



Solutions for EMS

Smart technologies to achieve sustainability goals

The VDA-Telkonet Group is **the largest global player** in the field of EMS and GRMS for the world Hospitality market. The Group defines the future of the sector by focusing on People as a valuable element of smart technologies and by offering the right balance between maximizing comfort and saving energy.

The Group is the global leader in IoT Hospitality technologies. As **the industry's leading solution provider**, the Group's experience in the service and support of its customers benefits them in all phases of their projects, from consulting to engineering, to delivery and ongoing support of the completed project.

With around 1 million rooms installed in 50 countries and **more than 60 years of experience** and two in-house R&D Teams of around 40 engineers with hardware and software expertise, the Group demonstrates a deep knowledge of the markets in which it operates and is a **strategic partner** for the global Hospitality market.

About us



The Group has obtained the **'ISO 9001' certification** as an international recognition for the quality of the products and services offered, adopting a management system compliant with UNI EN ISO 9001:2015 in order to improve and streamline its processes.

The adoption of **ethical behaviours** is a fundamental value for the Group, which regards regulatory compliance as a minimum standard from which to develop responsible behaviours. To this end, the Group has adopted the 'Code of Ethics' that guides its work and promotes a culture based on the principles of fairness, loyalty, and transparency.

About us



ITALY

HOTELS: 2,500+
ROOMS: 190,000+
GUESTS: 19,800,000+

AMERICA

HOTELS: 4,000+
ROOMS: 700,000+
GUESTS: 140,000,000+

EUROPE

HOTELS: 250+
ROOMS: 30,800+
GUESTS: 6,200,000+

MEA & AFRICA

HOTELS: 150+
ROOMS: 38,000+
GUESTS: 7,500,000+

ASIA PACIFIC

HOTELS: 110+
ROOMS: 20,900+
GUESTS: 4,200,000+

Presence

All VDA and Telkonet products, largely assembled at the production sites, are verified by **internal Quality Control** that establishes compliance with regulatory standards.

The ISO 9001 certified Group has adopted precise quality standards for processes and products, such that the Group can provide both standard and customized products; the development guidelines are well defined in order to maintain the quality of the product, even with significant customizations.

Ensuring the quality of the product and the service offered is a priority for the Group, which bases its philosophy on the ability to **satisfy the customer** and adapt to changing market contexts.

The Group's Quality



Our Markets

Hospitality

3-5 star hotels strive to strike the right balance between energy savings and guest comfort. Sustainability is the most popular trend in the travel industry today.

Student Housing

Sustainability is so important that many institutions have sustainability directors; many universities now offer sustainability as an area of study. Saving energy and occupant comfort are also important.

MDU

MDUs are interested in saving energy and maintaining ultimate control of energy usage; sustainability is becoming a priority as building standards change and as tenants increasingly demand it.

Military Housing

Military housing properties are primarily interested in saving energy and maintaining ultimate control of energy usage. Sustainability is becoming a priority as building standards change.

Senior Living Facilities

Senior living facilities are most interested in saving energy but not at the expense of occupant comfort. Sustainability is becoming a priority as building standards change.

Solution provider



KNOW HOW

Customer satisfaction is the Group's driving force and lifeblood.

The Group's deep knowledge of the industry is evident in its valued relationships in the Hospitality sector. The Group understands the needs of the market and establishes strong relationships with its customers.

The Group is driven by its '**People first**' philosophy. One of its main goals is to cultivate the relationship between the individual and the surrounding environment.

PRE-SALES

The Group's support starts from the presales stage, offering **consulting services**. We seek to understand the client's vision, acting as a trusted advisor and offering perspectives the client may not have considered. The Group develops **customized proposals**, outlining in detail the system to be installed, and suggesting the appropriate aesthetics.



2

PROJECT MANAGER

The installation phase of the project is entrusted to the **Project Manager**, who supports the customer in the set up and commissioning of the site, and acts as a liaison between the Project Engineer and the project stakeholders.

The Project Manager commits to the client the supervision and the management of every phase of the project development, actively involved until final installation and providing detailed documentation to be used as a guide to support and develop the property for years to come.



3

TECHNICAL SUPPORT TEAM

The **Technical Support Team** specializes in providing our customers with individual attention. They are an experienced, knowledgeable **group of professionals**, most of whom are located in the very same office as our Engineers, Product Development Engineers, Project Managers and Field Services Technicians.



Software service

Cloud solutions are now a consolidated reality in the world of Hospitality and more and more properties choose platforms capable of offering a software service (SaaS: Software-as-a-Service) able to evolve in harmony with the technologies of the future. One of the main advantages of the Internet of Things (IoT) is its ability to manage big data and parse it into information that is the basis for data analysis aimed at improving a variety of processes.

Predictive maintenance specifically exploits this data, anticipating and developing targeted interventions in advance of problems. This contributes to a significant reduction in maintenance costs and downtime, making it an investment that maximizes the life of devices and equipment and building health.



**ACCESSIBILITY
& MONITORING**



**SYSTEM
UPDATES**



**FLEXIBILITY
& SCALABILITY**



**ENERGY
EFFICIENCY**



**DATA
SECURITY**



**SYSTEM
CONFIGURATION**

Telkonet, headquartered in Waukesha, Wisconsin, is an IoT innovator focused on **intelligent automation** and **Energy Management** through the use of individualized climate controls that enable guests to intelligently control energy usage in accordance with their preferences while reducing energy consumption and improving facility management capabilities.

