

DigiSmart™



AN ENVIRONMENTALLY-CONSCIOUS COMBINATION OF
ENERGY MANAGEMENT
AND **PTAC PERFORMANCE**

Heating & Air Conditioning
Amana®

DigiSmart brings together our best PTAC ever with our best Energy Management Software and now integration with Property Management and Front Desk Management Software. Reduce PTAC energy consumption by **35% OR MORE*** through the power of the in-unit Energy Management System, programmable temperature set-back and limits combined. Reduce PTAC maintenance cost through our automated maintenance notification system. Improved maintenance sustains energy efficiency (EER) and prolongs PTAC life, keeping equipment running greener and room guests more comfortable.

Amana® Brand DigiSmart Solution

In-Room — "Self Installable" Wireless Peripherals



The DigiSmart **Wireless Remote Thermostat** can mount on the wall anywhere in the guest room. Battery powered and with its own wireless ability to communicate with the PTAC to maintain room temperature. Best of all, no wires to run. The PTAC and Thermostat connect at the press of a button and are permanently linked. The thermostat and PTAC work in-sync to display accurate temperature.



The DigiSmart **Occupancy Sensor** completes the in-room equipment. This infrared sensor can determine if the room is occupied or empty and when empty, signal the PTAC to adjust the temperature to save energy based on programmable setbacks.



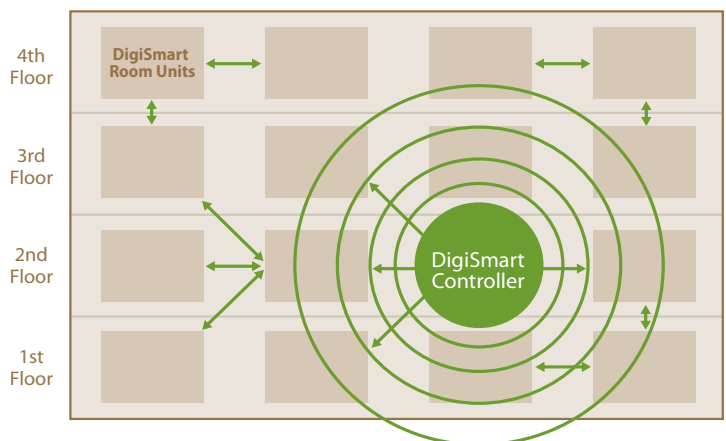
The DigiSmart **Wireless Antenna** installs inside the PTAC with a snap-in connector like a telephone jack. Installing the antenna allows the PTAC to communicate wirelessly with other devices in the room and to the DigiSmart network.

- > 45,000+ rooms have had wireless installations since 2005
- > Total wireless devices deployed to date – 120,000+

The Amana brand DigiSmart PTAC with antenna, combined with the self-installable, wireless Thermostat and Occupancy Sensor give the property owner complete control over the equipment settings and can reduce PTAC energy usage by **35% OR MORE.***

Site-Level — Central Wireless Controller

- > Site-wide PTAC Configuration
- > Site-wide PTAC Diagnostics
- > Front Desk System Interface
- > Email Reporting
- > Internet Accessible Web User Interface Enterprise

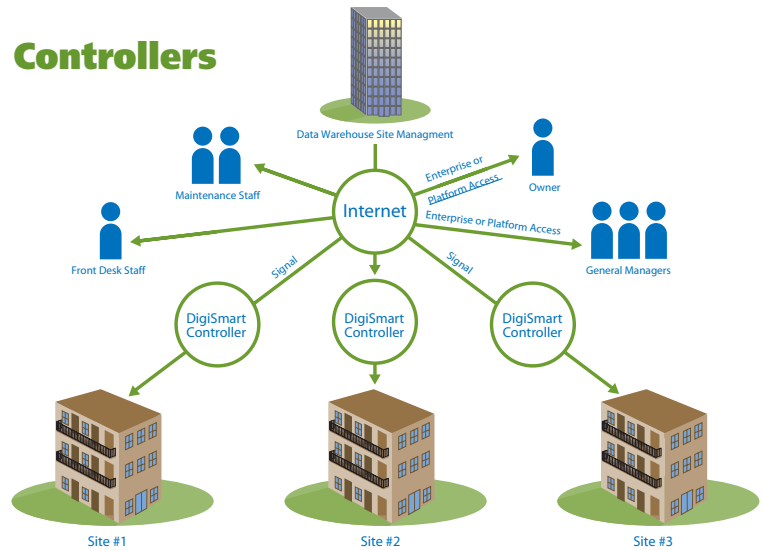


* These savings represent estimated savings over time and were generated using general assumptions including energy loads, local weather averages and use of occupancy controls. Actual savings will vary according to actual use habits, room square footage, and how the unit is installed and maintained.

