



# Electronic Security Guard Panel

## Hybrid Alarm Panel

RT-ESG-G-G1



Wired and Wireless Zone



Wired and Wireless Controller



Wireless sensor 5 to 10 years long battery life



2 Way Communication



Call/SMS/CMS alerts



Inbuilt 4G Modem for voices & data



Mobile app for monitoring and configuration



Automatic ARM/DISARM Function

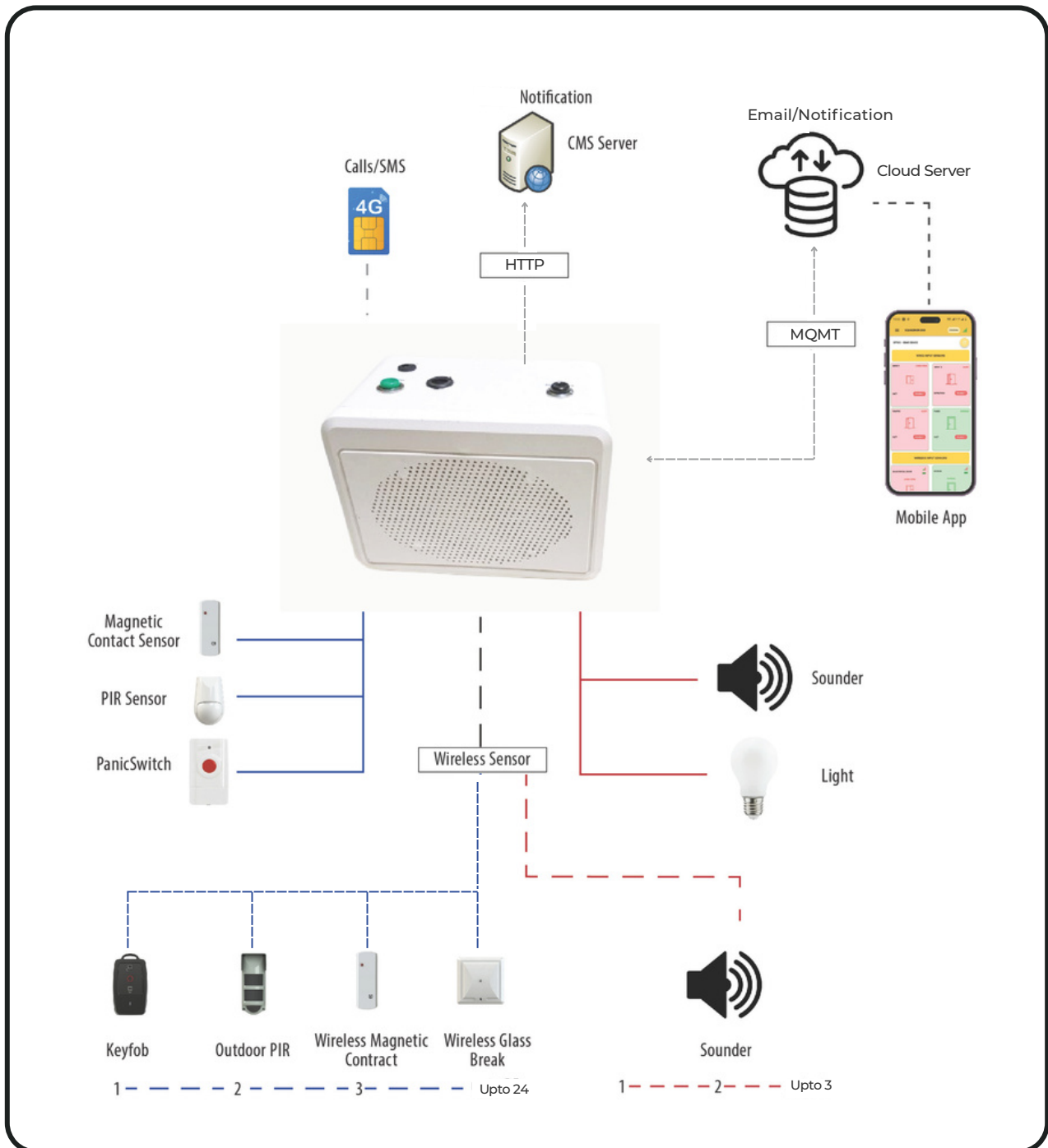
The Electronic Security Guard (ESG) is a state-of-the-art security device designed to provide unparalleled safety and seamless management for your premises. Engineered with an integrated 4G modem, the ESG ensures constant connectivity, enabling real-time SMS alerts, voice calls, and notifications to a centralized command center for 24/7 monitoring and swift response.

