

RADIO PARK ELEMENTARY SCHOOL

STATE COLLEGE, PENNSYLVANIA



EDUCATION

OVERVIEW

Radio Park Elementary School was designed to meet the State College Area School District goal of providing collaborative education through the incorporation of technology, flexible learning areas, and sustainability. Classrooms are organized as educational “houses” that facilitate quick movement and allow for small-group instruction, faculty support, and storage. The design of the new building provides flexibility to accommodate any changes to its use over the next two decades.

PROJECT DETAILS

Reliable Controls Authorized Dealer Nexgen Automation successfully installed a MACH-System™ during the construction of this LEED Platinum-certified facility.

An instance of RC-WebView operates on a central server in the district office and is connected through Ethernet to MACH-System devices distributed throughout the school. The system controls mechanical equipment and regulates the temperature, humidity, and CO₂ levels in each classroom. Building operation data is delivered to RC-Archive and managed in RC-Reporter, allowing operators to easily monitor energy consumption. Nexgen used RC-Studio to configure the entire building automation system.

Individual heat pumps are installed in each classroom, with dedicated energy recovery units that maximize CO₂ control and minimize energy consumption. A central plant maintains water at optimal temperatures.

Rooftop solar arrays supply 20 percent of the school’s electricity—just one of several factors that contributed to the building’s LEED Platinum-certification from the U.S. Green Building Council. The building also conserves water with low-flow toilets, bathroom sinks, and kitchen equipment, along with sensors that automatically shut off fixtures. The school remained functional during construction and renovations.

“Nexgen was integral in the construction of three elementary schools for the State College Area School District. These projects involved new construction and renovation that were occurring simultaneously. Nexgen staff were very responsive to the issues that arose over the course of the three projects. All projects opened on time and Nexgen’s staff was instrumental in meeting their tight schedules.”

The State College Area School District Facilities department depends on the Reliable Controls MACH-System to facilitate a healthy learning environment for its young students. Reliable Controls and Nexgen Automation are pleased with the outcome of this project.

To learn more about projects using Reliable Controls visit

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PROJECT TYPE

New construction and retrofit

INSTALLATION TYPE

Boiler, CO₂ monitoring, heat pump, HVAC, power, natural gas metering, water metering

TOTAL AREA

89,510 ft² (8,315 m²)

NETWORK

EIA-485, Ethernet

PROTOCOL

BACnet, Modbus

BACNET

Patterson-Kelley boilers

EQUIPMENT INSTALLED

**1 MACH-Pro1™ controller
6 MACH-Pro2™ controllers
56 MACH-ProAir™ controllers
3 MACH-ProCom™ controllers
5 MACH-ProPoint™ expansion modules
23 MACH-ProZone™ controllers
15 SMART-Space™ controllers
RC-Archive® software
RC-Reporter® software
RC-Studio® software
RC-WebView® software**

TOTAL SYSTEM POINTS

1,209

RELIABLE CONTROLS AUTHORIZED DEALER

Nexgen Automation Inc.



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