



## Hybrid Security Alarm System

Realize the full potential of your Smart Home system with Hybrid Wired & Wireless System



Climax Hybrid Security System is a wired and wireless IP-based smart home security gateway with LTE capability. It provides a customizable and robust system which takes advantages of both kinds of technology for commercial and large home applications, offering a comprehensive solution, including home security, total visual monitoring solution, ZigBee / Z-Wave home automation, and energy management and bringing all-round convenience, comfort and safety.



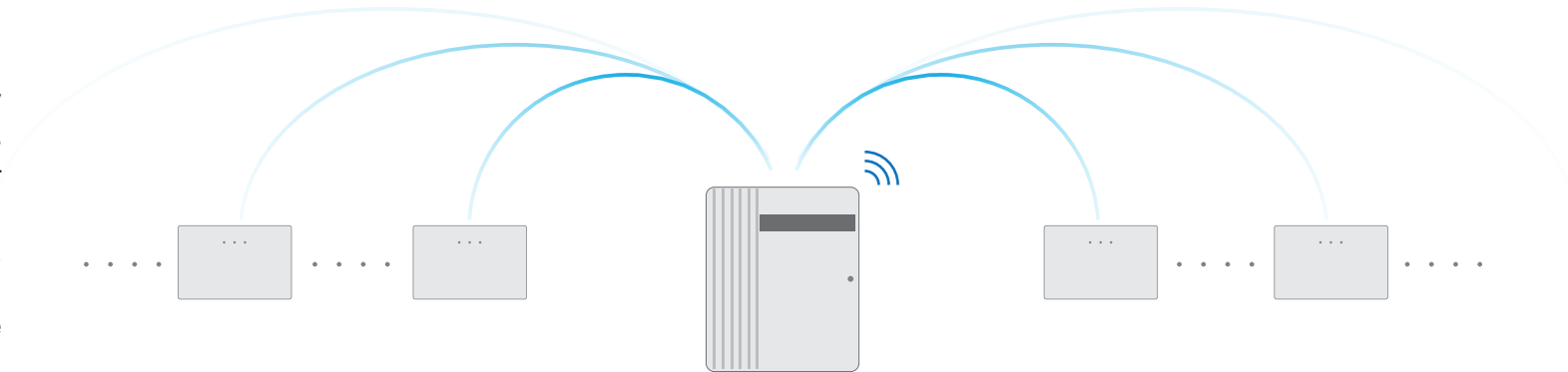
## HWC-1

HWC-1 is designed to convert existing wired security sensors to wireless zones, enabling retrofitting of traditional wired security systems.



## Scalable System

Hybrid Security System allows easy expansion of wired zones, which supports integrations of expansion module or hardwire-to-wireless converter, HWC-1, providing flexibility for installations of a wide range of wired sensors and devices. There are 12, 24, 36 and 48 zone expansion modules available.



## Smart Automation

Hybrid Security System incorporates ZigBee or Z-Wave devices to create an integrated, comprehensive smart automation system, able to adapt to your lifestyle habits and enhance security. Thermostats, lights, shutters, and electronic appliances can be turned on/off according to temperature settings, customized schedule/scenes, and/or security status. You can easily tailor the Hybrid Security Gateway's services to meet your needs anytime, anywhere via smartphone app and web browser.



## Energy Management

Hybrid Security System can integrate whole-premise energy meters to report how much electricity the entire household/facility uses and ZigBee/Z-Wave power meter switches to monitor the power consumption of individual home appliances. With this power-saving system you can develop a useful strategy to reduce energy consumption.