This advanced device offers a user-friendly interface that integrates with your smartphone, allowing you to manage security settings, monitor activity, and receive instant alerts from anywhere.

## Applications

- Homes
- Villas
- Retail shops
- Small banks
- Jewelry stores

## System Diagram



## Product Specification

|                         |                                                                                                                                                                                                             |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wired Zone              | <ul style="list-style-type: none"> <li>3 digital input zone with inbuilt 1 panic zone</li> </ul>                                                                                                            |
| Wired controls          | <ul style="list-style-type: none"> <li>1 no's of Potential Relay output 230VAC,2A.</li> <li>1 no's of Potential Relay output 230 VAC,5A</li> </ul>                                                          |
| Wireless Zone           | <ul style="list-style-type: none"> <li>24 no's of Input wireless zone.</li> <li>Operating Frequency 433 Mhz.</li> <li>Battery life-3 to 5 yrs</li> <li>Range upto 100 meters without obstruction</li> </ul> |
| Wireless Control        | <ul style="list-style-type: none"> <li>3 no's of output control's .</li> <li>Operating Frequency 433 Mhz</li> <li>Battery Life- 1 to 3 yrs</li> <li>Range upto 1000 meters without Obstruction</li> </ul>   |
| 2way Audio              | <ul style="list-style-type: none"> <li>6 Watts Speakers</li> <li>Inbuilt MIC range , Sensitivity upto 4 meters</li> </ul>                                                                                   |
| Communications          | <ul style="list-style-type: none"> <li>Modem : Quectel 4G Module Support 2G,</li> <li>4GSim Card : Micro Sim Card Slot</li> <li>Ethernet : 10/100 Mbps-RJ45 Connector</li> </ul>                            |
| LED Indications         | <ul style="list-style-type: none"> <li>ARM/Disarm, Power, SIM status</li> </ul>                                                                                                                             |
| RTC                     | <ul style="list-style-type: none"> <li>Inbuilt Real Time Clock</li> </ul>                                                                                                                                   |
| Inbuilt Button Switches | <ul style="list-style-type: none"> <li>ARM/Disarm Button</li> <li>Panic Button</li> </ul>                                                                                                                   |
| Power Supply rating     | <ul style="list-style-type: none"> <li>Operating voltage – 10 to 12VDC, 2A</li> <li>DC Female Jack-2.1mm connector type</li> </ul>                                                                          |
| Power Supply            | <ul style="list-style-type: none"> <li>External adaptor 230VAC Input,</li> <li>Output 12VDC, 3A</li> </ul>                                                                                                  |
| Operating Condition     | <ul style="list-style-type: none"> <li>Temperature : 10 to 60°C</li> <li>Humidity : 20 to 95%</li> </ul>                                                                                                    |
| Mechanical              | <ul style="list-style-type: none"> <li>Materials : ABS Plastic</li> <li>Size : W130xH115xD188 (mm)</li> <li>Weight : 470 gram</li> </ul>                                                                    |

