# telkonet

# 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, f rom 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

Map labels:
- VDA Telkonet AMERICAS
- VDA Telkonet UK & Ireland
- VDA Telkonet HQ
- VDA Telkonet MEIA
- VDA Telkonet APAC

**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.
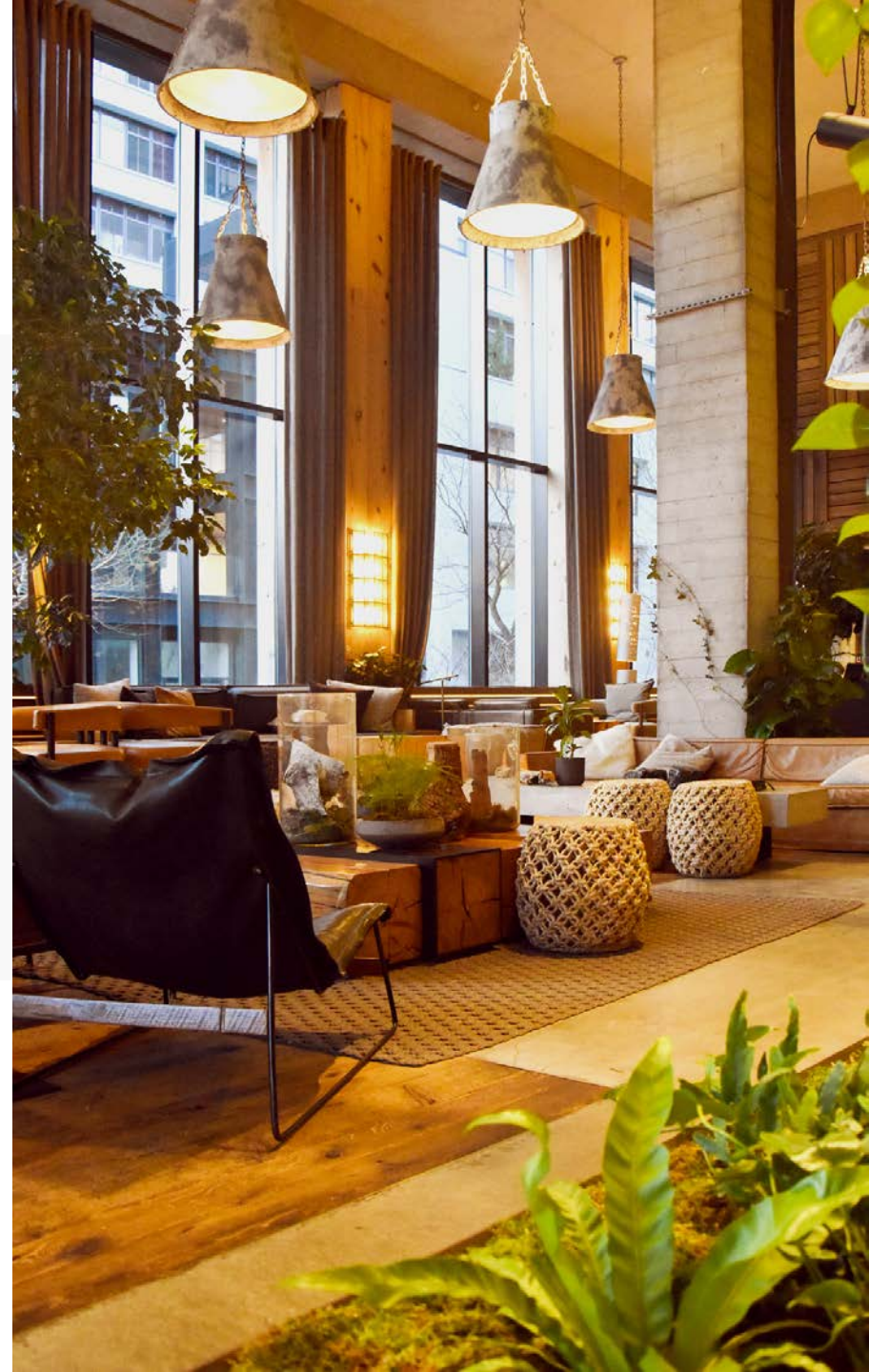
## PRE-SALES

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.