Telkonet was founded in 1999 and has successfully deployed **over 700,000 intelligent climate control devices** across more than 4,000 properties.





Energy Management System



Rhapsody

The second-generation
IoT platform

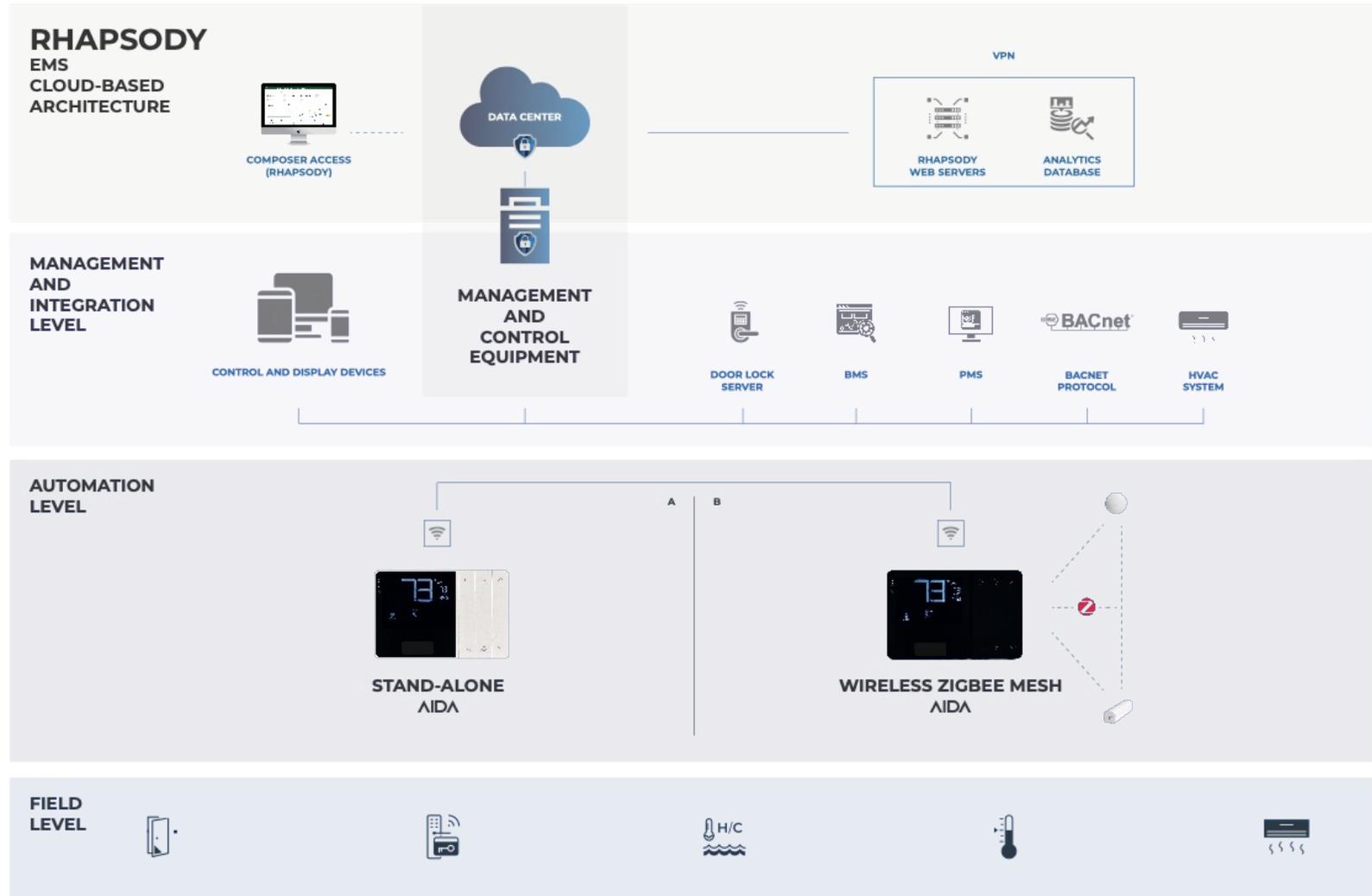


Rhapsody is Telkonet's second generation automation platform.

Its innovative open-system technology enables it to integrate with the communication protocols your property already uses: Wi-Fi, Bluetooth, and Zigbee. System setup and network installation are quick and easy. And because it's Wi-Fi capable, it saves time, effort, and expense by using existing Wi-Fi access points.

No other technology in the industry is capable of utilizing two different Wi-Fi platforms: one for the resident, and a backup Wi-Fi for the property.