**PSM-29**  
Power Meter  
Switch



**PRM-5**  
Power Meter &  
Relay Switch



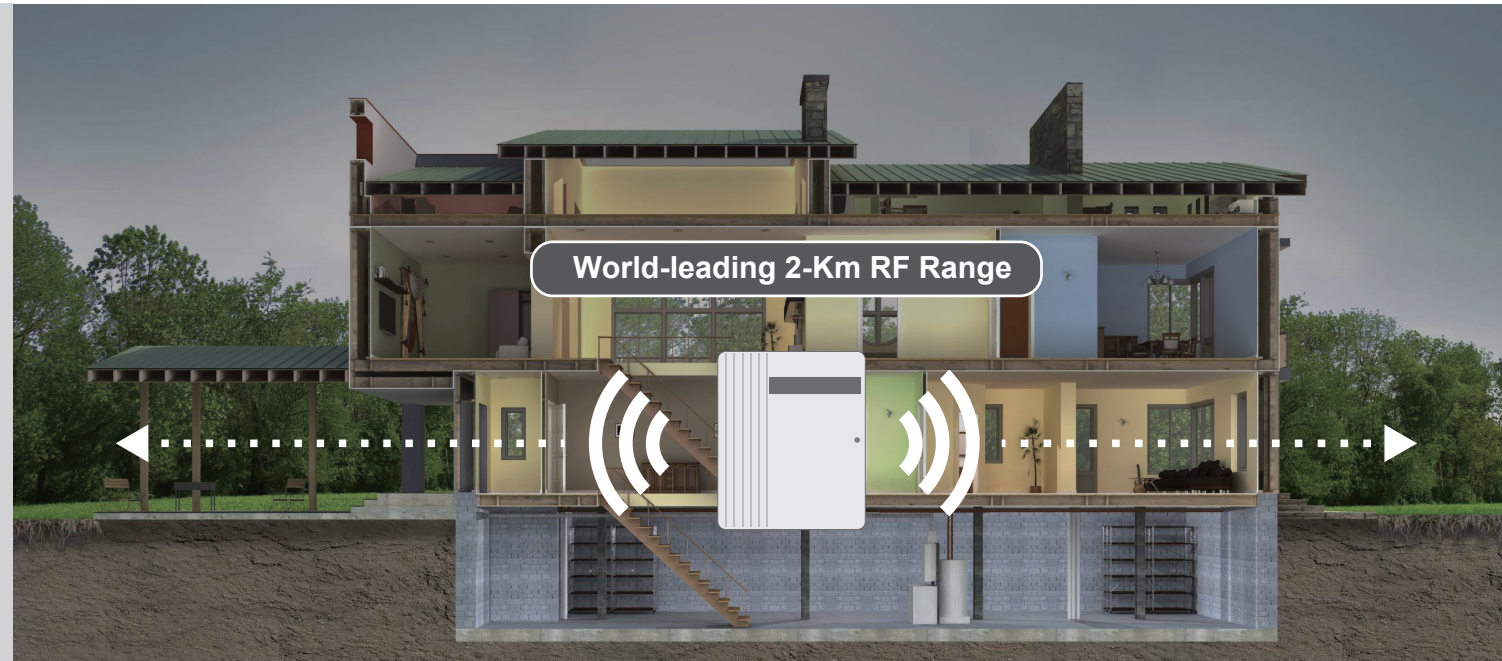
**EMD-1**  
Energy Meter



**POVS-1**  
PIR Occupancy/  
Vacancy Sensor

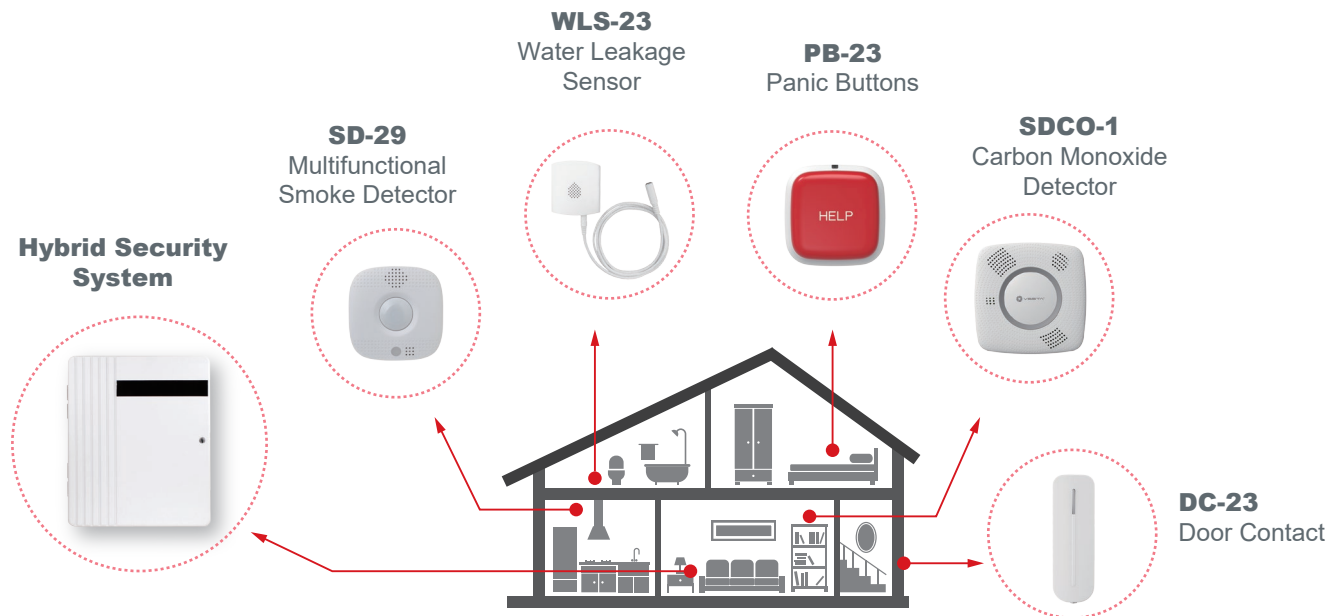
## World-leading 2-Km RF Range

Hybrid Security System utilizes Climax's groundbreaking Security@2km Wireless Technology that delivers RF communication range of 2 kilometers (1.5 miles), fast signal transmission, and relentless reliability. A major breakthrough in Climax's RF wireless technology has both massively extended the F1 systems' communication range and bolstered the systems' reliability. An optimum combination of record-breaking RF range, relentless reliability, and remarkable battery lifetime, the F1-generation systems are ingeniously designed to revolutionize the way you experience security.



