

## Unmanned Server Room and Base Station Monitoring with SNMP

2010-07-08

**Location / Country :**Europe

### **Product Solutions:**

[ioLogik E4200](#)

[Modular Ethernet Remote I/O adaptor](#)

### **Introduction**

Project Introduction

A leading European telecommunication service provider with over 80 years of experience in broadcast needed a high density and expandable I/O solution to monitor and control hundreds of unmanned base stations. This widely distributed network of base stations is used to provide nationwide access to a variety of services, including satellite communications, digital broadcast, television broadcast, and telecommunications. Monitoring and controlling this vast network of unmanned sites was a top priority for their maintenance engineers. Their existing solution was to use network management software (NMS) to manage SNMP-compatible network devices, but that leaves out I/O devices. An I/O controller that could integrate with the NMS would bring all of those devices into that same system.

System Requirements

- SNMP protocol support for I/O control
- High density I/O support
- High level expandability for future growth

Moxa Solution

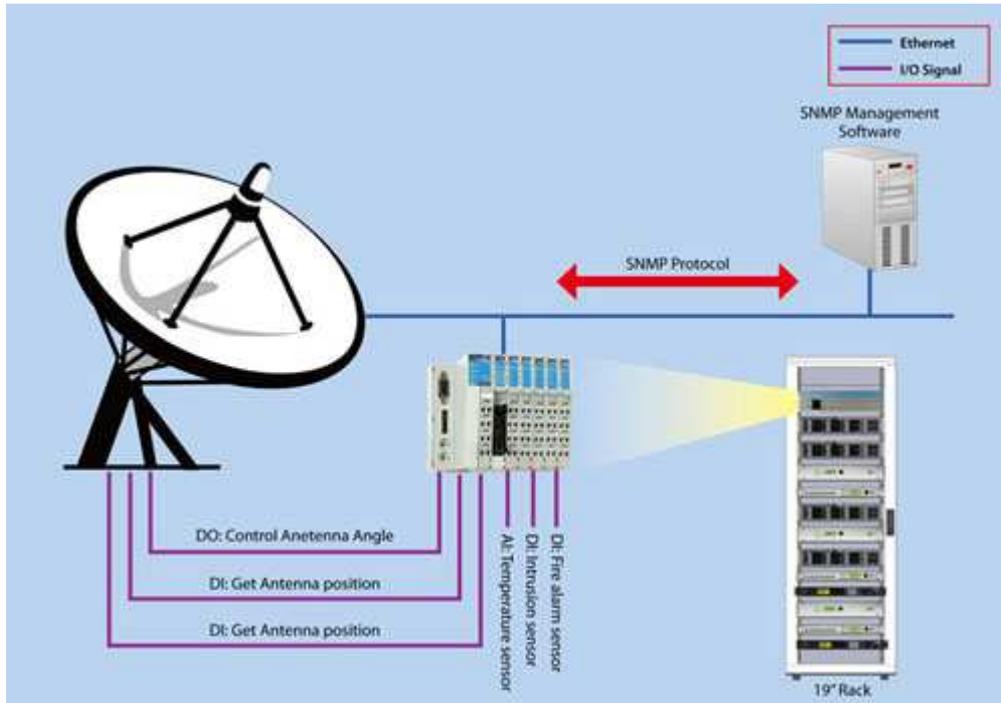
The customer selected Moxa's ioLogik E4200 modular active Ethernet I/O as a flexible I/O solution. The E4200 is both compact and modular, which makes this one product appropriate for many different places and applications.

Most importantly, the ioLogik E4200 offers SNMP-to-I/O functions, a feature unique to Moxa's products. IT users already have experience in using the SNMP protocol to manage network devices, but find it difficult to extend this expertise to I/O devices because SNMP to I/O communications is so problematic. Moxa overcomes this hurdle by offering an SNMP-to-I/O link with complete SNMP v1, v2c, and v3 support. This makes it possible for customers to use any NMS with Moxa's I/O devices.

SNMP traps provide an active alarm message; the customer can pre-define a threshold for each I/O channel. Once the value hits the threshold, the ioLogik will immediately send out the triggered trap message pro-actively, without any polling. SNMP v3 adds security features to avoid intrusion from hackers.

On the software side, the ioLogik E4200 offers Moxa's Click&Go™ configuration, which is a simple, programming-free configuration system. Click&Go's™ menu-driven IF-THEN-ELSE style logic is easy to understand and can be configured in just five minutes.

### System Diagram:



### Product Applied:

ioLogik E4200

- SNMP protocol support for I/O control
- Intelligent Click&Go™ logic for local control
- Modular design provides more flexibility
- Serial interface offered for SMS alarm

Why Moxa

- SNMP support helps customers to integrate systems with an existing NMS
- Modular design provides flexibility
- Compact size for deployment in confined spaces