Authorized Dealer

Precision AUTOMATION INC.

...empowering people with technology

The Peninsula Condominiums

Project Profile

Market segment
Residential

Location
Jacksonville, Florida, United States

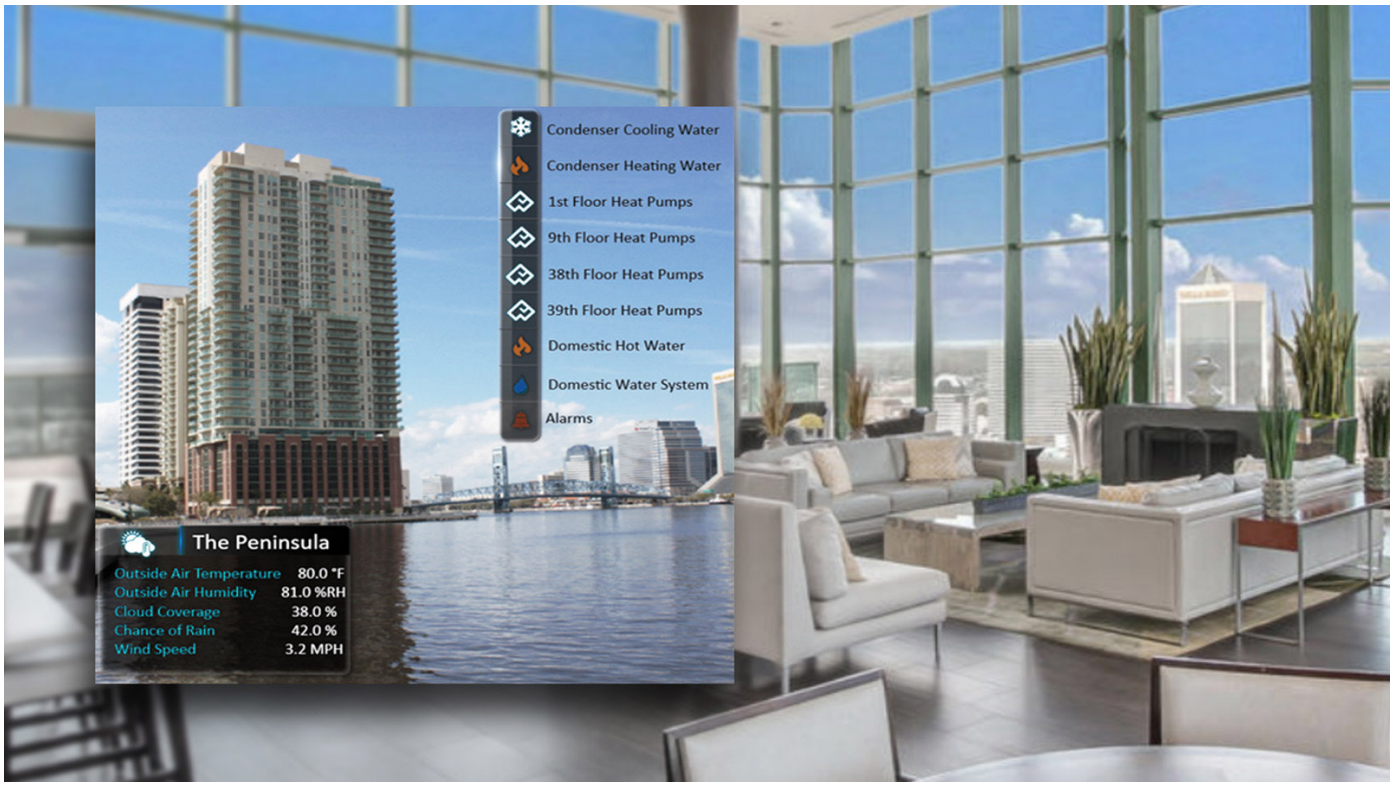
Total area
37,161 m² (400,000 ft²)

Project type
Retrofit

Protocol
BACnet, Modbus

Installation type
HVAC

Located on the south bank of the St. Johns River, the Peninsula Condominiums building is a commanding high-rise and the fourth tallest building in Jacksonville. Spanning 38 floors and 400,000 square feet, this architectural landmark features a two-story lobby with a business center, café, library, and outdoor terrace. On the ninth floor are entertainment, spa, and fitness facilities. Residences begin on the building's tenth floor and include a mix of one-, two-, and three-bedroom homes. The crown jewel is the thirty-eighth floor, which offers panoramic skyline and river views from a private rooftop club.



Authorized Dealer Precision Automation Inc. retrofitted the Peninsula Condominiums with a Reliable Controls building automation solution. Before the update, unit communication failed and the condenser loop system ran all components simultaneously, resulting in inefficient energy use and excess pipe pressurization.

