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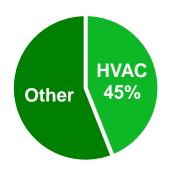
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#### hospitality energy consumption





~45%

energy in hospitality properties is used for heating and airconditioning;

2<sup>nd</sup> largest expense



hospitality occupancy patterns are totally random

unlike residential or other commercial environments

Many compartmentalized rooms with independent temperature control

unlike residential or other commercial environments

#### occupancy detection





Verdant thermostats are equipped with embedded infrared occupancy sensors and automatically adjust temperature when room is unoccupied

Patented "Night Occupancy" feature ensures guest comfort at night. Verdant EMS thermostats suspend setback at night while guests are asleep, even if occupancy is not detected.



$$\max_{0 \le x \le 1} xe^{-x^2} \\
\lim_{n \to \infty} \left(1 + \frac{1}{n}\right)^n \\
\underline{-b \pm \sqrt{b^2 - 4ac}}_{2a}$$

Dynamic Intelligent Recovery calculates the "slew rate" in each room to ensure that a desired temperature can be restored quickly when the guest returns.

### web access & data





# **Comprehensive Remote Management**

Web-based remote management application allows around-the-clock remote monitoring and configuration.

## Data from over 1,000 hotels across North America

- EMS runtime reductions
- Seasonal variations
- Geo variations
- Peak consumption



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COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS. US PATENTS: 7,918,406; 7,232,075; 7,185,825; 7,156,318; 7,152,806; 7,145,110; 7,050,026; 7,028,912; 6,902,117; 6,789,739; 6,786,421; 6,619,555; 6,581,846; 6,578,770; 7,838,803; 7,841,542; D556,061; D518,744; RE40,437; CANADIAN PATENTS: 2,633,113; 2,633,200; OTHER PATENTS PENDING.

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