Critical Infrastructure

IMPROVING HOMELAND SECURITY

The core of DAQ expertise lies in the high-level automation of complex processes for both security and SCADA applications. Founded in 1975, DAQ pioneered distributed processing for industrial automation projects in multiple industries, including electric, petrochemical, water/waste water, transportation, and communications. By embedding our recognized SCADA design and protection technology into our StarWatch™ SMS products, DAQ developed a suite of software modules and intelligent devices offering unique advantages for both comprehensive management of critical security operations and reliable performance in harsh environments.

SYSTEM FEATURES

- Predefined security elements, including access control, intrusion detection, and video management
- Rapid integration of third-party sensors with existing security and facility infrastructure using common protocols, including Modbus, DNP3, and IEC 60870
- Compliance with government regulations, including NERC CIP requirements
- Simple connection to the latest generation of smart locks and access card technologies
- Secure, efficient contractor/employee screening
- Site-specific security incorporating fence monitoring, perimeter detection, video analytics, and infrared cameras

Our custom-designed solutions, which range from small, stand-alone units to multi-site, distributed systems, enable users to precisely monitor and control geographically dispersed plants, equipment, sensors, and 3rd-party devices with a high degree of accuracy. By removing the possibility of human error from analytical and diagnostic processes, DAQ technology ensures the reliable flow of information across system architecture and an immediate response to alarm situations.

The StarWatch SMS platform provides the flexibility to address diverse applications, from single sensor solutions to fully implemented, multi-site security networks

This integration of security with SCADA enables the StarWatch platform to present a common user interface for system reporting and events. Complying with government NERC CIP regulations, infrastructure protection standards can be built-in and configured, such as lock-down sequences during potential cyber terrorism issues. StarWatch can manage and monitor access control and intrusion detection at a facility using existing communications framework and protocols, providing simple connection to previously installed devices and reducing duplicated services.

INTEGRATED PHYSICAL SECURITY

StarWatch extends a wide range of security functions for local facilities and remote locations, including entry/exit monitoring, alarm verification and assessment, automated event response, and the strict management of personnel and vehicle access. Complete situational awareness is achieved via fully integrated access control, video management, intrusion detection, and gate control operations, all viewed and controlled through a single graphical user interface.

Access control for authorized users from location to location can pose a significant challenge without the right technologies. Within StarWatch, the latest generation of smart locks and smart cards communicate directly to system databases where all access events, such as which individuals entered a substation and for how long, are monitored, recorded, and time-stamped. StarWatch minimizes loss by implementing vetting systems that provide background checks as part of an enrollment/registration process.

A MERGING OF TECHNOLOGIES

StarWatch facilitates the seamless fusion of third-party sensors with existing electronic security using common language protocols, including Modbus, DNP3, and IEC 60870. Data from diverse device types is collected under a single interface that manages, interprets, and unifies the information while introducing context-sensitive intelligence to the data handling process.

ASHRAE BACnet®

StarWatch provides users with the unique opportunity to merge security functionality with Building Automation Systems (BAS). With built-in BACnet® compliance, the platform offers a level of device interoperability previously unavailable in the physical security market, allowing building managers to reduce energy consumption by associating access/secure activity to BAS, including heating/cooling and lighting.

Standards-based interfaces and custom user controls enable the bridging of StarWatch to existing systems and allow operators to quickly analyze and act on reported information. By intelligently associating sensor data with real-time events within existing security systems, StarWatch offers clear advantages over stand-alone devices and interfaces. The system provides the framework to instantly connect bits of data into logical streams and eliminates the need for operators to manually interpret data in critical situations.

PROTECTING INFORMATION CENTERS

Safeguarding critical information locations, such as data centers that house telecommunications and storage equipment, requires a layered approach. By combining perimeter security, access control, and intrusion detection into a single solution, StarWatch provides a continuous view of personnel, assets, and systems, all within existing IT infrastructure. Providing robust door access control and constant monitoring of personnel movement throughout installations, StarWatch ensures all entry to restricted areas is authorized through configurations featuring biometric readers, anti-tailgating, and mantraps. Additionally, smart sensors, including biological and explosive detectors, can be strictly monitored with immediate reporting of alarms and auto-triggered responses, such as building lock-down and turning on/off components of HVAC systems.

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