MINING SURVEILLANCE WITH VIDEO MONITORING

Simple perimeter alarms and barbed wire are no longer enough to protect critical infrastructure from unauthorized access, vandalism, and theft. Interior monitoring is becoming more important in providing a complete security system in mining environments.

A large mining company in Chile has enhanced its security system using video monitoring. A security integration company chose Comtrol’s RocketLinx ES7510-XT Power over Ethernet (PoE) switches for installation at a particular mine to construct a complete surveillance solution. Cameras monitor access points along with activity inside the mine. As seen below, the camera feed is relayed to a remote monitoring station via the RocketLinx ES7510-XT switches and wireless radio equipment. The PoE switches are also being used in conjunction with slightly larger and more powerful surveillance cameras at an electrical substation near the mine. This video feed is also relayed to the remote monitoring station. Security personnel can monitor both feeds simultaneously for a complete surveillance of the mine.

The RocketLinx ES7510-XT switches provide power to the surveillance cameras, as power sources aren’t always conveniently located. The switches’ rugged design allows full and reliable operation in harsh weather conditions, including extreme temperatures. The combination of both of these features allows the mine to have complete surveillance, while the installation of Comtrol’s RocketLinx ES7510-XT switches assure that connectivity and environmental needs of the system equipment are being met.

The full line of Comtrol’s RocketLinx PoE industrial Ethernet switches are designed to meet the performance and environmental demands for applications requiring extended operating temperatures, rugged design, and reliable power delivery to standard and high power devices.
PoE Plus Supporting High Power Devices

The Comtrol RocketLinx ES7510-XT managed industrial PoE Plus switch is designed to meet the high power and advanced management needs of critical traffic applications such as real-time IP video surveillance and wireless communication utilizing outdoor rated IP cameras and high power IEEE 802.11 access points. Featuring a rugged design for harsh environments, intuitive web, CLI, SNMP management options, power scheduling and eight fully compliant IEEE 802.3at PoE injector ports, the ES7510-XT is easily installed in industrial settings and traffic cabinets supporting even the most power intensive devices such as IP cameras with heaters and pan/tilt/zoom controls.

Innovative Power Control

In addition to functioning as a PoE power source, the ES7510-XT includes advanced device controls, ensuring that power consumption does not exceed parameters defined by the user. This includes power budget control functions to limit power output on devices not reporting correct consumption rates and device priority options to guarantee power to critical devices while avoiding power supply overloads.

Management and Security

The RocketLinx ES7510-XT is equipped with full Layer 2+ management capabilities to provide the most flexible network configuration and control. Features like Link Aggregation Control Protocol allow grouping of multiple ports to enhance bandwidth and provide load balancing while Port-Based VLAN, QoS, IGMP Snooping, and Rate Control features enable optimum control over the network environment. In addition to the full array of management capabilities, the ES7510-XT also supports the most advanced security features to protect the network and guarantee secure, reliable data transmission. Fault relay and e-mail notification of event alarms, DHCP supporting IP and MAC binding, IEEE 802.1X network access control, SSH, and many other controls are included to make secure administration and management a simple task.