## 24-Hour Emergency Monitoring

Hybrid Security System can incorporate smoke/heat detectors, water sensors, air quality sensors, panic buttons, light and humidity sensors to protect user's premises and property from damage cause by fire, heat, water, or air toxins. This round-the-clock monitoring ensures comprehensive prevention of disasters and quick response during emergencies.





**2020-03-26 15:47  
Motion Detector Alarm**

**VST-1818 R3  
IP Camera**

**VST-862  
Camera PIR  
Motion Detector**

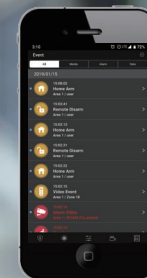
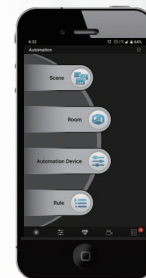
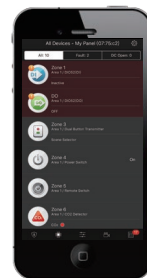
**VST-862EX  
Outdoor Camera  
PIR Motion Detector**

## Total Visual Monitoring Solution

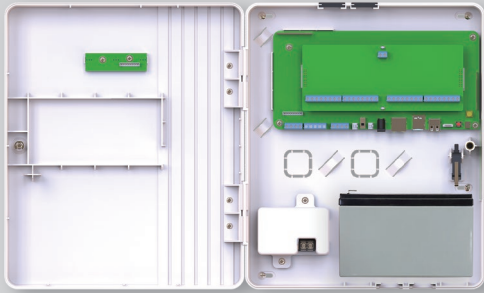
Indoor/outdoor PIR cameras, PIR video cameras, and IP cameras can be incorporated in Hybrid Security System for visual verification and real-time visual monitoring.

## Remote and Mobile Control

Hybrid Security System can be accessed anytime, anywhere, via Vesta Home 5 web portal or app. Vesta Home 5 enables users to control and manage the system via intuitive interface, as well as receive real-time event reports and view alarm videos/images. Users can have a clear overview of the whole system and have it totally in control all the time.

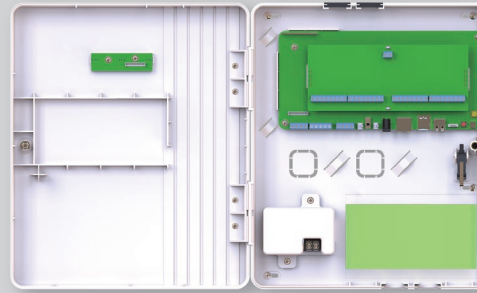


## Specification



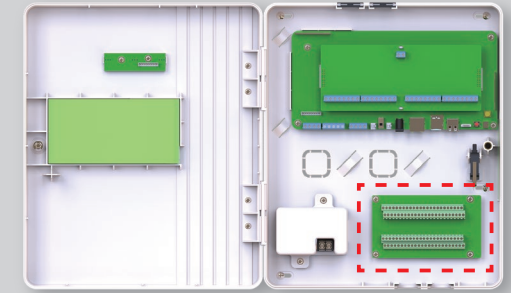
### Hybrid Panel-1-LA

Hybrid Security System with required battery type: Sealed Lead Acid battery (battery not included)



### Hybrid Panel-1(B)-NH

Hybrid Security System with required battery type: Ni-Mh battery. Hybrid Panel-1 does not include the battery; Hybrid Panel-1B is battery-included.