**ACCESSABILITY & 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
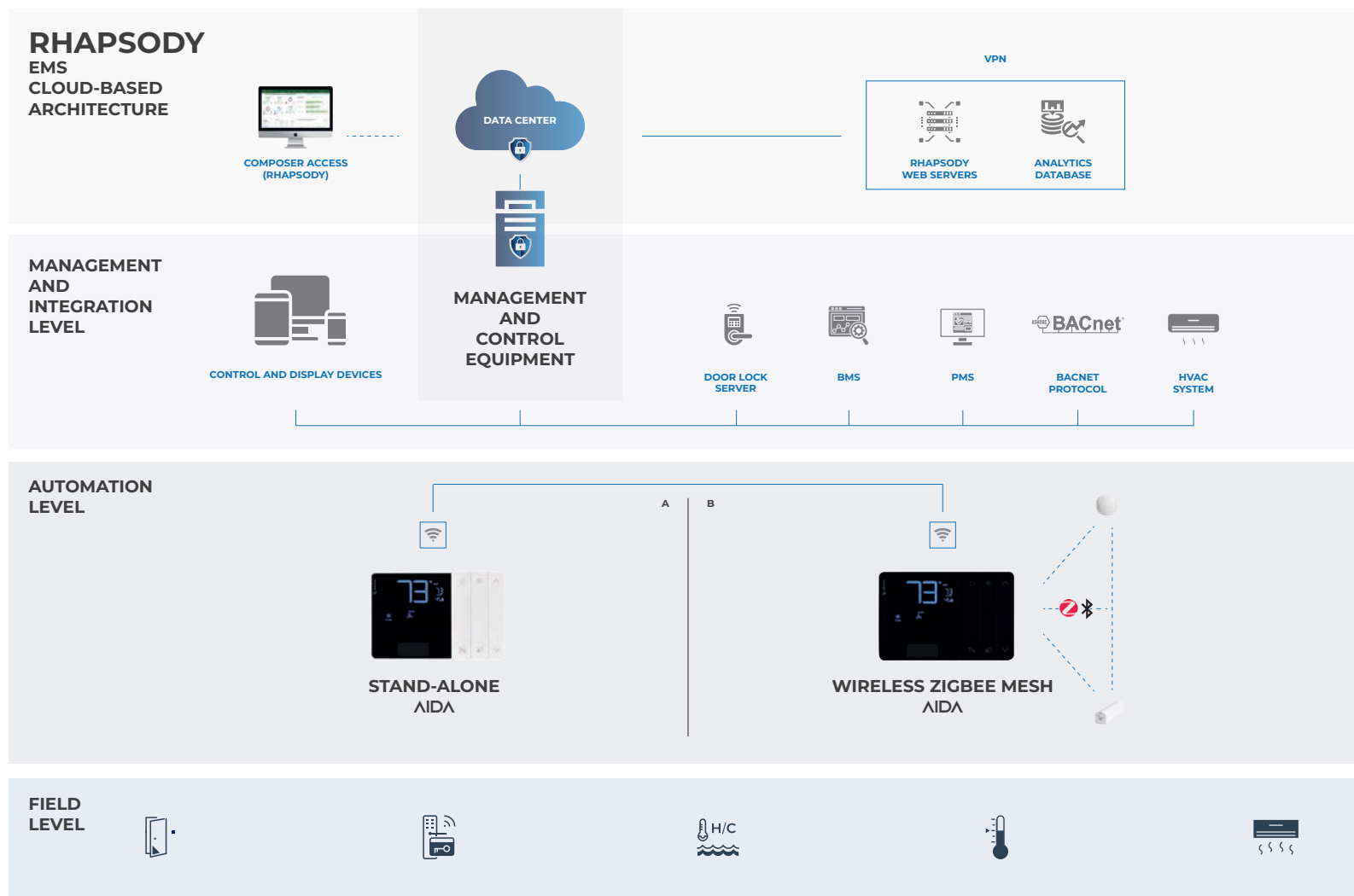
# Rhapsody

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.
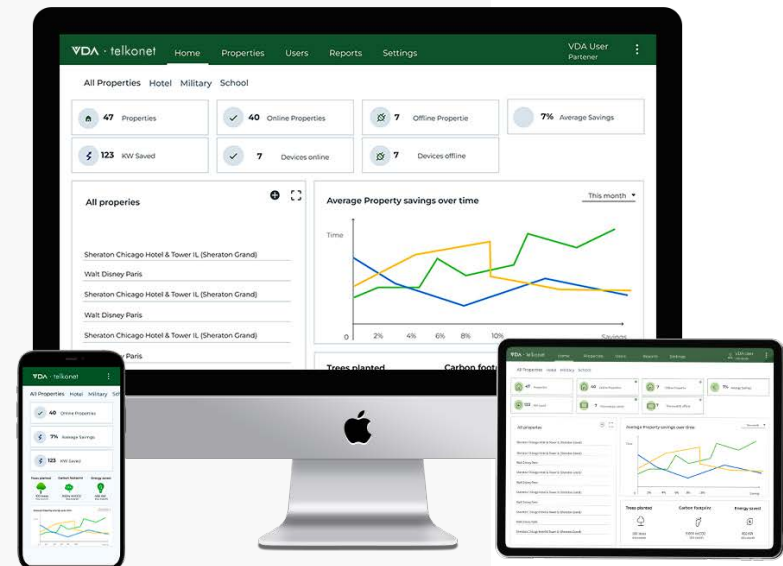
**RHAPSODY**

