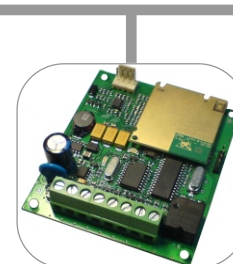
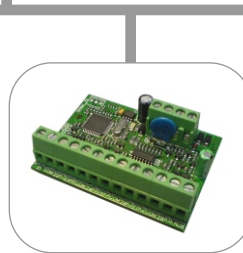
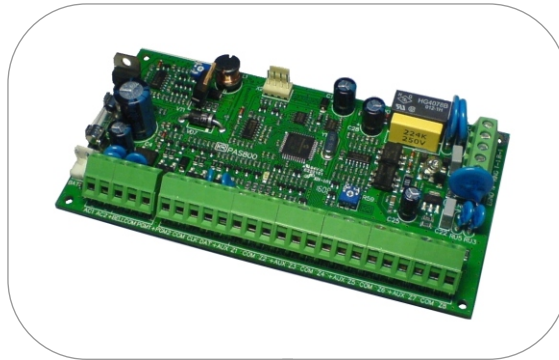


# Modular Intruder Alarm System **MAS-800**



## What's New in MAS-800 system?

- User menu personalization feature
- Easy accessible 5 Memo records on LCD
- 3 selectable languages in keypad
- Integrated USB interface
- 4 temperature zones in KM20T keypad
- +AUX voltage test on most modules
- User remote identification feature with RID820 module on system
- PIN protected remote control by phone with GSW2 on system
- 15 step MACRO commands for remote control with RCM800 on system

## Personal Menu



Personal menu is a set of shortcut keys called F-keys.

Using these F-keys the alarm system can be controlled easy and quickly.

For each F-key can be assigned commonly-used menu entry with user friendly key name.

F-keys in national language can be easy created and uploaded from PC



## MEMO

Memo is a keypad feature to give the user an important information about system service or usage. It's possible to store up to 5 text records with easy later access. For example service man phone number, installation company e-mail, manufacturer name, web site and so on.

## Integrated USB interface



No direct connection to the control panel and no extra adapters are needed. Programming can be done by using USB connectivity of PC and KM20 keypad.

# Keypad with temperature sensor

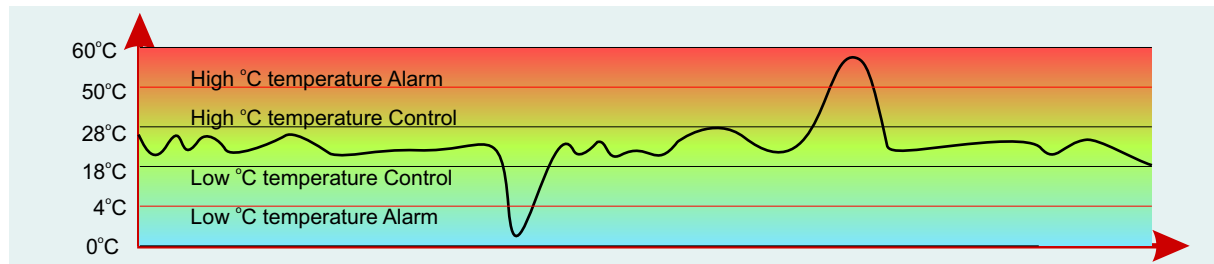
Keypad KM20T measures temperature of the surrounding and shows it on LCD.

Up to 4 temperature zones can be set in KM20T keypad.

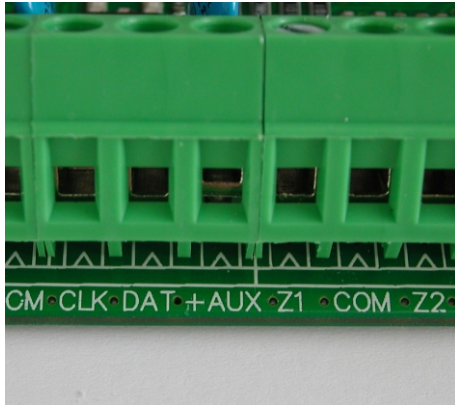
When the surrounding reach preset temperature value the zone is triggered and it can be used to control PGM or send alarm message.



