Authorized Dealer

COPANAC
Tenemos el aire... y el servicio

Centro Operativo Federico Humpert A.

Project Profile

Market segment
Financial

Location
Panama City, Panama

Total area
32,000 m^2 (344,445 ft^2)

Project type
Retrofit

Protocol
BACnet, Modbus

Installation type
HVAC

The Centro Operativo Federico Humpert A. in Panama City is Banco General's largest operations center. Each day, between 1,000 and 2,000 people work across eight stories in this flagship office building. Originally completed in 2016 with energy- and water-saving features, the building underwent a major automation retrofit that began in 2021, led by Reliable Controls Authorized Dealer Copanac. The result: increased energy savings, improved climate control monitoring, and easier access to system data for maintenance staff.

Total system objects
3,195

Integrated equipment
Data Aire precision units, LG variable refrigerant flow system, diesel generators that use Deep Sea Electronics controls, ABB and Huawei solar inverters, SEL power meter, water meters, water boilers, variable air volume units, air-handling units, AAON heat recovery units

Installed equipment


1 MACH-Pro2™ controller


8 MACH-ProAir™ controllers


6 MACH-ProCom™ controllers


1 MACH-ProZone™ controller


2 RC-FLEXair® controllers


10 SPACE-Sensor™ EnOcean devices

Challenge

Although the building featured sustainable architecture—including rainwater collection and solar panels—the original building management system (BMS) could not provide facility managers with the data or control needed to optimize the HVAC system and reduce energy costs. Key challenges included:

- Improving energy efficiency and climate control monitoring
- Making system access and maintenance easier and faster for facility staff
- Enhancing the BMS to help analyze and adjust the HVAC system for lower energy costs
- Integrating more energy equipment to track baseline consumption and receive alerts for system issues

Solution

Copanac installed six MACH-ProCom controllers to provide unified control over all HVAC and energy systems, including variable air volume boxes, air handling units, variable refrigerant flow units, air conditioning units, boilers, backup engines, solar panels, and a power meter. A MACH-Pro2 controller now manages the condensed water plant, a MACH-ProZone controls a new precision unit, and two freely programmable RC-FLEXair controllers support variable air volume and room control applications in the facility. Ten SPACE-Sensor EnOcean devices deliver wireless temperature sensing, key for optimizing occupant comfort and energy efficiency.

All these systems are now connected through RC-WebView, giving facility managers browser-based access to system controls and interactive graphics. With RC-Archive and RC-Reporter software, managers can easily trend, analyze, and report on energy use across the building.

Installed software

RC-Archive® software

RC-Reporter® software

RC-WebView® software

Results

"Authorized Dealer Copanac developed a compelling business case for a flexible, integrated building automation system from Reliable Controls," said Tito Arias, Chief Engineer at Banco General. "The system was designed to reduce costs by optimizing existing devices through advanced control strategies, and it was installed in just a few months, including interactive graphics, alarm management, enhanced programming, and improved scheduling."

The Reliable Controls system allows facility managers to:

- Automatically adjust air-handling unit setpoints for improved comfort and efficiency
- View and control all HVAC and energy systems from a single platform
- Align building operations more closely with the original architectural design
- Analyze baseline consumption and data trends to identify opportunities for increased efficiency
- Monitor daily, weekly, and monthly power use for anomaly detection

"No one knows how a facility functions and operates better than the customer," Tito Arias added. "The highly customizable system from Reliable Controls allowed for maximum flexibility in integration and programming. With support from Reliable Controls and Copanac, we achieved a return on investment in electricity savings in under 2 months."

The Centro Operativo Federico Humpert A. continues to pursue improvements in sustainability and performance. This project exemplifies what's possible when people and technology you can rely on come together for lasting results.

Learn more about how Reliable Controls can help you achieve your building sustainability and efficiency goals.

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