Enterprise — Multiple Wireless Controllers

Central Monitoring and Control of Multiple Properties

- > Data Warehousing
- > Savings Analysis
- > Email Reporting
- > Virtual Metering
- > Load Shedding



Web Based, Real-Time Monitoring

Amana® Brand DigiSmart™ Controller:

All of the PTACs in the building can be managed through a single interface on a PC.

FEATURES INCLUDE: Full unit details for every PTAC, visible from the front desk or home office, automatic emails for PTAC maintenance, ability to change all settings on the unit, and enhanced diagnostics. Monitor up to 170 PTACs, WIRELESSLY, with one controller. Additional controllers can expand the network for additional rooms/properties.

- > System Verification
- > Global Setbacks
- > EMS Configuration
- > Site Statistics
- > Battery Notices
- > Email Reporting
- > Unit Health
- > Unit Code Alerts

Current conditions from City, ST

82.0 F Humidity 65 %RH
 Mostly Cloudy Pressure 29.8 in Hg
 Heat Index 85°F

Site Home Alerts & Notices Global Overrides System Settings

Floor 1	0109	0111	0114	0115	0116	0117	0118
Floor 2	0119	0120	0121	0122	0123	0124	0125
Floor 3	0126	0127	0128	0129	0131	0133	0135
	0137	0143	0144	0145	0146	0147	0148
	0149	0150	0151	0152	0153	0155	0157
	0159	0160	0161	0162	0163	0164	0165
	0166	0167	0168	0169	0170	0171	0172
	0173	0174	0175	0176	0177	0178	0179
	0181	0182	0184	0186	0188		

■ Occupied ■ Unoccupied
■ Normal ■ Maintenance ■ Performance ■ Failure

Inventory

Total	197
Rented	197
Occupied	36

Unit Health

Normal	187
Maintenance	9
Warning	1
Failure	0

Pulse Meter

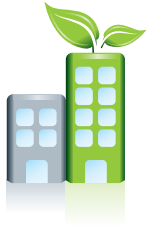
	KW	KWH
Curr	453.2	6611.9
MTD	557.7	68415.6
YTD	557.7	231102.0

Temp Limiting – Each PTAC can be configured with a heating and cooling temperature set-point limit.

Setbacks – Once a room is declared unoccupied by the occupancy sensor, the PTAC progresses through three different temperature setbacks, configured as three degree and time pairs (An example configuration is listed below).

- 1st: 2°, 30 mins – Setback the temp 2 degrees after 30 minutes
- 2nd: 4°, 1 hr – Setback the temp 2 more degrees after 30 more minutes
- 3rd: 8°, 3 hrs – Setback the temp 4 more degrees after 2 more hours

Unrented Set-Points – By integrating with your property's Front Desk System, the PTACs will adjust to specific set-points when no longer identified as rented in the system.



Case Studies



> EAST COAST - REGIONAL TEMPERATURE ZONES

In January 2006, a property in Maryland installed our full Amana® brand EMS suite.

- In 2005, this property used 676,320 kwh of electricity and paid \$47,263.34 in utilities.
- At the end of 2006, the site had only consumed 550,320 kwh for the year and paid \$38,301.68 in electrical utilities.

Assuming that PTACs make up about half of the connected load at the property, this represents a **37% SAVINGS** on their PTAC consumption.



> WEST COAST - REGIONAL TEMPERATURE ZONES

In 2008, we began logging a complete history of runtime statistics for a property in California with our full suite of EMS products – including an interface to their Front Desk.

The data for a ten week period showed that guests were physically occupying the properties rooms less than 35% of the time on average.

Analysis showed that the major power drawing components of the PTACs ran almost 12% of the time when the room was occupied.

However, with the Amana brand DigiSmart™ system in place, these same components ran less than 1% of the time when unoccupied.

This resulted in an average kWh savings of over 2100 kWhs a week and **63% SAVINGS** on their PTAC electricity consumption.



Call your Amana brand PTAC
sales representative at **800-647-2982**
for complete details.

