SUMMIT COUNTY CHILD & FAMILY LEARNING CENTER

AKRON, OH, USA

GOVERNMENT

ENERGY CONSUMPTION MONITORING

Summit County Child & Family Learning Center is a 400+ occupant, two-storey facility used for learning, government, administration, and county administration. Although the building features modern construction, County personnel identified it as a severe energy consumer, with an outdated system and virtually no graphic interface or system control.

PROJECT DETAILS

Reliable Controls® Authorized Dealer, Control Concepts of Ohio, provided the Summit County Child & Family Learning Center with an flexible and controllable upgrade by performing a successful retrofit installation.

The project includes integration with third-party controllers and uses the MACH-ProCom™ to collect and monitor all third-party devices. The MACH-ProWebSys™ is used as a host for all graphics and monitoring, and also uses four MACH-ProPoint™ expansion modules for boiler plant control, exhaust fan, and pumps. The MACH-ProSys™ is is used to control a modular 40-ton VAV air handler with hot water heat. Challenges included creating BACnet® network channels with dedicated ethernet used for Reliable Controls device communication. Physical IP connections were determined in conjunction with facility IT personnel in detail.

While extensive energy monitoring was not required on this project, the county utilized a third-party consultant to substantiate energy consumption, which is reported as 8-12% reduction in utility consumption, attributed directly to the HVAC controls retrofit. Prior to the retrofit there was virtually no graphic interface or system control; however, the end-user can now operate and balance the VAV boxes, as well as adjust air flows to space. Comfort and noise levels have been greatly improved.

To learn more about projects using Reliable Controls®, visit www.reliablecontrols.com/projects/overview.

PROJECT TYPE:
Retrofit

INSTALLATION TYPE:
Boiler
Fan Coil Unit
HVAC
VAV

EQUIPMENT INSTALLED:
1 MACH-ProWebSys™
1 MACH-ProSys™
5 MACH-ProPoint™
2 4x4 MACH-ProZone™
4 MACH-ProCom™
4 SMART-Sensor™ LCD IO
178 SPACE-Sensor™ Temperature with 10k Slider

NETWORK:
EIA-485

INTEGRATION:
BACnet

TOTAL SYSTEM POINTS:
1720 points

RELIABLE CONTROLS® DEALER:
Control Concepts of Ohio

www.reliablecontrols.com

BACnet