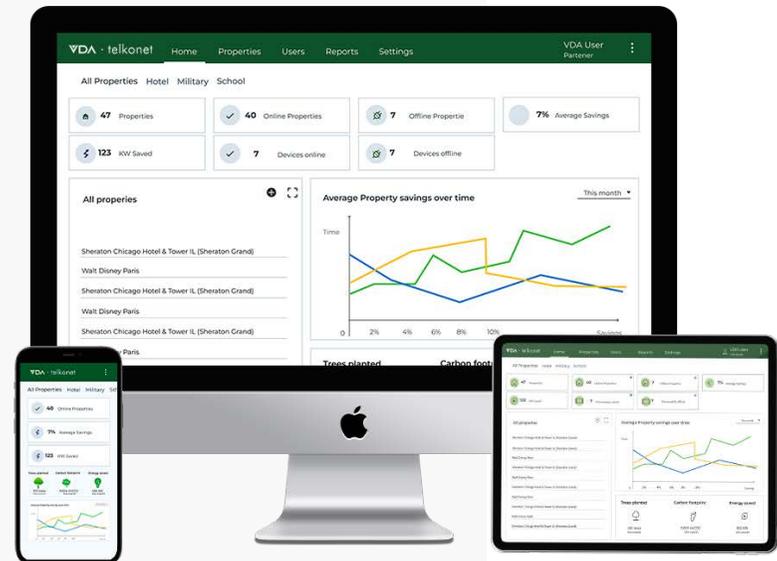




Rhapsody

WEB BASED USER INTERFACE

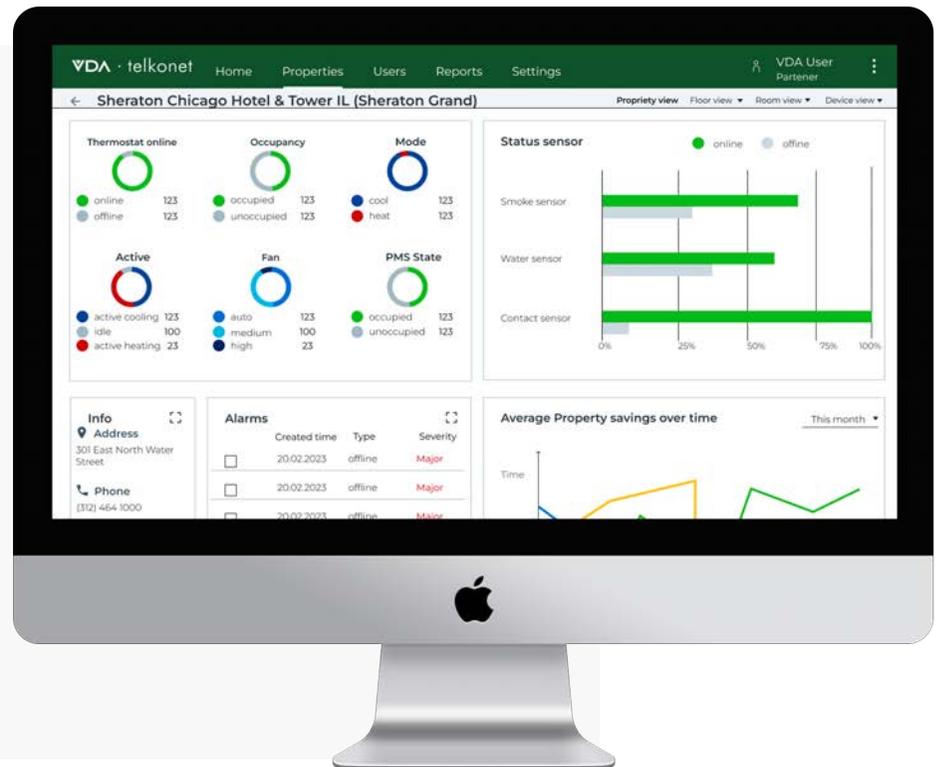
Telkonet's flexible Rhapsody offering provides several different methods of access. From physical interface with in-room devices to mobile applications, cloud-based software and publicly available API's, customers are able to choose the most convenient method of controlling their valuable environments.



Rhapsody

SOFTWARE CAPABILITIES

- Flexible device management
- Real-time information access
- Extensive reporting capabilities
- Convenient 'single pane of glass' access
- Versatile viewing options
- Substantial ROI through platform maintenance



Rhapsody



Rhapsody helps properties maintain comfortable in-room environments for the comfort of its guests.



Rhapsody assists building engineers maintain the health of the building and wellbeing of mechanicals like HVAC systems.



Properties can save up to 45% their energy usage using smart IoT technologies, without sacrificing guest comfort.

Rhapsody



SETUP AND CONFIGURATION TOOLS

Student housing, MDU's, and Hotels are prime candidates for Rhapsody.

Use existing Wi-Fi access points for networking the platform, saving on both parts and labor. Using the ubiquitous Zigbee protocol, the platform tracks occupancy for energy savings and integrates with lighting, panic buttons, and door contacts.

Guests appreciate using their mobile devices for thermostat control and for customizing schedules, using Bluetooth plus their Wi-Fi; property Wi-Fi can also be used, either in lieu of residential Wi-Fi or when residents move out.



Collections

Rhapsody

Touch Combo

Aida

Touch Combo

The cutting-edge smart thermostat, Telkonet's Touch Combo features the three most common wireless communication protocols, Wi-Fi, Bluetooth, and Zigbee, all in one device.





Touch Combo

Building owners can control thermostats and the energy use in the building, while at the same time giving their tenants the ability to control their thermostats with their own Wi-Fi via their mobile devices. No other platform today is capable of offering this.



