

An IO Solution for Network Video Recorders in Security Surveillance Systems

2010-07-08

Location / Country :Finland

Product Solutions:

[ioLogik E2210](#)

Ethernet Micro RTU Controller with 12 digital inputs and 8 digital outputs

[ioLogik E2212](#)

Ethernet Micro RTU Controller with 8 digital inputs, 8 digital outputs, and 4 configurable DIO

[ioLogik E2214](#)

Ethernet Micro RTU Controller with 6 digital inputs and 6 relay outputs

[VPort 25](#)

IP66, day-and-night vandal-proof fixed dome IP camera for outdoors

Introduction

Project Introduction

A leading provider of integrated visual surveillance and recognition solutions for maritime, parking, access control, and distributed areas sought to improve their ability to deliver integrated visual surveillance solutions to end users. To do this they sought to develop a software technology platform and product that is open and standards-based. Their end users include prominent transportation system integrators such as Mitron. In order to achieve this goal, they needed a secure, bandwidth-efficient I/O solution that collects sensor status and works with the network video recorder (NVR) in their surveillance system.

System Requirements

- SNMP protocol support for I/O control and secure communications
- Bandwidth-efficient
- Easy to add to existing system

Moxa Solution

Surveillance systems have three key components: I/O, camera, and NVR software. As an NVR software provider, the customer needed to develop high performance software that can manage all the video streams in a surveillance system. However, video surveillance systems

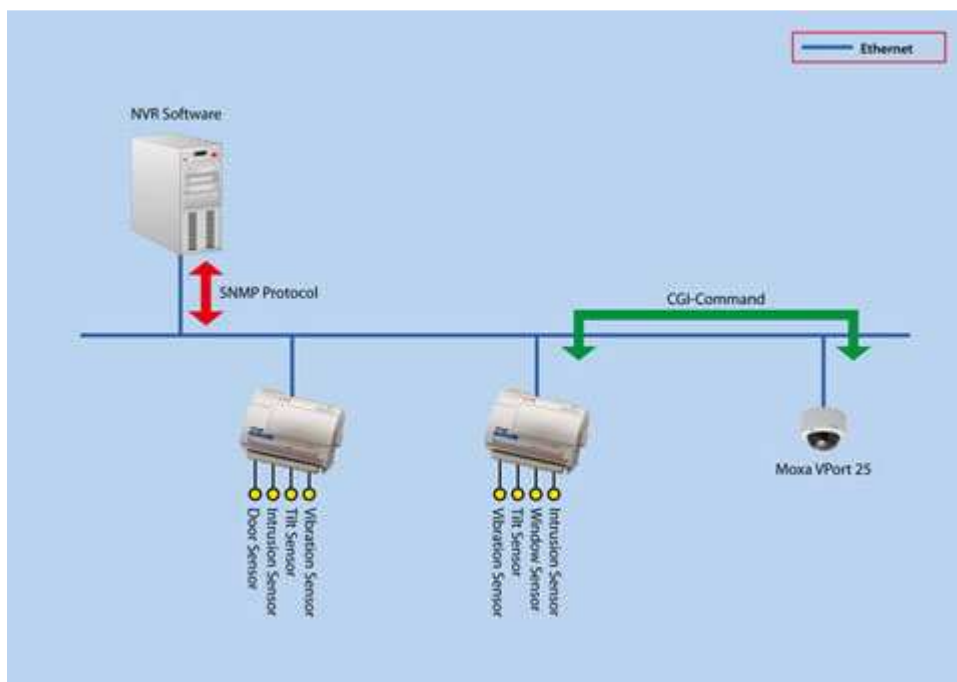
are demanding applications that can be bandwidth hogs, so efficiently reducing network traffic is a key goal.

For their surveillance system, Moxa's ioLogik E2200 series Ethernet Micro RTU Controller product was selected to collect status from physical devices such as door sensors, window sensors, intrusion detectors, and alarm detectors. The ioLogik's unique SNMP v1/v2c/v3 protocol support feature allows NVR software to actively receive I/O status with SNMP traps, which greatly increases the bandwidth efficiency of the system. The SNMP support also makes it easy to implement this I/O solution in existing surveillance systems, and the SNMP v3 protocol provides even more secure communications.

In addition, Moxa's Ethernet Micro RTU Controller supports CGI commands, which are a commonly used function in IP surveillance systems. With this function, the ioLogik can easily manage communications with an IP camera. For example, an IP camera can trigger the I/O server to activate a buzzer; or the I/O server can command the IP camera to pan to a pre-set point.

The NVR solution provider found that Moxa's I/O solution is a perfect match for security surveillance systems. Moxa's Ethernet Micro RTU Controller makes it easy to build a security surveillance solution that is both highly secure and bandwidth-efficient.

System Diagram:



Product Applied:

ioLogik [E2210/E2212/E2214](#)

- Sends active alarm message by TCP/UDP/SNMP-Trap/email
- Supports CGI commands for video server or surveillance software compatibility
- Supports SNMP for I/O control and monitoring

Why Moxa

- Open protocol for easy integration
- Active alarm function saves bandwidth
- SNMPv3 support ensures security