OPTIMIZE EVERY ROOFTOP UNIT AT EVERY SITE

Reduce energy use in rooftop units at any number of sites without compromising occupant comfort, using the Honeywell Opus™ Magnum platform with the capabilities of Encycle Swarm Logic®

Honeywell Optimization for Rooftop Units (RTUs)

Honeywell

ENCYCLE

LET'S MAKE ENERGY EFFICIENCY STANDARD OPERATIONS

Rooftop units have long been a barrier to better energy savings – hard to program, hard to coordinate, with few operating modes – making it difficult to balance comfort and costs in large buildings.

Honeywell and Encycle make it easy for enterprises to precisely coordinate and automate every RTU at every site – whether you operate 10 buildings or 10,000.

UNCOORDINATED, FIXED FUNCTION, SINGLE MODE – BUT WHY?

Traditionally, RTUs only heat or cool one specific zone, and can only respond to preprogrammed setpoints – with no responsiveness to how that affects the rest of the building, and no ability to adapt operations to any other building data.

Worse, many RTUs can only operate at 100%, often resulting in temperature volatility – addressing the temperature fluctuation within the space throughout the day as you move from area to area. Not only can this operating profile lead to excessive wear and tear, but it can increase energy use.

In short, typical RTU operation makes maintaining consistent comfort and optimization of energy consumption throughout the entire building difficult.

Consequently, enterprises often feel forced to choose the "lesser evil" – often using short-cycling for too many starts and stops to maintain occupancy comfort standards/specifications vs. increased energy saving and unit life by allowing temperatures to fluctuate farther from set-point in the space.

RETHINK THE RTU STATUS QUO

It's time to optimize the way your rooftop units operate – with no extra hardware, no upfront capital costs, and no disruptive recommissioning.

By integrating the Honeywell Opus™ Magnum platform with machine learning from Encycle Swarm Logic®, your RTUs can finally be coordinated as a set, using a constantly evolving strategy to heat and cool each facility as a whole space – not as individual, uncoordinated zones.

Opus Magnum also makes it easy to scale this efficiency throughout your portfolio to any number of sites.

HOW IT WORKS

Swarm Logic analyzes real-time performance of every RTU (in 5-minute increments) and continuously recommends optimized control decisions for each unit, adapting to the building's thermal load profile and maximizing energy efficiency.

Opus Magnum then provides real-time data analysis – such as current indoor conditions, occupancy levels, and weather data – giving you responsive automation to optimize the operational efficiency of your entire building, based on actual conditions, internal and external.

Use energy when it's cheapest
Make full use of automated demand response by pre-conditioning facilities during off-peak periods, reducing peak-demand charges, optimizing energy use during those time, and load shifting for DR events.