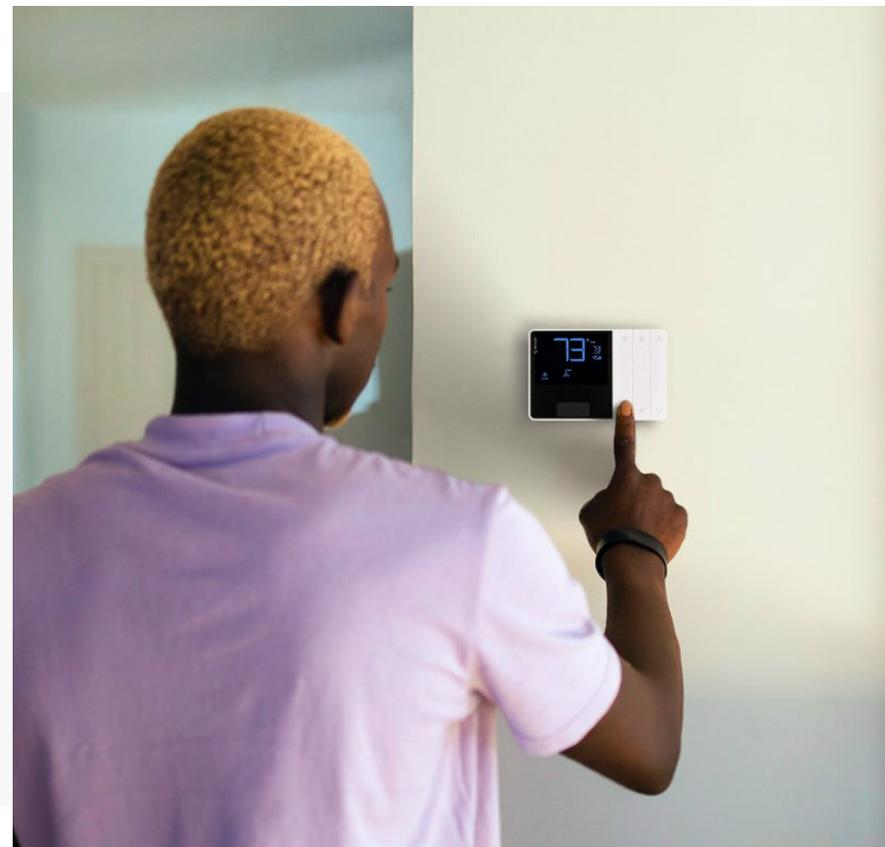
Touch Combo

Touch Combo is designed for energy efficiency at university housing, senior living, and multi-family facilities.

Essentially all managed housing that have already invested in robust Wi-Fi infrastructure.

Aida

The next generation of Telkonet smart thermostats, Aida is an HVAC controller and user interface in one device. It features a user-friendly interface that all occupants can easily interact with.





Aida

Property owners can control thermostats and the energy use in the building, while also giving their tenants the ability to control their thermostats through their own Wi-Fi via their mobile devices. No other platform today is capable of offering this solution.

Telkonet's Aida features the three most common wireless communication protocols, Wi-Fi, Bluetooth, and Zigbee, all in one device.



Aida

Aida is designed for energy efficiency at university housing, senior living, and multi-family facilities; essentially, all properties that already have a robust Wi-Fi infrastructure.

Light sensing also aids in accurate occupancy detection, especially at night.



Controllers

Rhapsody

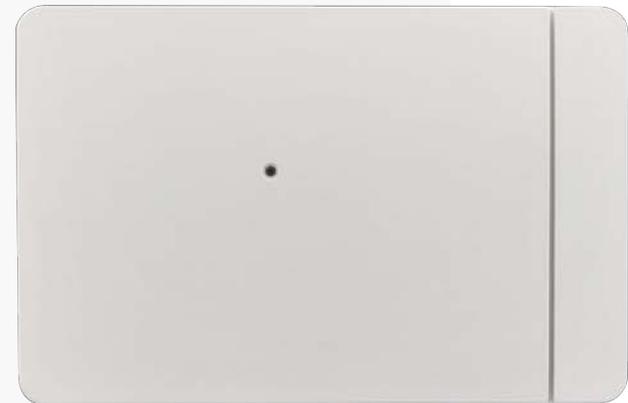
Source Combo

ES Controller

The ES Controller is part of the Rhapsody wireless thermostat package that offers flexible deployment options for many types of HVAC equipment.

The ES Controller communicates wirelessly with a remote display unit (Air BLE) and with the Rhapsody platform.

The ES Controller has a self-ranging power supply that allows it to be connected to a range of voltages without additional equipment.





Network

Rhapsody

Integration server



Integration server

A network edge appliance, required when properties choose on-premise interfaces. Interfaces include PMS, BACnet, or smart door locks. When the Integration Server is used, all Rhapsody devices will first communicate on a local network to the Integration Server.

The Integration server maintains a connection with the cloud to allow for reporting and control capabilities in the Rhapsody dashboard.

