



Connecting Premier Buildings

311 South Wacker Drive
Chicago West Loop

- Non-Invasive Wireless Pneumatic Thermostat retrofit
- DDC Control of pneumatic zones
- Seamless integration with IntelliCommandSM
- Cloud based optimization and fault diagnostics
- 50% ComEd utility rebate based on estimated 26% HVAC energy savings and 1.7 year payback

Project Description

Zeller Realty's 311 South Wacker Drive is a premier 65-story building in downtown Chicago. Built in the 1990's, it relied on pneumatic HVAC controls which were unable to implement intelligent building strategies used on modern buildings today. Retrofitting to conventional DDC systems would be cost prohibitive and incur unacceptable tenant disruption — the building was essentially locked in the past with higher energy and operational costs.

In 2014, Zeller Realty looked beyond conventional solutions and implemented a retrofit project using a combination of Wireless Pneumatic Thermostats (WPT) from Cypress Envirosystems and JLL's smart building solution, IntelliCommand. The WPT is a non-invasive retrofit technology that installs in minutes at a fraction of the cost of traditional DDC systems. IntelliCommand is a smart building cloud-based portfolio management solution. Once the WPT system was installed, it connected seamlessly with IntelliCommand. IntelliCommand was able to use complex algorithms to analyze data from the WPTs and other building systems to identify and diagnose faults, and optimize building performance.

The entire project, involving 1,400,000 square feet, was completed in approximately eight weeks. ComEd utility rebates paid for 50% of the project cost based on an estimated 26% savings in HVAC energy use and a payback period of 1.7 years.

Company and Product Descriptions



JLL is a professional services firm that specializes in commercial real estate services and investment management for organizations around the globe.

IntelliCommand is a facility management software that keeps your buildings running smoothly and efficiently, and saves operating costs. It combines monitoring-based commissioning to optimize building performance and predictive analytics to solve root causes — ensuring greater reliability and control.



Cypress Envirosystems develops non-invasive retrofit solutions for commercial buildings for energy efficiency, improved comfort and lower maintenance costs.

The Wireless Pneumatic Thermostat (WPT) system is a non-invasive DDC retrofit solution for buildings with pneumatic thermostats. Cypress's WPT enables buildings to be upgraded in a fraction of the time with no disruption to occupants at 60 – 80% lower cost than traditional solutions.