**KM20T**



## +AUX voltage test



The maximum length of power supply lines depends on wires cross-section diameter, number of modules and detectors in the system. MAS-800 modules equipped with voltage test feature to detect voltage drop. +AUX voltage test shows on KM20 LCD the present voltage on modules pins

## User identification module



**RID820**

RID820 module gives higher level of security by swapping Entry delay time. When pre-programmed 2.4 GHz RFID card approach the RID820 module in approximate 3 m distance the 0 sec. entry delay time is swapped to preset value. RID820 reduce the installation cost of the system as there no need to hide control panel. It can be mounted near entry door.



## Remote Control by using cell phone

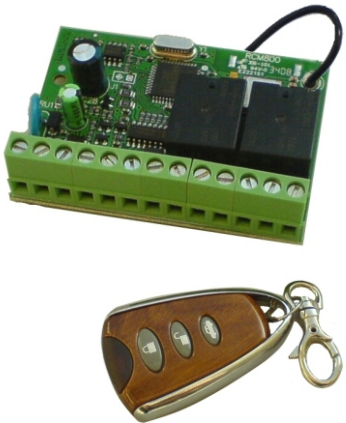


**GSW2**

GSW2 communicator emulates some KM20 actions on the system. This way it's possible to use cell or PSTN phone as virtual keypad by making call to GSW2, entering valid user PIN and typing procedure number. Allowed procedures are Arming, Disarming, Clear Alarm, Arming or Disarming by specified Areas.

## Useful MACRO commands

**RCM800**



With RCM800 module on the system 15 step MACRO commands can be used for remote control. Each command is activated by pressing pre-defined remote control buttons combination.

For example: the MACRO command can activate PGM output first (close garage door) later wait a “delay time” and after then arm 4 areas in 4 different arming modes.