EcoSmart

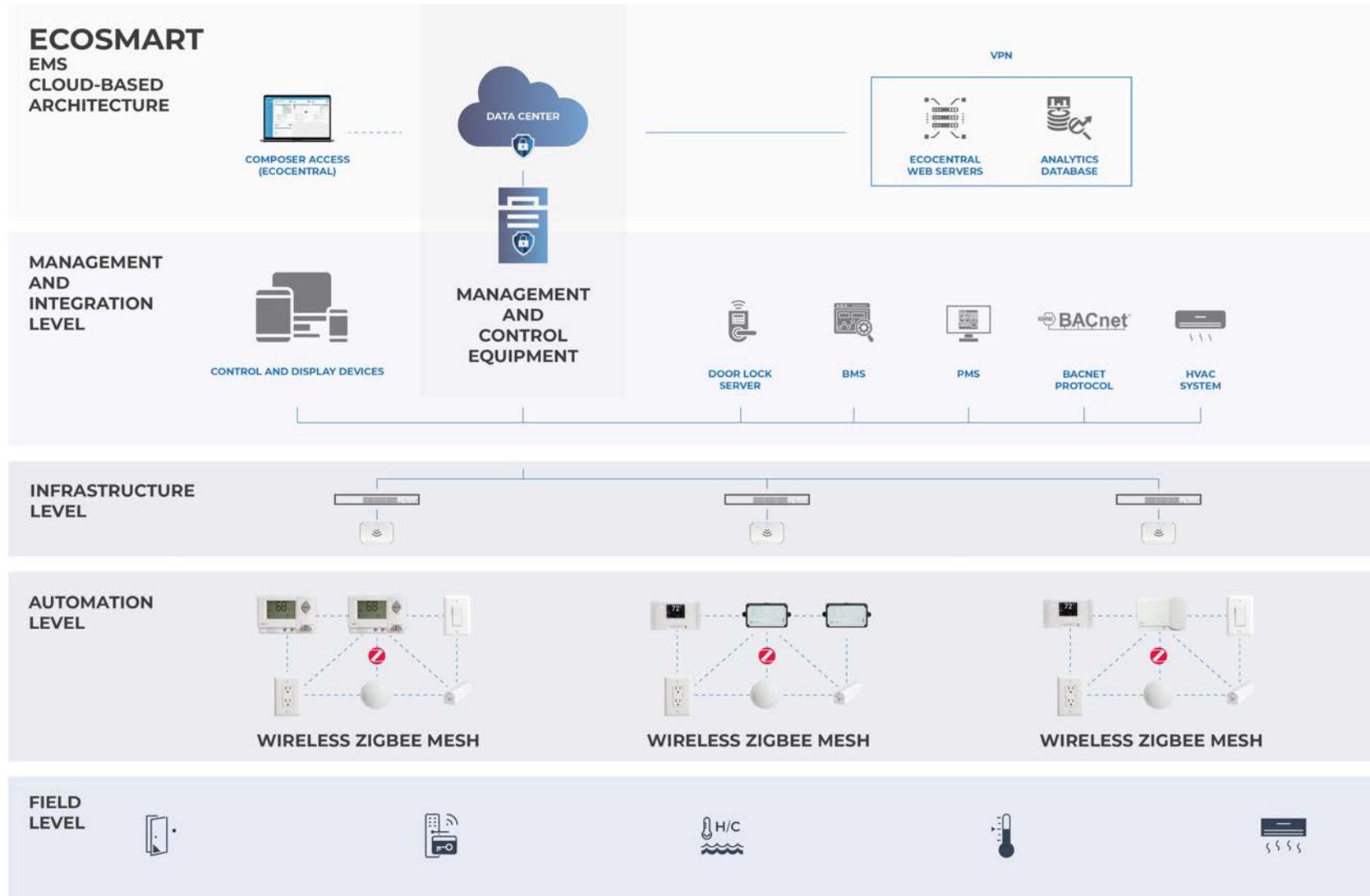
Proven EMS platform offers
guest comfort, building health,
and energy savings.



EcoSmart is Telkonet's industry-leading intelligent automation platform offering an unmatched guest experience, energy savings and operational efficiencies. Telkonet ensures that its customers prioritize their business and assets as well as energy savings.

EcoSmart's vast array of integrations provides for exceptional guest experiences increasing both value and ROI for its customers and maximizes the potential for technology throughout any property.



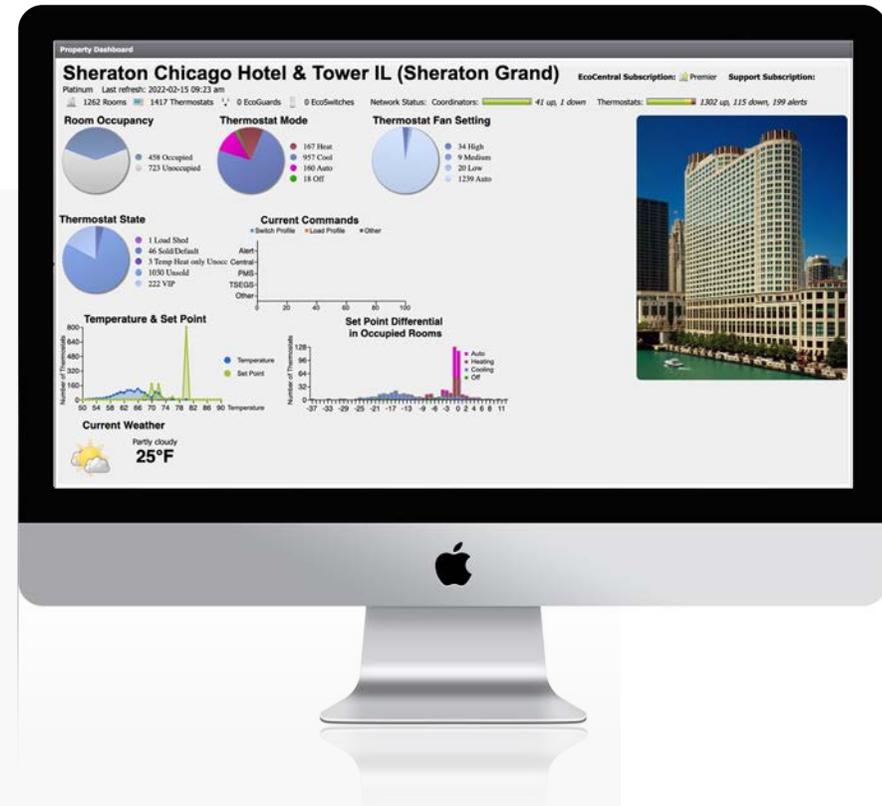


EcoCentral

EcoSmart system

WEB BASED USER INTERFACE

Cloud-based data storage, reporting, and analytics interface providing real-time monitoring and reporting to track progress toward efficiency goals. Prevent unscheduled emergency repairs. Dispatch maintenance more efficiently. Set up custom alerts. Identify underperforming HVAC units. Troubleshoot remotely.