**EMS CLOUD-BASED ARCHITECTURE**

VPN

COMPOSER ACCESS (RHAPSODY)

DATA CENTER

RHAPSODY WEB SERVERS

ANALYTICS DATABASE

**MANAGEMENT AND INTEGRATION LEVEL**

CONTROL AND DISPLAY DEVICES

MANAGEMENT AND CONTROL EQUIPMENT

DOOR LOCK SERVER

BMS

PMS

BACnet

BACNET PROTOCOL

HVAC SYSTEM

**AUTOMATION LEVEL**

A    B

STAND-ALONE
AIDA

WIRELESS ZIGBEE MESH
AIDA

**FIELD LEVEL**

H/C

## Rhapsody
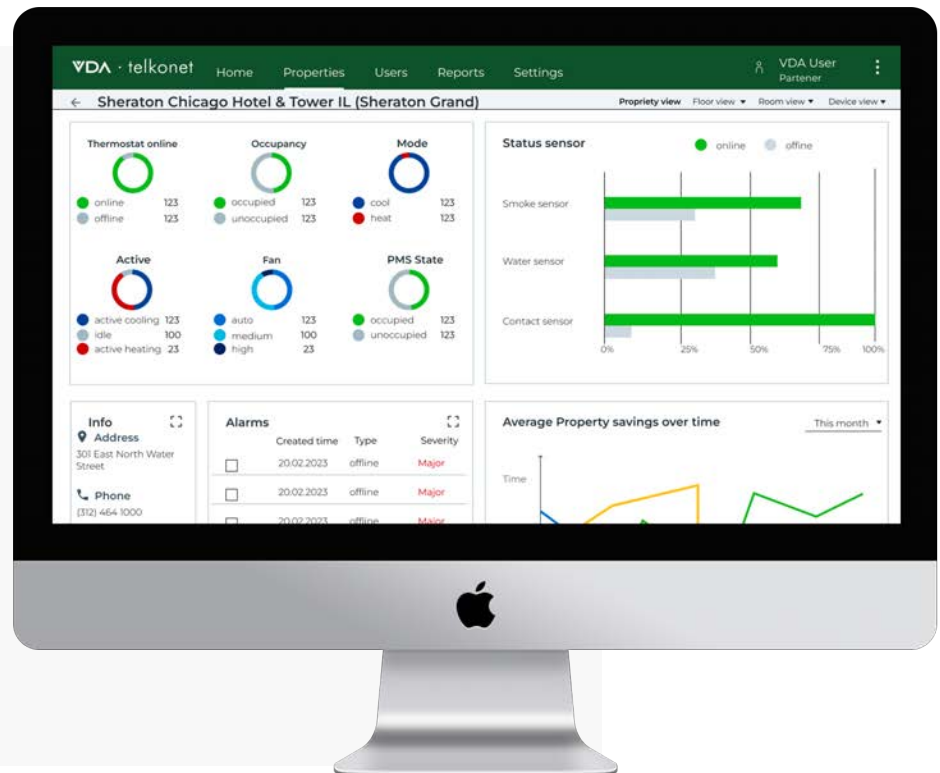
### WEB BASED USER INTERFACE

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

# Why Rhapsody

Rhapsody's Wi-Fi capability makes it quick and easy to install, configure, and remotely troubleshoot.

Rhapsody software features multi-site viewing from a single platform, user-friendly graphics, and powerful analytics.

There is a Rhapsody thermostat for practically every scenario, from thermostat retrofits, to smaller PTACs, to customizable button options.

Third party integrations fit right into the Rhapsody platform: PMS, BMS, door locks and more.