### Hybrid Panel-3(B)

Hybrid Security System with required battery type: Ni-Mh battery, and compatible with Zone expansion module. Hybrid Panel-3 does not include the battery; Hybrid Panel-3B is battery-included.

| Functions                              |   |
|--|---|
| Number of areas                        | 8   |
| Number of wired zones                  | 16 on-board zones   |
| Zone expansion module options          | 12 wired zone expansion module<br>24 wired zone expansion module<br>36 wired zone expansion module<br>48 wired zone expansion module  |
| Number of total wired & wireless zones | 40 per areas, 320 in total  |
| Number of wired keypads (KP-35-COMBO)  | 4 (via RS-485 connection)   |
| Number of users                        | 40 per areas, 320 in total  |
| Wired input                            | NO/NC<br>Single end-of-line (SEOL)<br>Double end-of-line (DEOL)<br>EOL resistance configuration (in ohms): 1K, 2.2K, 3.74K, 4.7K, 5.6K, 6.8K, 8.2K, 10K<br>(32 pieces of 5.6K resistors are included in shipment) |
| Ethernet interface                     | RJ-45 connection  |
| Tamper protection                      | Dual wall-mount & front cover tamper  |

| Electrical  |   |
|---|---|
| External AC/DC adaptor  | 12VDC/2A  |
| Power supply <sup>1</sup>   | (1) 16 ~ 18VAC @ 40VA<br>(2) 100-230VAC, 50/60 Hz<br>(3) 12VDC/2A   |
| Total current consumption of wired zones, auxiliary output, & KP-35-COMBO | 12V/400mA (max.)  |
| PGM output <sup>2</sup>   | 12V/400mA (max.)  |
| Bell output <sup>2</sup>  | 12V/400mA (max.)  |
| Backup battery <sup>3</sup>   | Backup battery options:<br>(1) 12V/7A Sealed Lead Acid Battery (can be expanded up to 2 pieces of batteries)<br>(2) 12V/4A Sealed Lead Acid Battery (can be expanded up to 2 pieces of batteries)<br>(3) 7.2V 4500mAh Ni-Mh rechargeable battery pack PTC resettable fuse included; operation current: 5.5A<br>(4) 7.2V 2300mAh Ni-Mh rechargeable battery pack PTC resettable fuse included; operation current: 2A |
| Battery duration <sup>4</sup>   | (1) 12V/7A SLA: 36 hours<br>(2) 12V/4A SLA: 21 hours<br>(3) 7.2V 4500mAh Ni-Mh: 33 hours<br>(4) 7.2V 2300mAh Ni-Mh: 17 hours  |

**Note:**

1. Use only one of these three options at one time.

2. Bell output + PGM output = 400 mA max.

3. When purchasing the Ni-Mh battery from other supplier, only use the battery with corresponding 5.5A/2A PTC resettable fuse included for safety.

4. The battery duration is calculated under the condition that each hardwired zone consumes 2mA. Actual battery life may vary with product settings, operating environment, and usage patterns.

| Wireless              |  |
|-----------------------|--|
| LTE Frequency         | EU: B1 (2100 MHz) / B3 (1800 MHz) / B5 (850 MHz) / B7 (2600 MHz) / B8 (900 MHz) / B20 (800 MHz)<br>US: B2 (1900 MHz) / B4 (1700MHz) / B12 (700MHz) |
| 3G Frequency          | EU: B1 (2100 MHz) / B5 (850 MHz) / B8 (900 MHz)<br>US: B2 (1900 MHz) / B4 (1700MHz) / B5 (850 MHz)   |
| RF Frequency          | F1 868 MHz / F1 433 MHz  |
| ZigBee Protocol       | ZigBee Pro HA 1.2, 2.4GHz  |
| Z-Wave Protocol       | Z-Wave 500 series module 868.40MHz (EU) / 908.40MHz (US)   |
| Wi-Fi                 | 802.11 b/g/n, 2.4GHz   |
| DECT Module           | Reserved   |
| Physical Properties   |  |
| Operating temperature | -10°C to 45°C (14°F to 113°F)  |
| Operating humidity    | Up to 85% non-condensing   |
| Dimensions            | 268 mm x 320 mm x 80 mm  |

## Ordering Information

|                                 |   |
|---------------------------------|---|
| <b>Hybrid Panel-1-LA</b>        | Hybrid Security System with required battery type: Sealed Lead Acid battery (battery not included)  |
| <b>Hybrid Panel-1-NH</b>        | Hybrid Security System with required battery type: Ni-Mh battery (battery not included)   |
| <b>Hybrid Panel-1B-NH-23/45</b> | Hybrid Security System with required battery type: 2300 mAh / 4500 mAh Ni-Mh battery (battery included)   |
| <b>Hybrid Panel-3</b>           | Hybrid Security System with required battery type: Ni-Mh battery, and compatible with Zone expansion module (battery not included)                |
| <b>Hybrid Panel-3B-23/45</b>    | Hybrid Security System with required battery type: 2300 mAh / 4500 mAh Ni-Mh battery and compatible with Zone expansion module (battery included) |
| <b>WEZ-12</b>                   | 12 wired zone expansion module  |
| <b>WEZ-24</b>                   | 24 wired zone expansion module  |
| <b>WEZ-36</b>                   | 36 wired zone expansion module  |
| <b>WEZ-48</b>                   | 48 wired zone expansion module  |