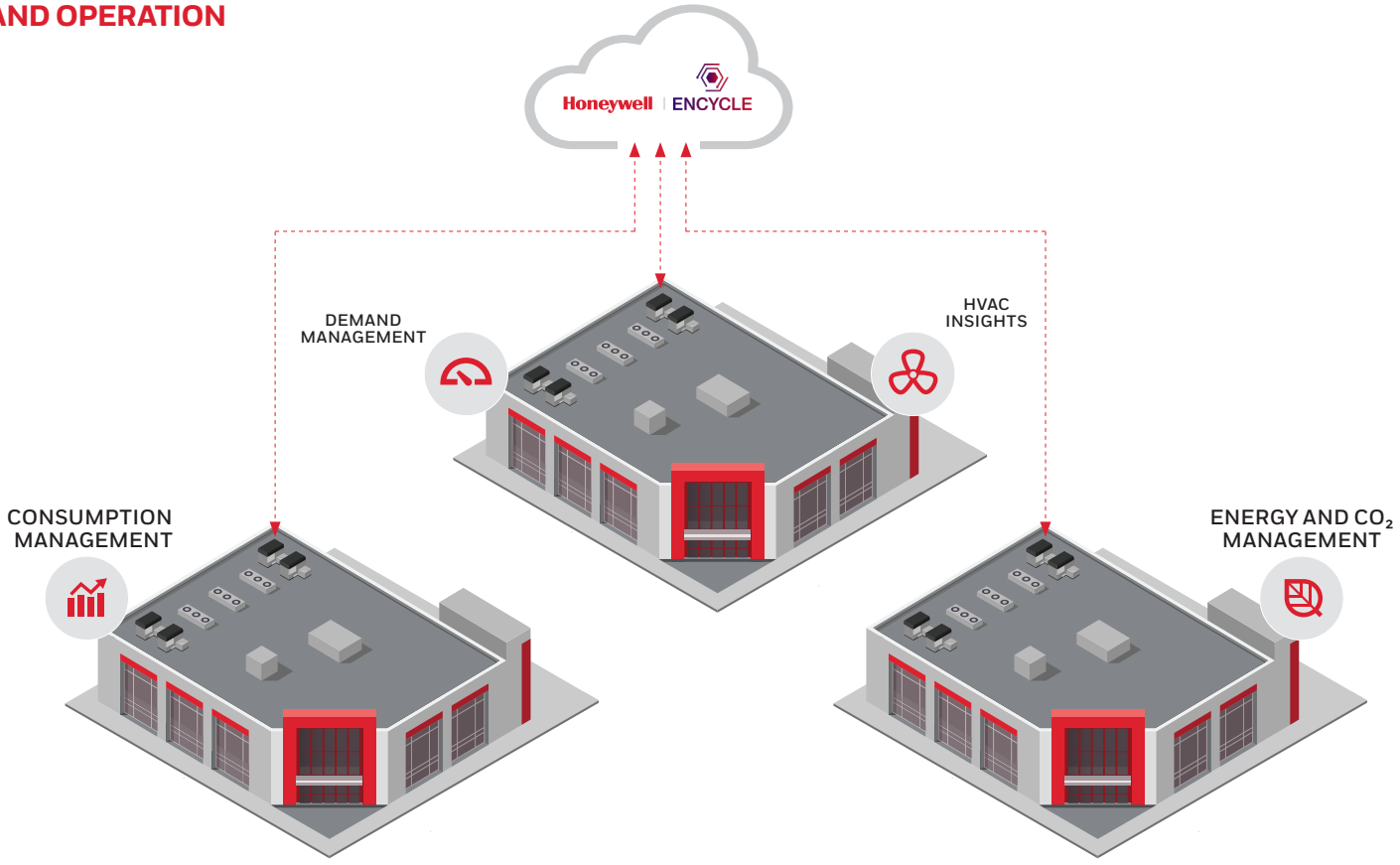
Rebalance loads across RTUs
Swarm Logic will identify performance/mechanical issues that can cause units to operate inefficiently.

Run only as needed
Operate RTUs for shorter periods of time by adapting to weather data, and using occupancy and thermal inertia to your advantage.

Proactive and predictive maintenance
Leverage fault-detection diagnostics alerts on units operating outside normal parameters so you can address potential issues before they become costly disruptions.

Site specific, portfolio wide
Escape the straitjacket of preprogrammed setpoints with analysis and adaptability that helps each facility perform at its best – by responding to its own conditions.

ROOFTOP UNIT MONITORING AND OPERATION



WHERE THE SAVINGS COME FROM

RESPONSIVE AUTOMATION
Optimizes continuously and autonomously

Adapts to real-time conditions every five minutes to maintain comfort

Helps lower utility rates with automated demand response (ADR)

SIMPLE DEPLOYMENT
Integrates with existing building systems

Requires no additional hardware or upfront capital expenses

Provides daily energy savings to support positive return on investment

EFFICIENT OPERATIONS
Eliminates the need to manually estimate and program RTU setpoints

Manages energy use and CO_2 emissions

Helps reduce equipment strain, extend RTU lifecycles, and prevent disruptions with predictive maintenance capabilities

Let’s rethink how rooftops run

with the Honeywell Opus Magnum building management system and Encycle Swarm Logic

Opus Magnum
hwll.co/opusmagnum

Multisite Solutions
hwll.co/Multisite

Swarm Logic
Encycle.com/solutions/swarm-logic

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