# Rhapsody



## SETUP AND CONFIGURATION TOOLS

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

Use exisiting 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.
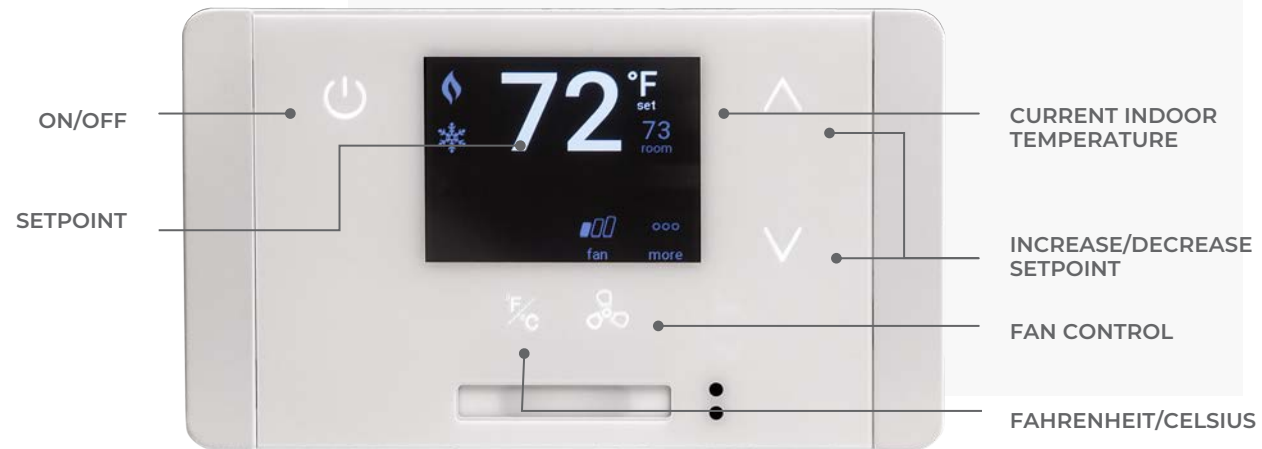
# Collections

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.

ON/OFF

SETPOINT

72 °F
set
73
room

fan    more

CURRENT INDOOR
TEMPERATURE

INCREASE/DECREASE
SETPOINT

FAN CONTROL

FAHRENHEIT/CELSIUS

## 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.

CURRENT INDOOR
TEMPERATURE

SETPOINT

FAHRENHEIT/CELSIUS

ON/OFF

INCREASE/DECREASE
SETPOINT

FAN & ECO-MODE
CONTROL

## 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.
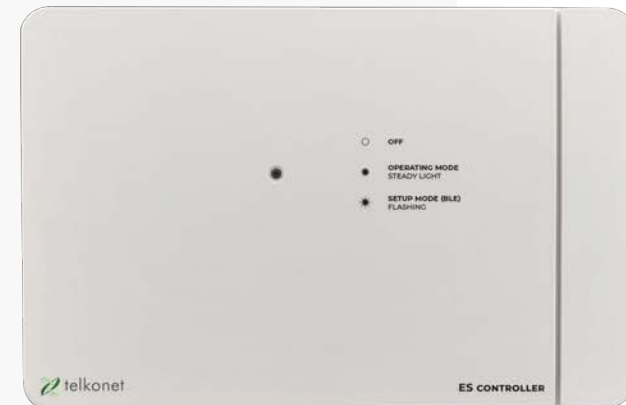
# Controller

Rhapsody

ES Controller

# 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.

OFF

OPERATING MODE
STEADY LIGHT

SETUP MODE (BLE)
FLASHING

telkonet

ES CONTROLLER

# 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.

# Accessories

Contact+

Sense+

# Contact+

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

# Sense+

Supplemental occupancy detection for exceptionally large or angular spaces and multi-room layouts.
The Sense+ 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.
Sense+ easily integrates with other third-party Zigbee devices.

VDA · telkonet

**VDA TELKONET HQ**

VDA Group S.p.A.

Viale Lino Zanussi n. 3

33170 Pordenone (PN) - Italy

**VDA TELKONET UK**

VDA UK Ltd

Unit 5, Orbital 25 Business Park,

Dwight Road, Watford, WD18 9DA - United Kingdom

**VDA TELKONET MEIA**

VDA Middle East Fz Llc

P O Box 37830 Unit No. B203-204,

"Design House", Plot No.78-0,

AL Sufouh First, (off Sheikh Zayed Road) Dubai,

United Arab Emirates

**VDA TELKONET IRELAND**

VDA UK Ltd

Stonewell House, Cloughanover,

Headford County Galway, H91 AT2Y, Ireland

**VDA TELKONET APAC**

VDA Asia Pacific LTD

Office No. 305, 3rd Fl., FICO Place Bldg. 18/8 Sukhumvit 21,

Klongtoey Nua, Wattana, Bangkok, 10110 - Thailand

**VDA TELKONET AMERICAS**

Telkonet Inc.

20800 Swenson Drive, Suite 175,

Waukesha, WI 53186

www.vda-telkonet.com          www.vdagroup.com          www.telkonet.com