

# Smarter Energy Control & Savings for New Constructions

Verdant's smart thermostats connect with the Verdant Thermostat Manager app to deliver portfolio wide visibility, control over energy savings, and optimal resident comfort.

## Designed to Elevate Your New Building's Energy Management



### No Wi-Fi Dependence

Reliable connectivity through Verdant's proprietary 900MHz RF protocol, removing the need for Wi-Fi or repeaters.



### Unrivaled Compatibility

Engineered to support all HVAC types including leading VRF systems (LG, Mitsubishi, Carrier, Daikin, and more)



### Proven Energy Savings

Reduce energy costs by up to 18% through automated energy management.



### Smart Technology Integration

Integrates seamlessly with BMS, lighting controls and other smart home technology

## Intelligent HVAC Control for Multifamily Buildings

With electricity costs at an all-time high, homes and commercial buildings account for about 40% of all energy consumed in the United States, according to the U.S. Department of Energy.. This presents a significant challenge for developers and operators of new multifamily buildings who need to balance managing energy costs with effectively protecting HVAC equipment.

Verdant provides visibility and control of thermostat operations across multiple properties in your portfolio, enabling you to review humidity, temperature and alerts reported by our thermostats. The property staff can remotely update energy management settings for vacant units or common areas.

Our online platform, **Verdant Thermostat Manager**, provides quick and easy access to create, edit or remove resident access to their individual thermostats. This way, the property has full control over who can access the thermostats, without having to system reset the units on the walls.

## Visibility & Control

Verdant solutions provide an unparalleled level of visibility and control, offering a Building Management System (BMS) lite without the BMS price tag.

### Visibility

Our Verdant Thermostat Manager (VTM) provides a dynamic portfolio view with an interactive map that offers high-level system summaries for all your properties. The platform consolidates alerts across your properties, keeping staff informed of critical issues in real time.

View periodical data transmitted from each thermostat via interactive room graphs, allowing you to easily monitor resident comfort, humidity levels and issues in the HVAC functionality. You can easily define and assign multiple energy management profiles to rooms in bulk, helping you maximize savings with custom heating and cooling settings tailored for every stage of a unit's journey - from unrented to occupied.

### Proactive Alerts and Monitoring

Monitor alerts, connectivity status and warning messages from all thermostats installed across multiple properties in your portfolio. Enroll for email alerts for limited set of alerts like temperature out of range, offline devices, humidity etc. as per importance.

### Control

Our Verdant Thermostat Manager makes onboarding and offboarding users straightforward. Grant new residents access to their thermostats quickly and update permissions as needed, giving property managers precise control over who can adjust settings, while maintaining seamless access for incoming or departing occupants. You can also easily achieve your sustainability goals by remotely adjusting energy management settings.



## Unmatched HVAC Compatibility

Verdant thermostats are engineered for maximum flexibility, designed to work out-of-the-box with a wide array of HVAC systems used in new construction. From classic PTACs to the most advanced VRF systems, our solutions adapt to your property's unique needs.

### Broad System Support

Our thermostats seamlessly support a diverse range of systems including PTAC/VTAC, Fan Coil Units (FCU), Rooftops, and Split Systems. They are compatible with 2-pipe, 4-pipe, heat pumps, and multi-stage HVAC, with both line-voltage and low-voltage models available for full wiring compatibility. With built-in relays and configurable inputs, no extra control board is needed.

### Native VRF Integration

Verdant provides out-of-the-box compatibility with many major VRF brands, allowing for precise temperature and fan speed control. This enables smart zoning and scheduling even with complex configurations, ensuring optimal performance without the need for additional hardware.

### Modbus & Airzone Integration

We offer Modbus RTU/RS-485 integration for flexible control over third-party VRF systems. Additionally, Airzone support enables a seamless connection to multiple VRF brands, providing digital, centralized control and reporting through the Verdant Thermostat Manager platform.



## Simple and Cost-Effective

Verdant makes networking easy with no extra or recurring fees. Our solutions are designed for easy management and integration, helping you control costs while improving efficiency.



## Comprehensive Support

We provide end-to-end support for your project, from initial installation to commissioning and onboarding. Our guidance ensures smooth and efficient deployment, so you can get the most out of your system from day one.

## BAS Integration

Verdant solutions are built to work with your existing building automation system, enabling seamless integration with your property's infrastructure. Our thermostats natively support BACnet/IP, allowing for easy integration into existing BAS platforms for centralized control and visibility. This provides real-time HVAC control and a two-way sync for schedules, modes, and alerts between your systems. With familiar BACnet tools, our solutions offer minimal commissioning for a quick and simple setup.

