



## SMART GUARD - SECURITY AND SMART HOME - NEXT GENERATION TECHNOLOGY



### NEW GENERATION OF INTELLIGENT SECURITY ALARM SYSTEM

**GPS Systems Bulgaria** have created a technologically advanced alarm system of new generation. **SMART GUARD (SG)** combines the latest innovations in the security and communications fields to provide a number of hi-tech solutions for securing different objects such as homes, offices, warehouses, factories and other commercial and industrial buildings. The system is unique by itself as it goes beyond the conventional means of security by introducing different aspects by integrating a security and an intelligent system for managing and controlling various electrical appliances through mobile devices. We offer reliable security and a smart home with innovative control and security technology, with the ability to be controlled by various mobile devices.

**SG** is integrated in the **CLOUD SMART GUARD (CloudSG)** system, which provides an absolute security and a high technological level. It allows monitoring, control, management and notification of events for the user from the entire alarm system in real time. In addition, **SG** has an integrated support for communication with the monitoring center and the cloud system. Extremely reliable and highly secure, it enables users to remotely control a variety of external systems and devices with a wide range of functionality without being worried by cyberattacks or unauthorized external access.

The System can be programmed and maintained on site via a keyboard and/or computer. It has a unique feature for automatically updating the software of the entire system - panel, keyboards, sensors, RFID readers and expanders.

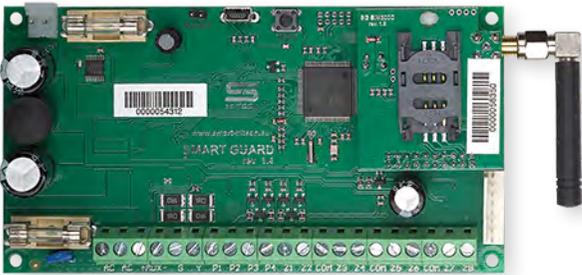


## SMART GUARD - SECURITY AND SMART HOME

### BASIC SYSTEM FUNCTIONALITY:

- Up to 8 partitions, 500 users, 135 logical zones;
- Up to 6 expanders;
- Up to 48 outputs (PGM);
- Up to 8 keypads;
- Up to 32 RFID readers;
- Built-in two-way communication with control centre for monitoring, programming or updating all system components;
  - Built-in integration with **CloudSG** – WEB and mobile application, allowing the user to real-time monitor, control, support and receive alerts for events within the whole system;
  - GSM communicator, supporting full functionality of the **SMART DIALER**. Allows the system to send notifications and alerts to specified numbers when specific events occur.

### SG PANEL



#### Description:

**Smart Guard Panel** has the ability to record and store every single event – up to 2000 events, with exact date and time of occurrence. By using simultaneously GSM, Wi-Fi and LAN communication, the data is transmitted to the monitoring, technical center and/or **CloudSG**. This increases the dependability of the system and guarantees that all events would be sent without data being manipulated or deleted. The system can be easily programmed both on site, through the keypad and/or PC, and remotely. All components from the system, including panel, keypads, proximity reader and expanders can be automatically and remotely configured. A new smart innovation called AUTO ARM was implemented. This feature allows the automatic arming of the system in accordance to a predefined schedule or period of inactivity. A further implementation – **Smart Door Control**,

allows the system to control electromagnetic locks, without the need of additional power modules.

#### System Functionality:

- 8 wired input split into 16 logical zones;
- Ability to choose between 9 types of zone connection schemes;
  - 4 PGM outputs, independently programmable in different operational modes;
  - 8 completely independent partitions;
  - Access control with proximity reader;
  - 9 connection schemes for zone setup;
  - Ability to view history through the keypad, PC and CloudSG;
    - **SMART** control and diagnostics showing the status of “AUX” bus power supply. Built-in protection against short circuit and automatic recovery. Full data feed showing current power consumption of peripheral devices.
      - **SMART** diagnostics of the lead-acid battery - information regarding capacity, load, charge, discharge and others.
      - **SMART** control and diagnostics showing the status of “AUX” bus power supply. Built-in protection against short circuit and automatic recovery. Full data feed showing current power consumption of peripheral devices.
        - **SG PIR** support.



## SMART GUARD - SECURITY AND SMART HOME

### Technical Parameters:

Power Supply	18VAC $\pm$ 10%, fuse 2A
Backup Power Supply	12V lead-acid battery
System output (AUX)	13,8 VDC/1,6A
System bus	RS485
Operation temperature	from - 10°C to +50°C
Dimensions	140mm x 74mm x 15mm

### SG KEYPAD



### Description:

**Smart Guard Keypad** has a stylish and elegant design, perfectly fitted for every home, office, store or other production or commercial sites. The keypad includes a two-line screen and built-in LED backlight.

### Technical Parameters:

Power Supply	9 ÷ 18VDC
Power Consumption	20mA ÷ 80mA
Button type	Capacitive
Lighting	Built-in LED lighting with ability to change the intensity
Zones	1 zone (logical)
PGM	1 PGM, 2A max
Built-in RFID reader	Yes, works on 125 kHz
Built-in tamper	Yes
Operational Temperature	from -10°C to+50°C
Dimensions	158 mm x 117 mm x 23 mm

### System Functionality:

- 1 wired input split into 2 logical zones
- 1 PGM output - supports **Smart Door**

### Control (SDC)

- Built-in proximity reader for 125 kHz tags
- Touch-sensitive keypad with predefined buttons for basic operations
- Built-in buzzer for audible alarm with adjustable volume levels
- Built-in tamper for additional security
- Quick buttons for turning on / off all security modes
- Displayed quick buttons for memory review and technical issues
- Programming system parameters

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## SMART GUARD - SECURITY AND SMART HOME

### SMART GUARD RFID



#### Description:

**SG RFID** built-in 125 kHz proximity reader, used for access control with 1 input (2 logical zones) and 1 output (PGM). Supports **Smart Door Control**.