Total system objects
1,426

Integrated equipment
Hyfab water pressure boosters, AAON dedicated outdoor air system controllers, condenser water loop boilers

Installed equipment

1 MACH-Pro2™ controller

3 MACH-ProAir™ controllers

3 MACH-ProCom™ controllers

3 MACH-ProSys™ controllers

11 MACH-ProView™ LCD controllers

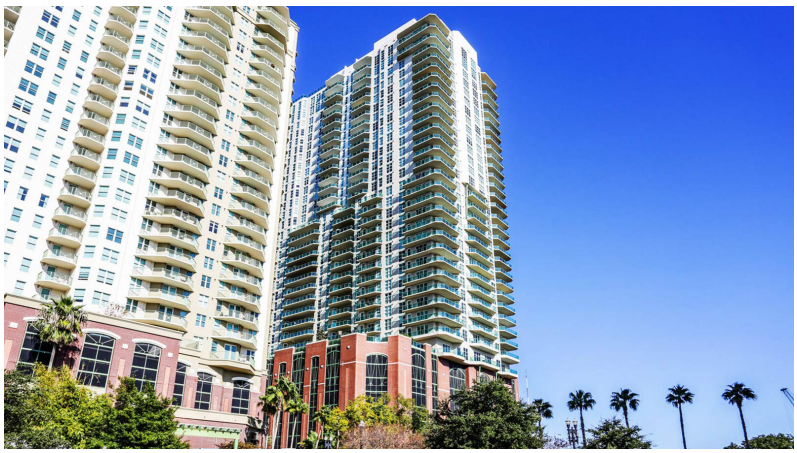
1 MACH-ProWebCom™ controller

3 MACH-ProZone™ controllers

16 SMART-Sensor™ EPD devices

With the Reliable Controls solution, Precision Automation Inc. addressed the following challenges:

- High condenser loop pressure that caused leaks and piping failure—resolved with effective equipment control and sequence-of-operation programming
- Inoperable stairwell pressurization smoke control system due to failed components—today the Reliable Controls system runs a weekly automatic test with detailed fault notifications
- Excess energy use caused by condenser loops running simultaneously and a cooling tower that continuously operated at 100 percent—resolved with programming that modulates the cooling fan to maintain a setpoint temperature and instructs one pump to run at a time, with automated lead lag and fault detection changeover



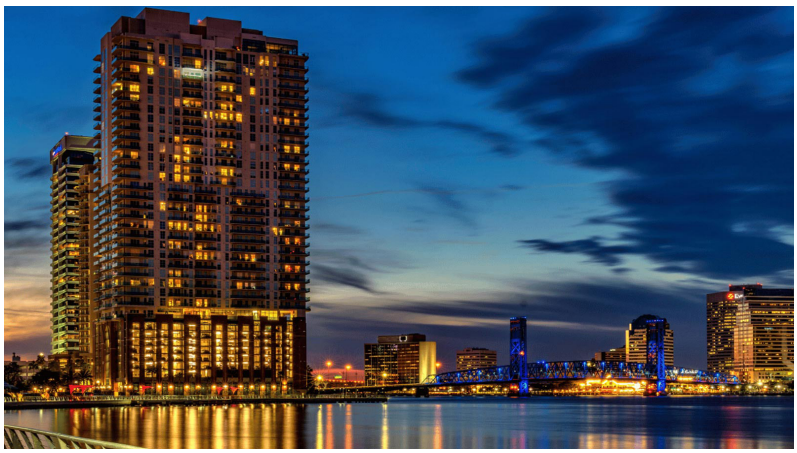
These changes have significantly reduced the runtime and load on mechanical equipment, leading to energy savings, reduced carbon emissions, and improved equipment life expectancy.

Precision Automation Inc. installed 25 MACH-Pro devices to control common area water-source heat pumps, boilers, condenser water loop pumps, domestic water pumps, pressure-reducing valves, and a stairwell smoke control system. All MACH-Pro controllers used in the facility are BTL Listed BACnet Building Controllers that allow data sharing, alarm and event management, scheduling, trending, and device and network management using the BACnet protocol. Sixteen networked SMART-Sensor EPD devices allow building operators to improve energy and operational efficiency with aesthetically pleasing local control.

Installed software

Precision Automation Inc. used RC-Studio, an easy to learn and use BACnet Advanced Operator Workstation software program, to quickly deploy the system, restore proper operation of mechanical equipment in the building, set up alarm notifications, and map both Reliable Controls and third-party objects to intuitive graphical user interfaces. They also installed RC-RemoteAccess software to simplify IT management and improve data communications for the Peninsula Condominiums in a way that's scalable, secure, and affordable.

"Facility managers are delighted with the Reliable Controls building automation system," says Precision Automation Inc. Vice President Travis Paul. "They can now monitor and maintain desired temperatures throughout the facility and receive notifications when critical component failures occur."



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