional 100 meters (to a maximum of 200 meters)
- Withstanding extreme weather conditions through an extended temperature range product and with integrated surge protection
- Offering easy plug-and-play installation
- Enabling remote management, facilitating quick assessment of endpoint issues and allowing remote reboot/power diagnosis

Our PDS-104GO outdoor PoE switches enhanced the seamless deployment of the project's PTP/PTMP antennas and 180 cameras throughout the city in just 14 days!

A Scalable IEEE 802.3at-Compliant Solution

PDS-104GO outdoor PoE switches provide up to 60 Watts of PoE and offer an IEEE 802.3at-compliant solution for outdoor WLANs, outdoor IP cameras or outdoor P2P radios. With VLAN and RADIUS support, the PDS-104GO brings improved security and performance. It provides better safety through centralized management of user profiles and authorized system access. By regulating network traffic in each VLAN, the switch offers increased network performance. There is no need to open the unit during installation. Deployment is simple and straightforward. In addition, it enables remote monitoring and control of the devices' status, including remote reset. The switch extends the reach between the switch and powered devices by an additional 100 meters to a maximum of 200 meters—a major benefit in many applications. It offers lightning protection to the switch itself and to the indoor network.





The Result

Our PDS-104GO outdoor PoE switches eased installation of high-power outdoor IP cameras subject to harsh weather conditions and antennas for wireless connectivity in hard-to-reach places without power. Maintenance was simplified with remote management while SFP input helped lower camera installation costs over longer distances.

We teamed up with Active Solutions and offered all the necessary equipment and technical support within the

specified timeframe. The entire IP security system was installed in just two weeks. With nearly 180 camera perspectives, the public safety video solution proved to be extremely helpful during sports events and celebrations, enhancing the safety and security for residents and visitors alike. The innovative PoE architecture can scale to meet the demands of future expansion in the most demanding environments.

“Microchip’s PoE switches were essential to the success of this IP surveillance system. We chose Microchip for the switch’s PoE capability, outdoor rating, port configurability, and ability to accept a fiber input. Their support was instrumental for a seamless installation and achieving our project deadline.”

Brian Fitzpatrick
President, Active Solutions LLC



Challenge

The client needed to quickly install an outdoor IP surveillance system that includes PTP/PTMP antennas and high-power panoramic PTZ cameras, often in locations without a local power source.



Solution

Microchip installed PDS-104GO outdoor PoE switches in just 14 days for seamless deployment of PTP/PTMP antennas and 180 cameras.



Results

Microchip’s PDS-104GO outdoor PoE switches simplified installation of high-power outdoor IP cameras subject to harsh weather conditions and antennas for wireless connectivity in hard-to-reach places without power. Maintenance was simplified with remote management while SFP input helped lower camera installation costs over longer distances.

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