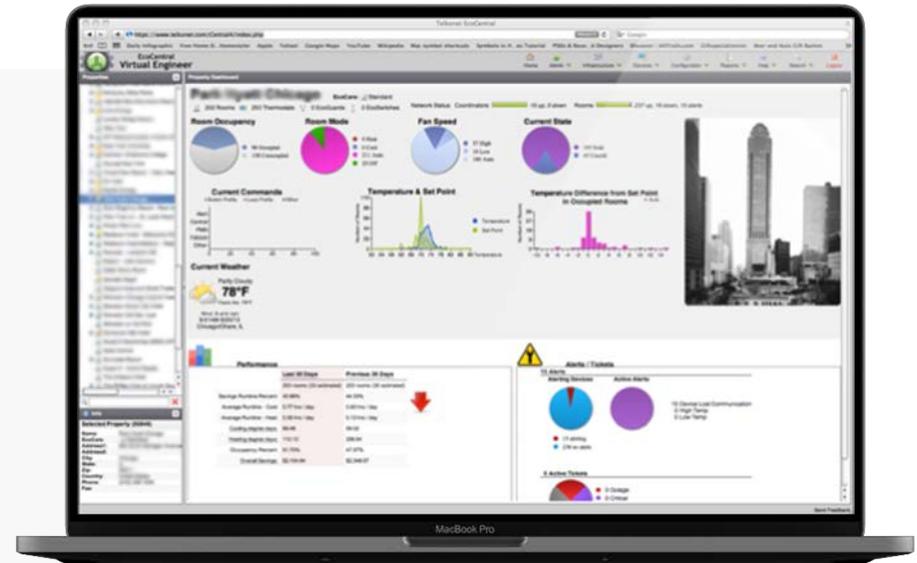


EcoCentral

EcoSmart system

SOFTWARE CAPABILITIES

- PMS and BMS interfaces
- Third-party integrations like door locks, lighting, shades, voice control, etc.
- Room-by-room data collection for energy management
- 25 actionable reports
- Track unusual occupancy statistics
- Facilitate demand response and automatically balance load across specified units
- Accessible via desktop, tablets, mobile devices.



EcoCentral

EcoSmart system



Comprehensive platform offering energy savings, exceptional guest experience, and increased operating efficiency.



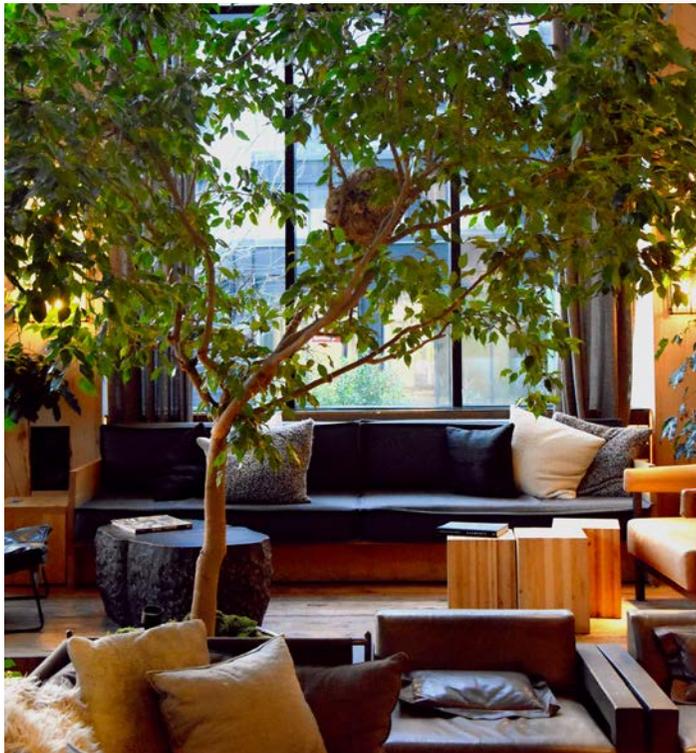
Standards-based technology providing future-proof scalability. A secure, stand-alone version is also available for special circumstances.



Provides a simple and intuitive web-based user interface, ensuring a user-friendly solution for configuring and using the system.

EcoCentral

EcoSmart system



SETUP AND CONFIGURATION TOOLS

Convenient portfolio of tools provided for real-time system management and configuration.

Mobile, desktop, cloud, and third-party access to the vast catalog of features and functionality ensures platform efficiency and guest comfort.

A stand-alone version of EcoCentral is available for properties such as military housing and universities with exceptional security concerns.

Collections

EcoSmart

EcoTouch+

EcoInsight+

EcoAir



EcoTouch+

The EcoTouch+ offers a sleek, slim, modern design on the outside and powerful technology under the cover.

Battery-powered, it can be installed in the optimum location in the room without concern for existing wiring. It features a PIR occupancy sensor, calibrated to extreme sensitivity. Paired with an EcoSmart controller, it offers a complete HVAC control solution.





EcoTouch+

The EcoTouch+ buttons resemble those of a traditional thermostat, for easy occupant-control of the room environment. Properties can choose to display all buttons on the screen, or elect a simplified version.