### Available datapoints include

Datapoints	Read/Write
Heat, cool and guest setpoint	R/W
Thermostat status (on/off/setbacks)	R/W
Room temperature, humidity	R
Battery percentage	R
Gateway connectivity status, thermostat last updated timestamp	R
System mode (heat, cool, auto) , fan speed	R/W
Min, max setpoint limit	R/W

## API Integrations

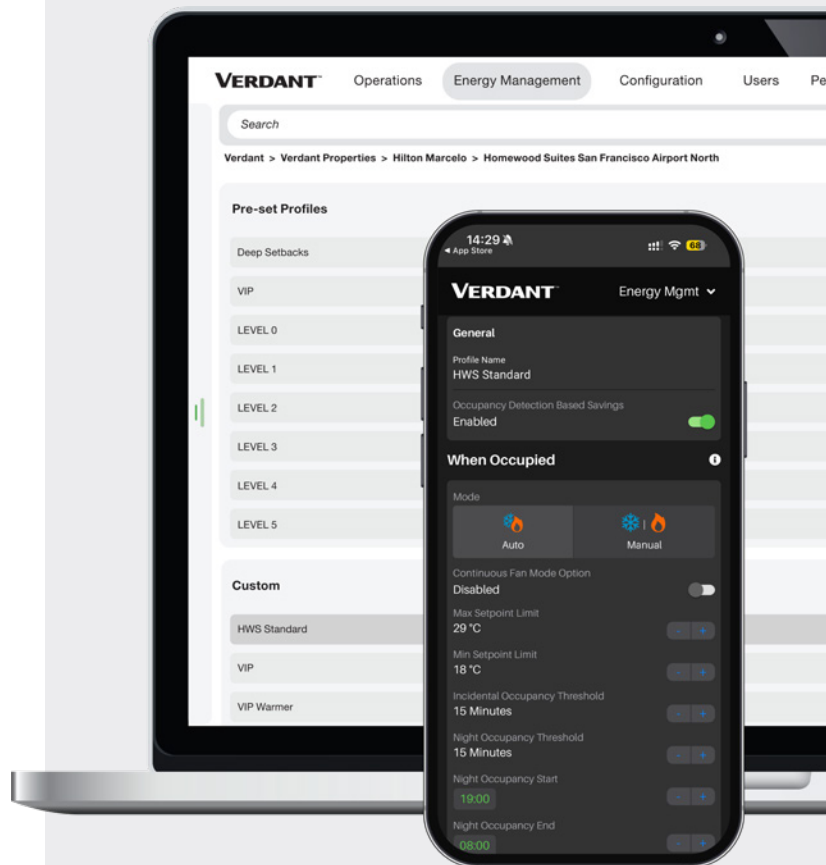
Verdant offers robust cloud-based REST APIs and webhooks to automate HVAC control and provide seamless integrations with leading property management and smart living systems.

### For Property Staff

Our integrations with Property Management Systems (PMS) allow your staff to streamline operations. You can automatically assign thermostats to residents, eliminate manual onboarding, and gain complete visibility and control over all thermostats and data directly from your PMS.

### For Residents

Integrations with Smart Apartment Platforms provide residents with a familiar and connected experience. Residents can control temperature directly from their smart home apps and enable cross-device automations—for example, locking doors, adjusting lights, and setting the thermostat with a single tap.



## Verdant Capabilities

Discover how Verdant solutions empower properties with smarter energy management and effortless control.

### Mesh Networking

Verdant's thermostats are built with an Integrated Mesh Network that is completely independent of your building's Wi-Fi. Easy to install, no specialized installers required or commissioning required to set up the building wide network.

### Centralized Portfolio Management

Verdant's smart energy management system offers a highly scalable, low-cost solution designed for large portfolio management groups with **NO RECURRING FEES**. It provides visibility and control across your multiple property portfolio, enabling you to easily control settings and monitor HVAC performance across thousands of rooms remotely, reducing operational overhead.

### Asset protection

Verdant's system provides proactive asset protection through intelligent monitoring and early detection. Beyond monitoring HVAC performance, it offers accessories like water leak sensors to detect potential issues before they cause costly damage.

### Demand response

Supports utility demand response programs, allowing automatic HVAC adjustments to reduce energy costs and support grid stability.

### Resident Interface & Scheduling

Verdant's mobile application gives residents control of their unit's climate and energy use, enabling them to easily manage comfort settings and create personalized schedules.

### ENERGY STAR Certified

Verdant thermostats are ENERGY STAR certified, supporting sustainable building initiatives and alignment with LEED certification goals.

### Sustainability Impact

In addition to regional operational savings, Verdant's platform adheres to numerous sustainable design practices and standards. For example, Verdant can help designers achieve up to 20 LEED credit points depending on application.

### Lighting, Exhaust, and Ventilation Control

Our thermostats help further reduce energy waste and enhance overall building efficiency by controlling lighting, exhaust fans and ventilation systems when required.



## BMS Lite without the Cost of BMS

Feature	Verdant	Traditional Tstats	Wi-Fi Residential Thermostats	EMS thermostats	BMS thermostats
Price	\$\$	\$	\$\$	\$\$\$	\$\$\$\$
Recurring fee	None	None	\$\$	\$	\$\$\$
7-day Programmable	Yes	Limited	Yes	No	Limited
Centralized Visibility and Monitoring	Yes	No	No	Yes	Yes
Portfolio Level Visibility	Yes	No	No	Yes	Yes
Alert Notifications	Yes	No	No	Yes	Yes
Energy Management Solutions	Yes	No	Limited	Yes	Yes
Advanced BACnet Integration	Yes	No	No	Yes	Yes
Resident Mobile Application	Yes	No	Yes	No	No
PMS Integration	Yes	No	Yes	No	No
Demand Response	Yes	No	Yes	Limited	Yes
Asset Protection - Water Leak	Yes	No	No	No	Yes
Commissioning Complexity	Low	Low	Medium	Medium-high	High

Discover how Verdant's industry-leading solutions can help your property:  
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Learn more: [verdant.copeland.com](http://verdant.copeland.com)