#### System Functionality:

- Controls one selected partition
- LED indication for recognised or rejected card;
- LED indication for current ARM/DISARM state
- LED indication for SYSTEM BUS state;
- Built-in buzzer for audible alarm with adjustable volume levels;
- Built-in tamper for additional security.

### SG EXPANDER



#### Description:

**SMART GUARD EXPANDER** adds 8 additional zones and two PGM to **SMART GUARD**

alarm panels. Added zones and PGM are freely programmable from the control panel. Can be installed in the box next to the main panel.

#### System Functionality:

- Direct connection to the SYSTEM BUS;
- 8 wired inputs, extended to 16 logical zones;
- 9 connection schemes for zone setup;
- 2 PGM outputs, independently programmable to work in different modes.

#### Technical Parameters:

Power Supply	9 ÷ 18VDC
Power Consumption	1.5mA ÷ 60mA
Zones	8 zones (16 logical)
PGM	2 PGM, 2A max
Operational Temperature	from -10°C to +50°C
Dimensions	102mm x 50mm x 10 mm



## SMART GUARD - SECURITY AND SMART HOME

### SMART GUARD GSM MODULE



#### Description:

**Smart Guard GSM Module** is part of the newest generation communication modules intended to connect **SMART GUARD** alarm system panels to

all types of clouds, enabling remote software updates for the whole system. Thanks to the unique function "HOT PLUG", the device is installed quickly and easily. The **GSM Module** operates with all mobile network providers without limitations.

#### System Functionality:

- Operates with standard SIM card
- GPRS data rate: 85.6kbps(download/upload)

### SMART GUARD PIR



#### Description:

**Smart Guard PIR** is designed for securing different sites such as homes, offices, warehouses and other commercial and industrial buildings. The detector supports advanced built-in temperature compensation and protection against white light. One of the biggest advantages of the **SG PIR** is the ability to support two-way bus communication with the control panel. This one of a kind innovation al-

lows not only for on-site setup, but also for remote configuration which saves time, money and effort. **SG PIR** is compatible with all alarm systems as a conventional detector

#### System Functionality:

- **SG PIR** is installed using conventional wiring but operates as an addressable and remotely programmable detector and communicates through **SG power bus**
- All installed and connected **SG PIR** detectors can be individually recognised via the assigned zone
- Provides pet immunity to eliminate false alarms caused by pets or small animals and robot vacuum cleaners.
- Built-in tamper for additional security.

#### Technical Parameters:

Power Supply	9 ÷ 18VDC
Power Consumption	8÷14 mA
Work range	1.5m ÷ 15m
Coverage angle	90°;
Protection against white (daylight)	Yes
Protection against radio and electrostatic disturbances	Yes
Installation height	1.5m - 3.6 m (2.1 m recommended )
Operational Temperature	from -20°C to +50°C
Dimensions	95 mm x 56 mm x 44 mm
Weight	~75 g

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## SMART GUARD - SECURITY AND SMART HOME - NEXT GENERATION TECHNOLOGY

### SMART HOME



**SMART GUARD** is a next generation alarm system, combining reliable security and “**SMART HOME**” automation, allowing the user to easily control different electric and electronic appliances and other external systems through different mobile devices. **SMART GUARD** has the ability to ARM

according to previously set timebased schedules. Implemented **Smart Door Control** for further automation of electromagnetic locks, without additional power supply modules, reducing time and costs. This makes the **SG** one of the most innovative, dependable and secure alarm systems on the market!

### CLOUD PLATFORM



**SMART GUARD** is easily manageable through all mobile platforms. For complete and reliable event monitoring, the system supports simultaneous communication through GSM, Wi-Fi and LAN networks. The built-in GSM communicator has the full functionality

of the **SMART DIALER** with the ability to alert and notify about events via call and SMS to or from specified numbers. The module further provides the option to view event and alarm history from the keypad, PC, **CLOUD SMART GUARD** and other platforms and devices.

### DATA ENCRYPTION



**SMART GUARD** has a built-in algorithm for additional high level code protection, ensuring communication encryption for remote access. In the event of an attempt to breach the system, we've engineered a highly intelligent software with automatic coun-

teractive measures. By implementing two-way encryption and removing the option to delete events, the system guarantees advanced data security and integrity. It is impossible to manipulate or delete information, without it being sent to the monitoring centre.

### REMOTE SUPPORT



**SMART GUARD** is a one of a kind system, supporting automatic and remote software updates over different devices such as the panel, keypads, proximity readers, expanders and others. In the event of connection loss, the software updates can resume from their last point of progress resulting in saving

data and avoiding dangerous loops. Other than on site, through the keypads or/and PC, it is possible to remotely support and program the system and its components. The innovative **SG PIR** sensor allows the supporting teams to remotely view its current state, troubleshoot and modify the settings.

produced by

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