EcoTouch+

The EcoTouch+ communicates wirelessly with the EcoSource+ HVAC controller and the EcoSmart VRF controller, to control a wide array of HVAC systems.

Its haptic feedback offers the same light vibration you feel when touching your mobile phone screen.

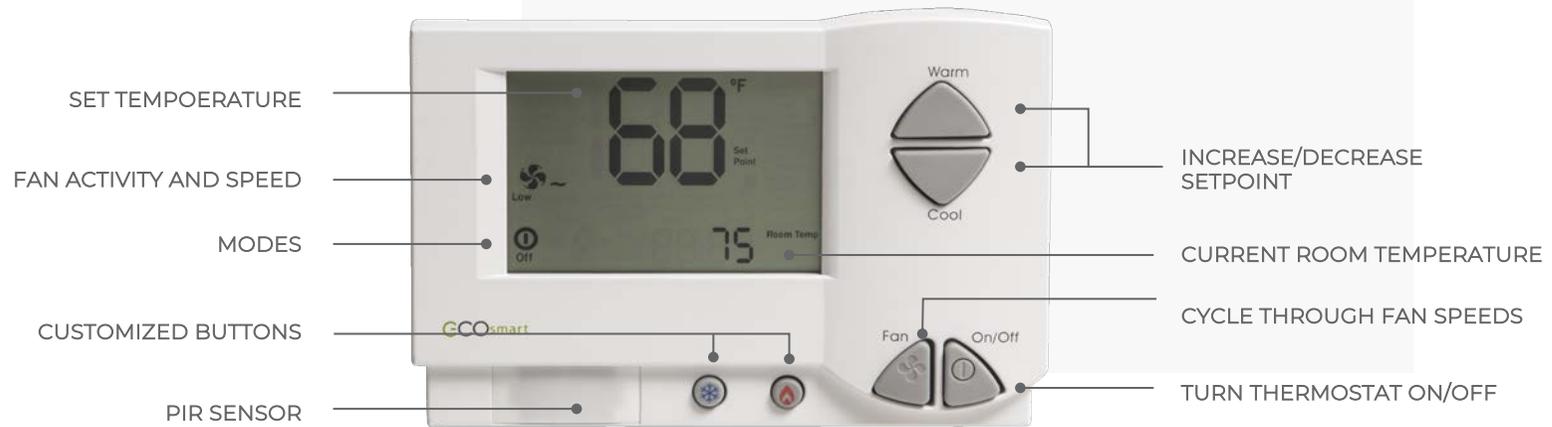
The EcoTouch+ is ultra-thin, at only 15mm deep (battery version 31 mm). The EcoTouch+ can be hard wired or operate wirelessly with battery power.

EcoInsight +

The EcoInsight+ is an intelligent thermostat that acts as the “brain” of the room, serving as the EcoSmart room automation controller. It serves as a ZigBee-enabled router, communicating wirelessly with the other EcoSmart devices in the network.

The EcoInsight+ provides advanced occupancy, light, and humidity sensing for enhanced HVAC optimization. The versatile EcoInsight+ is highly compatible with most HVAC systems on the market.





EcoInsight +

The EcoInsight+ provides advanced occupancy, light, and humidity sensing for enhanced HVAC optimization. With the EcoInsight+ you get more than just a thermostat, you get a network edge processor with a generous number of input and output options. Up to three Current Transformer (CT) inputs can be used to measure and log current. Two external temperature inputs can be used to monitor remote temperature, two dry contact pairs are available for door contacts or integration with third party building controls and 2 variable outputs are included for control of lighting, fans or valves, making the EcoInsight+ a fit for the basic to the most complicated installations.



EcoInsight+

EcoInsight+ is particularly well suited for new construction, when its location can be pre-determined without regard for previous wiring.

Like all EcoSmart thermostats, it features the proprietary Recovery Time Technology and offers full remote control capability with any web browser via our EcoCentral web application

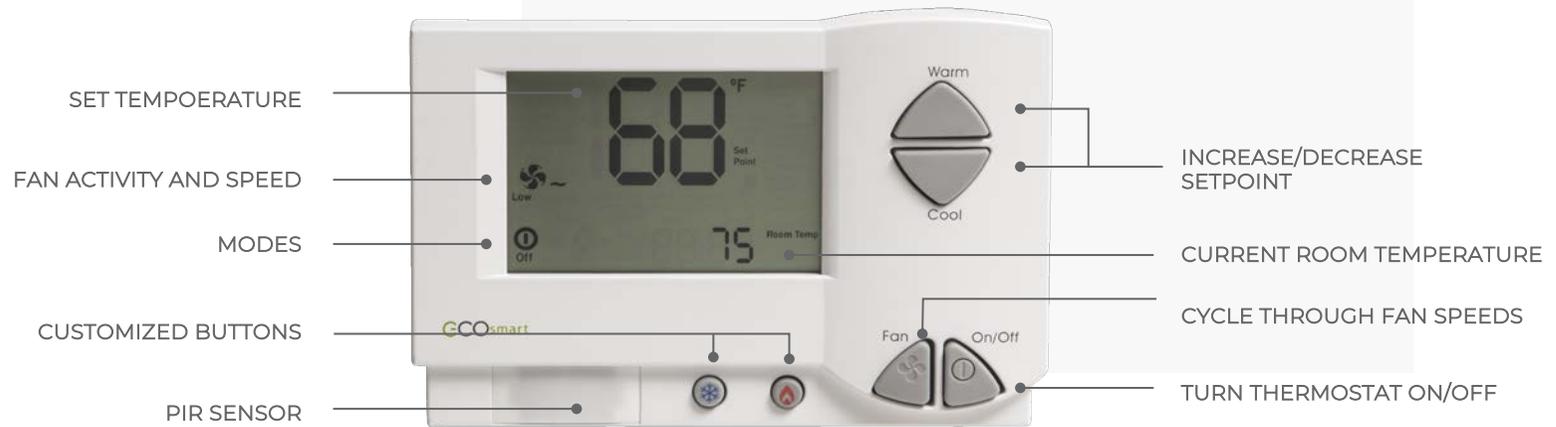
Owing to its Zigbee communication capabilities, EcoInsight+ easily integrates with most third-party smart devices on the market, like Saflok, Salto, and Axxess.

