

Control Your Costs and Comfort

Energy Management Solutions

Orion by VingCard Elsafe is the new Energy Management Solution that offers savings by degrees, while ensuring guest comfort.

Orion by VingCard Elsafe detects guest presence in the room and allows you to control and manage your A/C cost while rooms are unoccupied, monitoring and maintaining the same temperature comfort level when they return to their rooms.

Orion by VingCard Elsafe is much more than "just" an energy management solution because it offers full wireless online functionality and a network that can be either set up independently or together with VISIONLINE by VingCard wireless online electronic locks.

Orion by VingCard Elsafe dramatically helps you improve your environmental and green initiatives and contributes to reducing global warming.

Don't let your money fly out of the window and get more "cool" savings.



ORION BY VINGCARD ELSAFE MAIN FEATURES AND BENEFITS

Standalone scenario:

- Accurate digital room temperature control
- Controls most types of A/C systems "PTAC, FCU, etc."
- Easy-to-use
- Simple installation
- Determines guest presence through motion sensor, door switch and other proprietary technology
- Lowers A/C runtime by determining occupancy
- Designed for new construction and retrofit applications

Wireless online EMS scenario

- All standalone benefits plus:
- Real time remote status of:
 - » A/C Runtime
 - » Room occupancy
 - » Orion thermostat
- Preventative maintenance schedules and reports
- Occupancy change notifications
- Occupancy trends and reports
- Savings reports
- Event notifications
- Maintenance alarms
- Device alarms
- Low battery warnings
- Dynamic or static setbacks
- Designed for new construction and retrofit applications
- Remote room temperature adjustment for welcome room set-ups

Wireless online EMS with VISIONLINE

- All wireless online benefits plus:
- Seamless integration with VISIONLINE by VingCard electronic locks wireless network
- Uses the same wireless online network from VISIONLINE
- Uses Integrated lock communication to accurately determine occupancy status, no need for door switch
- Manages guest/staff entry to monitor HVAC accordingly
- Integrated remote wireless "Do Not Disturb" function with electronic locks
- And much more...

▶ Orion by VingCard Elsafe Energy Management Solutions

System components

Orion Thermostat

- Digital room temperature control including Heat/Cool/3 Fan Speeds
- RF-online wireless communication (Zigbee based) to motion sensor and wireless online VingCard electronic locks
- Integrated humidity sensor
- Modular design – upgradeable for future options
- Simple installation
- Intuitive to use
- Temperature display range: 2 digit display
- Guest control range: 65-90°F / 18-32°C. Configurable
- Configurable "room not occupied"/"room not sold" status timers
- Dimensions: 5.19H X 3.44W X 1.42D in (132H X 87W X 36D mm)



Orion Motion Sensor

- Identifies movement in order to determine guest presence
- Standalone device
- Battery operated (3AA batteries)
- Ceiling or wall mounted, easy installation and battery change
- RF-online wireless communication (Zigbee based) with Thermostat determining room occupancy and alarms.
- 360 degrees range. 8 meters horizontal, 3 meters vertical
- Dimensions: 4.72 in diameter X 1.74 in H (120 mm diameter X 44mm H)



Door switch

Door switches, together with motion sensor and thermostat, determine room status change and whether the guest is inside the room or not.

Scenario 1: Standalone installation

- Standalone thermostat and motion sensor.
- Motion sensor communicates with thermostat via wireless RF.
- Thermostat, together with door switches and motion sensor, determine the guest occupancy in the room and take control of room temperature when guest leaves to save energy and maintain the comfort level upon guest return.

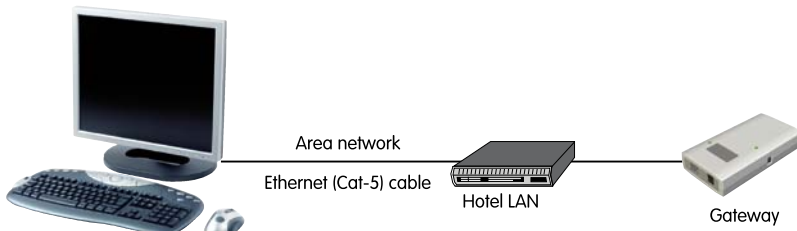




Based on High-security Zigbee open platform

Scenario 2: Wireless Online Network

- Standalone thermostat and motion sensor. Motion sensor communicates with thermostat via wireless RF.
- RF-online wireless communication between thermostat and gateways.
- Gateways connecting to hotel ethernet network for direct communication with Orion by VingCard Elsafe server.

