

KENTUCKY STATE UNIVERSITY

FRANKFORT, KENTUCKY, UNITED STATES

OVERVIEW

Kentucky State University is a historically Black public land-grant university in Kentucky with a mission to provide quality education founded in liberal studies, scholarly research, and public service. The university's land and physical properties include 41 building facilities at its main campus in Frankfort, a 296-acre agricultural research farm in southern Franklin County, and a 306-acre environmental education center in Henry County.

Kentucky State's vision is to prepare today's students as global citizens, lifelong learners, and problem solvers through its core values of a student-centered philosophy, excellence and innovation, ethical conduct, and social responsibility.

Reliable Controls Authorized Dealer Core Controls installed a new building automation system at the university during a recent campus upgrade.

PROJECT DETAILS

Kentucky State recently began a capital planning proposal to build and renovate multiple buildings and construct a new central steam-heating plant with a main warehouse and facilities maintenance offices over several years. A significant part of the project was integrating equipment from multiple vendors into a single building automation system.

Starting with chiller- and boiler-plant upgrades in 2019, Core Controls worked with Kentucky State to implement a Reliable Controls system in 28 buildings across the three campuses, which included the installation of more than 500 controllers and 129 other devices from Reliable Controls.

The backbone of the new building automation system is RC-Studio, an easy to learn and use BACnet Advanced Operator Workstation (B-AWS) software program that helped Core Controls improve the operational efficiency, occupant comfort, and sustainability on campus while integrating both Reliable Controls controllers and equipment from numerous other brands.

Core Controls installed more than 300 MACH-ProAir controllers to control the variable air volume system at the university. Today, dozens of MACH-Pro1, MACH-Pro2, MACH-ProCom, MACH-ProSys, MACH-ProView, and MACH-ProZone controllers, along with MACH-ProPoint expansion modules, are seamlessly integrated with the facility's mechanical equipment, including three chillers, cooling towers, air-handling units, fan-coil units, and even the ventilation hoods in the campus kitchen. And each zone now has a SMART-Space Controller or SMART-Sensor device that delivers occupancy status, which provides an excellent means to improve energy and operational efficiency throughout the facility.

"The installation quality and workmanship of all the controls is first-class," Kentucky State University project manager Jeremy Kelly said of the work Core Controls did on this project. "More important than the installation quality, though, was Core's dedication to commissioning each piece of equipment and controller to make sure it was operating correctly per the sequence before they asked us to review it. Their attention to detail made our job commissioning these systems streamlined and efficient and ultimately ensured the project performs as promised."

The new building automation system is projected to save the university energy costs up to 27 percent per year. Together with Core Controls, Reliable Controls was happy to help Kentucky State continue to provide sustainable living, teaching, learning, and working environments for the university's students, staff, faculty, and guests—both today and in the future.

To learn more about projects that use Reliable Controls, visit
reliablecontrols.com/projects



MARKET SEGMENT

Education

PROJECT TYPE

Retrofit

INSTALLATION TYPE

HVAC

TOTAL AREA

1,238,338 m² (13,329,360 ft²)

PROTOCOL

BACnet

INTEGRATED EQUIPMENT

Johnson Controls BAS, Schneider Electric BAS, Automated Logic BAS, Daikin VRF

INSTALLED EQUIPMENT

24 MACH-Pro1™ controllers
 11 MACH-Pro2™ controllers
 319 MACH-ProAir™ controllers
 20 MACH-ProCom™ controllers
 32 MACH-ProPoint™ Input/Output expansion modules
 32 MACH-ProSys™ controller
 12 MACH-ProView™ controllers
 56 MACH-ProZone™ controllers
 2 SMART-Net Relay™ devices
 18 SMART-Sensor™ devices
 109 SMART-Space™ Controller devices
 RC-Studio® software

OBJECTS

5,360

RELIABLE CONTROLS AUTHORIZED DEALER

CORE CONTROLS