## Functional Specification

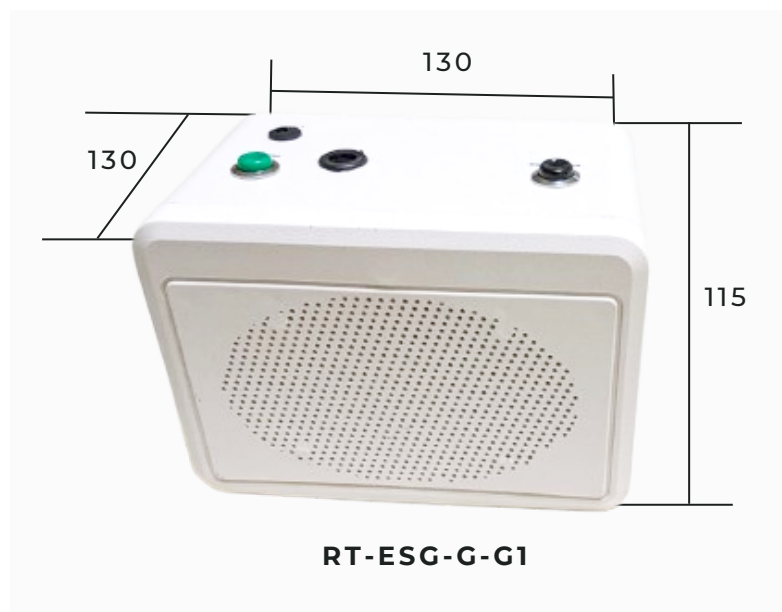
|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input Zones                 | <ul style="list-style-type: none"> <li>• Sensors Type Selection –NC/NO</li> <li>• Function Type-Intrusion - Arm/Disarm</li> <li>• Function Type - 24/7- For all Time Events like Panic</li> <li>• Configuration of Long Open alert time, Debounce Time</li> <li>• Wireless devices-Tamper ,Battery, Signal status</li> <li>• Automation based- Wired output control</li> <li>• 4 no's of Schedule based Alarm/Automation.</li> <li>• Types of Action selection SMS/Call/CMS/Sounder</li> <li>• Enable/Disable</li> <li>• Binding/Unbinding wireless devices</li> </ul> |
| Output Control              | <ul style="list-style-type: none"> <li>• Sounder/Other type selection</li> <li>• Others- Link with Input based Automation</li> <li>• Automation type- Pulse/Permanent/Status</li> <li>• 5 nos of different schedule function</li> <li>• Wireless devices-Tamper ,Battery, Signal status</li> <li>• Sounder Test and Acknowledge function</li> <li>• Enable/Disable</li> <li>• Binding/Unbinding wireless devices</li> </ul>                                                                                                                                            |
| User Management             | <ul style="list-style-type: none"> <li>• Admin - View and Configuration</li> <li>• User - View</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Call/SMS Management         | <ul style="list-style-type: none"> <li>• 10 no's of user number added</li> <li>• Alert based - User selection</li> <li>• Number based - SMS/Call Selection</li> <li>• 2way Communication Established for Panic alert selection numbers</li> <li>• Normal 2way communication from Registered mobile numbers only at any time</li> </ul>                                                                                                                                                                                                                                 |
| ARM/Disarm Functions        | <ul style="list-style-type: none"> <li>• Switch based/MobileApp Selection</li> <li>• Timer Based- Auto Arm /Disarm daily based</li> <li>• Holiday Weekly Days selection Template for 2 no's to keep Arm Function</li> </ul>                                                                                                                                                                                                                                                                                                                                            |
| Central Monitoring Software | <ul style="list-style-type: none"> <li>• Sensors Based - Alerts send to CMS Server IP</li> <li>• Hooter Acknowledge function</li> <li>• Actions Taken- As per Escalation Matrix</li> <li>• Standard SIA code configuration options</li> <li>• CMS server IP configuration</li> </ul>                                                                                                                                                                                                                                                                                   |

|                        |                                                                                                                                                                                                                                                                                          |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mobile App             | <ul style="list-style-type: none"> <li>• Status of Zones, Controls</li> <li>• Output Controls</li> <li>• All parameters Settings</li> <li>• ARM/Disarm Functions</li> <li>• Reports View</li> <li>• Location - Based devices can be added to view and manage multiple devices</li> </ul> |
| Communication Protocol | <ul style="list-style-type: none"> <li>• MQTT, HTTP</li> </ul>                                                                                                                                                                                                                           |
| Reports                | <ul style="list-style-type: none"> <li>• Events Reports</li> <li>• Alert Reports</li> </ul>                                                                                                                                                                                              |

## Product Selection

| MODEL       | COMMUNICATION | DESCRIPTION                     | DIMENSIONS (W*H*D)mm |
|-------------|---------------|---------------------------------|----------------------|
| RT-ESG-G-G1 | GPRS          | Electronic Security Guard Panel | W130xH115xD188       |

## Product Dimensions



## Calibration

This product is factory calibrated, No Field calibration is necessary for the life of this product.

## Certification

CE certified, RoHS compliant, ISO 9001:2015

## Warranty

1 Year warranty

**Note:** Please refer our product catalogue for other models selection.

## Revision History

| REV NO. | DATE     | NO. OF PAGES | PREPARED BY | REVIEWED BY | APPROVED BY |
|---------|----------|--------------|-------------|-------------|-------------|
| 1       | 14-08-25 | 06           | RK          | CT          | AX          |

**Disclaimer:** The specifications and information provided in this datasheet are subject to change without prior notice. The manufacturer reserves the right to modify product features, design, and performance parameters at any time. Please verify the latest specifications before making purchasing or design decisions.