

Verdant Energy Management Solutions

Hampton Inn Woodbridge



About

Located in Woodbridge, New Jersey, just off I-95, the Hampton Inn Woodbridge offers easy access to major shopping centers, restaurants, and local attractions. The property benefits from steady year-round occupancy driven by both leisure and commercial demand, making operational efficiency a key focus for the hotel's management team.



Number of Rooms
87



Installation Date
September 2020



Building Location
**Woodbridge,
New Jersey, USA**



Building Class
Hotel

VERDANT
by **COPELAND**



Energy Consumption Challenges

At Hampton Inn Woodbridge, optimizing energy use became a top priority as the hotel aimed to balance sustainability and guest comfort. HVAC systems were often running in empty rooms due to unpredictable gaps between guest stays, as well as guests leaving them on when they left their rooms, leading to significant energy waste. Since utilities were included in the room rate, guests had little incentive to adjust the temperature, resulting in higher operational costs.

Energy Management Ecosystem

HVAC type: PTAC

Installation Date: September 2020

Climate Zone: Mixed-Humid

Electric Rate: \$0.0867/kWh

As energy prices rose and sustainability goals gained more focus, the hotel sought a solution that could reduce energy waste without impacting the guest experience. The challenge was finding a seamless way to improve efficiency while maintaining the high standards of comfort and service the Hampton Inn brand is known for.

Property Goals

Hampton Inn Woodbridge aimed to address key energy challenges while enhancing operational efficiency. Their main objectives included:

Reducing Energy Expenses:

Minimize energy consumption in unoccupied rooms to lower utility costs.

Maximizing HVAC Efficiency:

Seamlessly integrated with PTAC units to optimize runtimes, reduce wear, and extend system lifespan.

Simplifying Installation & Control:

Install an efficient system with minimal disruption and manage HVAC performance through a centralized platform.

Ensuring Guest Comfort:

Maintain a high standard of in-room comfort for guests while optimizing energy use behind the scenes.





Solution

Enhancing Efficiency with Upgraded In-Room Products

To tackle rising energy costs and enhance guest comfort, Hampton Inn Woodbridge collaborated with [Transworld's](#) team to upgrade their in-room climate control systems. The hotel implemented **87 Verdant VX2 EMS Thermostats**, featuring **occupancy detection to reduce energy use in vacant rooms** and **intelligent recovery to restore comfort before guests return**. Paired with [Transworld's](#) revamped PTAC units, this strategic upgrade combined **Verdant's cutting-edge technology** with **high-performance HVAC systems** to improve the hotel's operational workflow. Designed for **easy installation** and offering **unmatched HVAC compatibility**, Verdant's solution seamlessly integrated into the property's existing setup.

Maximizing Energy Savings with Verdant Thermostats

Verdant's smart thermostats played a key role in driving energy savings at the hotel. The system uses occupancy sensors to monitor room usage and automatically adjusts the temperature when rooms are unoccupied. By entering energy-saving setback modes when guests leave their rooms, the thermostats ensure HVAC systems are only in operation when necessary, reducing waste and lowering overall energy costs.

Optimizing HVAC Efficiency with Transworld's PTAC Units

[Transworld's](#) upgraded PTAC units are designed to enhance energy efficiency while providing reliable heating and cooling. These units help optimize energy use by reducing excess consumption, ensuring that HVAC systems are running more effectively. With improved performance and energy management, the PTAC units contribute to supporting the hotel's energy-saving initiatives.

Centralized Control for Measurable Results

The combined solution from [Transworld](#) and Verdant provided the hotel with more than just energy savings—it helped streamline operations and improve energy efficiency across the property. With smart energy management, the HVAC systems were optimized for peak performance, resulting in a 21% reduction in energy consumption each month since installation.



Results

Performance Highlights

The partnership between [Transworld](#) and Verdant delivered measurable improvements in energy efficiency and cost savings. Below are the key outcomes from the implementation of the upgraded PTAC units and smart thermostats.



Big Picture

Total Savings:



Total kWh Savings
179,039.99 kWh



Average Monthly Savings
21%



Equals to
**25.5 gasoline-powered cars
off the road for one year**



Equals to
**keeping 121,579 pounds
of coal-related carbon
emissions out of the air**



Take Control of Your Energy Management with Verdant



Reduce Energy Costs

Save up to 18% on energy costs and reduce HVAC runtimes by 45% on average without affecting guest comfort.



Plug & Play

Suitable for both retrofit and new construction projects, our wireless thermostat can be self-installed in under 15 minutes.



True Mesh Networking

Keep your thermostats connected without interfering with your Wi-Fi.



Effortless Integration

The Verdant system can integrate with all HVAC types, PMS, BMS, lighting controls, and other smart technology.



Say goodbye to unnecessary heating and cooling costs with Verdant's energy management system. Installed by more than 9,000 properties in North America and Europe, Verdant prioritizes energy efficiency without compromising guest comfort.

Want to Learn More?

Contact Us:
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