EcoAir

The EcoAir acts as the occupant interface with the HVAC unit. It is typically battery-powered, so it can be installed in the optimum room location without regard for previous thermostat wiring.

The EcoAir communicates wirelessly with the HVAC controller for a complete HVAC solution. It features a user-friendly interface. The EcoAir provides advanced occupancy, light, and humidity sensing for enhanced HVAC optimization.





EcoAir

The EcoAir provides advanced occupancy, light, and humidity sensing for enhanced HVAC optimization. With its simple interface design, EcoAir is user-friendly for any occupant.



EcoAir

The EcoAir provides advanced occupancy, light, and humidity sensing for enhanced HVAC optimization.

Two configurable soft buttons allow property owners to select the best room control options for their property (such as Heat/Cool or F° /C°).

EcoAir is easy to install and it takes only a few minutes to complete installation.

Controllers

EcoSmart

EcoSource+

VRF Controller





EcoSource+

The EcoSource+ acts as the 'brain' of the room, serving as the EcoSmart room automation controller. It is paired with either the EcoTouch+ or EcoAir for occupant control of the inroom environment. Installed in or on the HVAC unit the versatile EcoSource+ is highly compatible with most HVAC systems on the market.

As a Zigbee-enabled router, it communicates wirelessly with the other EcoSmart devices and third party devices in the network. Like all EcoSmart thermostats, it features the proprietary Recovery Time Technology.



VRF Controller

The EcoSmart VRF Controller is mounted next to the indoor unit for physical control of the system. It communicates wirelessly with the EcoAir or EcoTouch+ for occupant control. It is easily installed and programmed.

Like all EcoSmart thermostats, it features the proprietary Recovery Time Technology and offers full remote control capability with any web browser via our EcoCentral web application. This Zigbee HA (Home Automation) compliant device simplifies third-party integration by serving as a Zigbee-enabled router, communicating wirelessly with the other EcoSmart devices in the network.

Accessories

EcoSmart

Eco Contact+

EcoSense+

EcoSwitch+

EcoGuard+





EcoContact+

An effective solution for supplementing occupancy detection in large or multi-angular living spaces.

EcoContact+ plays two important roles:

1. Supplements occupancy detection in large or multi-angular living spaces.
2. Proactively adjusts HVAC output when patio doors or windows are left open.



EcoSense+

Supplemental occupancy detection for exceptionally large or angular spaces and multi-room layouts. The EcoSense+ contains a PIR, which detects body temperature and motion. Our PIR sensors are optimized for use in spaces such as Hotel rooms and dormitories. They are calibrated to extreme sensitivity so they can detect even subtle motion. EcoSense+ easily integrates with other third-party Zigbee devices.



EcoSwitch+

The EcoSwitch+ provides the aesthetics of standard light switches with advanced energy management capability. It can significantly reduce energy consumption while operating seamlessly a normal light switch. It stops the flow of electricity to lights, conserving electricity that would have been wasted on an unoccupied space. It is simple to use, operating as a standard switch, yet providing sophisticated energy management capability.



EcoGuard+

The EcoGuard+ energy management outlet provides the ability to stop the flow of power to an outlet, turning off lamps, TVs, appliances, and other energy-consuming loads. The EcoGuard+ combats energy vampires - those devices on stand-by power that are turned off but still use power when plugged into an outlet. Its LED status indicator indicates smart outlet scanning during the pairing process. It features screw terminal installation, requiring wiring connections for line (hot), neutral, and ground. Device pairing to Zigbee certified gateways is easily accomplished.

Network

EcoSmart

EcoCommander

Gateway Coordinator





EcoCommander

A network-edge gateway server for management of the Telkonet product suite. The EcoCommander acts as a gateway between Telkonet thermostats and EcoCentral. It functions on a private network by creating a secure tunnel, collecting, organizing and transmitting data from the thermostats to EcoCentral, and vice versa. It is a secure, solid-state network appliance collecting data continuously and in real time. The EcoCommander transmissions are two-way: EcoCentral issues commands back to the thermostat, commands such as 'change fan speed', 'switch from heat to cool', and 'adjust temperature minimum and maximum'.



Gateway Coordinator

The Gateway coordinator offers reliable and redundant networking, providing effective network communications in any energy management environment. The Gateway establishes the wireless channel and PAN identification that a group of EcoSmart products will join. Each Gateway device forms a reliable redundant mesh topology between all ZigBee-enabled EcoSmart products within its wireless range. It operates using ZigBee 'mesh networking' and provides a highly reliable method for reaching many devices without the worry of direct signal strength.

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