



## Overview

Albuquerque Academy is one of the most respected Educational Institutions in New Mexico and a renowned College Preparatory School. It was founded in 1955 and the campus consists of 19 facilities situated on 312 acres campus near the Sandia Mountains. Energy Controls Inc. was selected to manage a \$2 Million project that included situations addressing campus automation, mechanical and electrical systems.

This project included installation of a new boiler and chiller plant, a campus wide automation system and energy efficient lighting in all campus facilities. The project emphasized Integration of multiple systems via FieldServer to Modbus, I/Net and Ethernet. Blending both new and existing devices/networks at the Academy involved products from a wide variety of manufacturers. These included lighting controls, access control, boiler controls, chillers, variable frequency drives, and video surveillance. The project also included Integration of Access Control, Video Security, as well as a high speed wireless Internet system.

All of this information had to interface to an I/Net system from TAC. Energy Controls came to Sierra Monitor to help them solve this integration challenge. Using multiple FieldServers, Energy Controls was able to link the necessary information to I/Net and the Ethernet. Due to a certain unique situation regarding the chillers, additional enhanced configuration of FieldServer was necessary to deliver the proper information to I/Net. Working with Sierra Monitor technical support, Energy Controls was able to make the necessary changes to bring all the data desired into the network. Energy Controls knowledge gained at the FieldServer Technical Training class combined with the special expertise provided by the Sierra Monitor Technical Support Center gave Albuquerque Academy the integrated solution they desired.

## Facilities

### East Campus

- Administration
- North and South Buildings
- Sims Performing Arts
- EC Gym/Dining Hall
- Music Building
- Physical Plant

### West Campus

- Administration
- Visual Arts
- Multi-purpose Computer
- 6th & 7th Grade Buildings
- WC Gym
- Natatorium

### Central Campus

- Science Building
- Library

### Efficiencies

- New Chiller Plant and Piping
- New Boiler Plant and Piping
- Full Campus Lighting Retrofit
- Campus-wide FMS System
- FMS Connect to Internet
- FMS Service and Mechanical Repairs
- Variable Frequency Drives

### Integration FieldServer

- Modbus to I/Net – Square D
- Modbus to I/Net – McQuay

### Security Measures Campus-wide

- Access Control
- Internet-based Video Surveillance

### Integration Ethernet

- Ethernet LAN to I/Net

### Wireless

- 11 MBS Wireless to I/Net & MATE Security

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice.

MSA operates in over 40 countries worldwide. To find an MSA office near you, please visit [MSAsafety.com/offices](http://MSAsafety.com/offices).