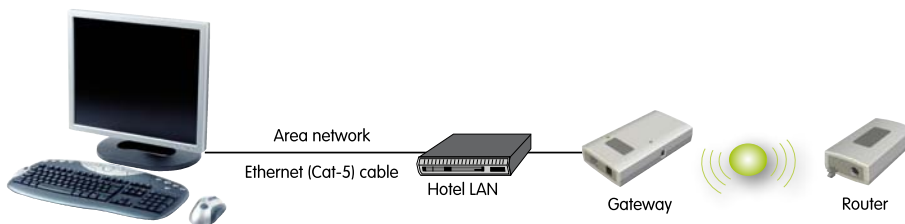


Orion by VingCard Elsafe software



Scenario 3: Wireless Online Network Together with VISIONLINE by VingCard Electronic Locks

- Standalone thermostat and motion sensor. Motion sensor communicates with thermostat via wireless RF.
- RF-online communication between thermostat and VingCard electronic locks.
- RF-online wireless communication from locks and safes to VISIONLINE network.
- RF-online wireless communication between thermostat directly and with gateways.
- Gateways connecting to hotel ethernet network for direct communication with Orion by VingCard Elsafe server.



Orion by VingCard Elsafe software



ZIGBEE Network Devices

Zigbee is a wireless standard transmitting data via RF-signals. This standard is aimed at controlling applications with relatively low data rate/power consumption.

■ Router technical data:

- Powered by a power adapter (5VDC).
- Low power consumption.
- Easy mounting.
- Flexible setup and configuration.
- UL94-V0 approved.
- Weight: 36 g.
- Flame retardant ABS.
- Color: RAL 7047.
- The router is intended for indoor use only, temperature range +5°C to +50°C (41°F - 122°F). Relative humidity 10% to 90% (non-condensing).
- Dimensions: 40 mm x 105 mm x 20 mm (1 37/64 in x 4 9/64 in x 51/64 in)



■ Gateway technical data:

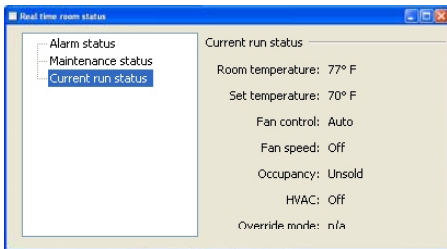
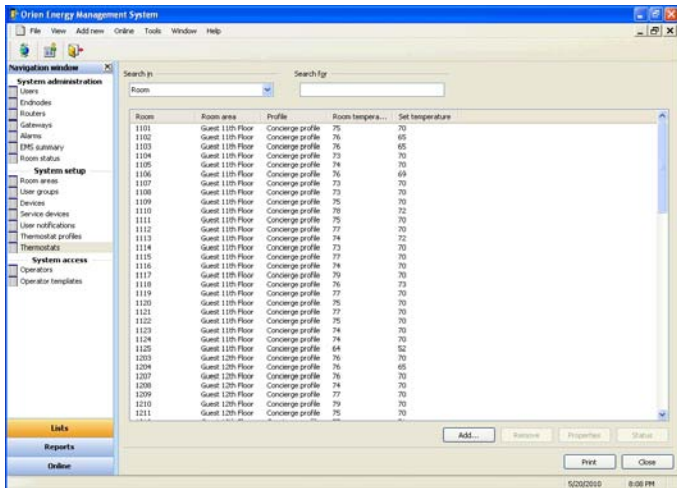
- Automatic adjustment to 10 or 100 Mbit/s networks.
- Powered over ethernet (PoE) or by a power adapter (5VDC).
- Low power consumption.
- Easy mounting.
- Weight: 116 g.
- Flame retardant ABS.
- UL94-V0 approved.
- Color: RAL 7047.
- The gateway is intended for indoor use only, temperature range +5°C to +50°C (41°F - 122°F). Relative humidity 10% to 90% (non-condensing).
- Dimensions: 63 mm x 144 mm x 28 mm (2 31/64 in x 5 43/64 in x 1 7/64 in)



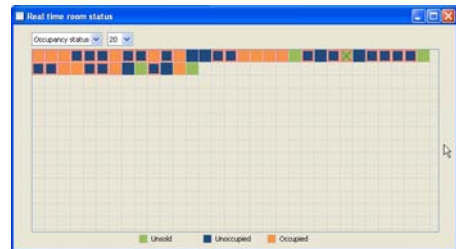
▶ Orion by VingCard Elsafe software

Orion Software features

- **Reporting features:**
 - » Energy savings
 - » Maintenance
 - » Occupancy
- **Status views:**
 - » Occupancy
 - » HVAC Settings
 - » Status
 - » Current savings
- **Alarms:**
 - » HVAC
 - » Security
 - » Preventative maintenance
 - » Occupancy status change
- Interface with PMS, Lock server, Work order systems
- Multi-language
- User friendly and intuitive graphical interface
- And much more...



Flexible settings to fit all properties and climates



Summary of all rooms and thermostats

Control Your Costs and Comfort

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Specifications may change without notice.