# Control Panels



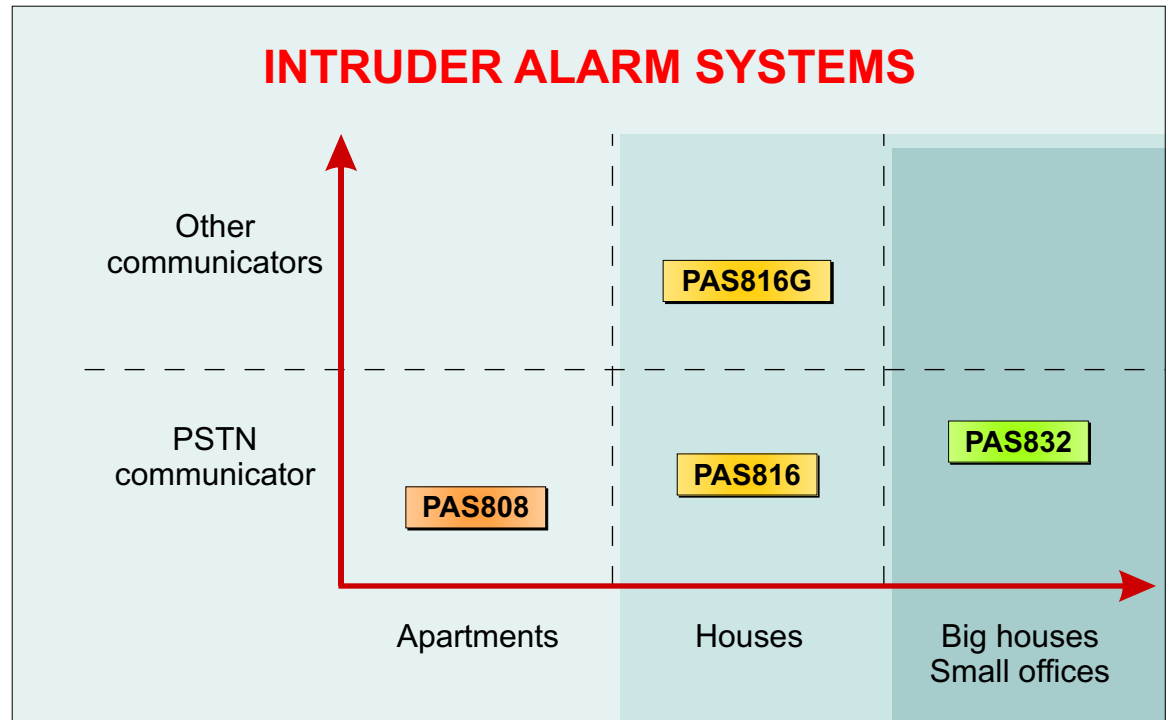
PAS808



PAS816, PAS832



PAS816G



# Control panel features

	PAS808	PAS816	PAS832	PAS816G
<b>Zones total (zones on PCB)</b>	8 (6)	16 (8)	32 (8)	16 (8)
<b>Programmable outputs total (outputs on PCB)</b>	8 (3)	8 (3)	16 (3)	8 (3)
<b>Users</b>	3 + 1	15 + 1	15 + 1	15 + 1
Users + service				
<b>Areas</b>			4	
<b>Timers</b>	4	8	16	8
<b>Modules</b>	7	7	15	7
<b>Reporting channels</b>	PSTN	PSTN	PSTN	SMS/GSM
<b>Reporting protocol</b>	Contact ID	Contact ID	Contact ID, SIA, Modem beeps	Contact ID, SIA, SMS
<b>Event Log</b>			1024	
<b>Main power supply (<math>\pm 10\%</math>)</b>			20 V AC 50 Hz	
<b>Power supply voltage</b>			13,8 V DC	
<b>Maximum permanent current load</b>			1 A	
<b>Maximum current load on programable outputs +BELL, +PGM2</b>			0,8 A	
<b>Maximum current load on open colector type output -PGM1</b>			50 mA	
<b>Reserve power supply</b>			Battery 12 V 7Ah/20HR	
<b>Security grade</b>			II	
<b>Environmental class</b>			II class	
<b>Operational temperature</b>			-10 °C... +50 °C	
<b>PCB size (l x w)</b>			144,8 x 76,2 mm	



**KM20, KM20T**

## **KM20, KM20T features**

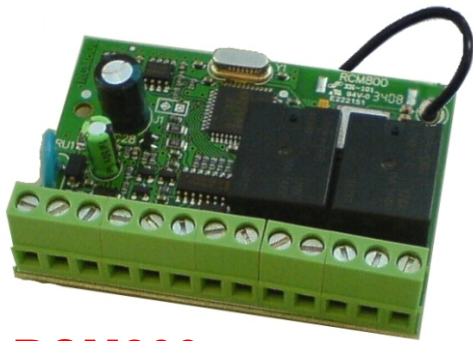
- 32 character alphanumeric LCD
- 2 in-built zones
- 4 temperature zones (KM20T only)
- 4 LED indicators: “Alarm”, “Armed”, “Trouble”, “Pre-alarm”
- In-built Buzzer
- Up to 32 F-Key combinations
- 3 menu languages
- 5 Memo records
- 3 quick call buttons combinations for emergency services
- In-built USB interface
- +AUX voltage test



**EXM800**

## EXM800 features

- 8 sockets
- Up to 8 sockets programmable as zones
- Up to 7 sockets programmable as OC type PGM
- PGM max current 50 mA
- Diagnostic and module's address on system LED
- +AUX voltage test



**RCM800**

## **RCM800 features**

- Integrated 434 MHz RF receiver
- Up to 255 code hopping remote controls
- Use of MACRO commands
- Remote control distance up to 100 meters
- Tamper input
- 2 OC type PGM outputs, 2 power relay PGM outputs
- +AUX voltage test



**RID820**

## **RID820 features**

- Integrated 2.4 GHz RF receiver
- Up to 20 RFID cards
- RFID card “Low battery” message to KM20
- Diagnostic and module's address on system LED





**GSW2**

## **GSW2 features**

- SMS/GSM/GPRS communicator
- Full Contac ID, SIA protocol (voice channel, PSTN receiver)
- ARMING, DISARMING, ALARM reporting (SMS for user)
- Contac ID reporting by GPRS (server must be installed)
- Alarm System control by phone
- Diagnostic and module's address on system LED
- Optional power relay PGM output (special order code)
- Optional microphone input (special order code)

# Enclosure

## Enclosure



- Robust metal enclosure
- Tamper protection
- Dimensions: 264 x 294 x 90 mm
- Transformer: 30 VA
  - primary voltage: 230 V AC, 50 Hz
  - secondary voltage: 20 V AC, 50 Hz
- 230 V circuit fuse: 250 mA
- Up to 5 modules can be installed
- Space for 12V 7Ah/20Hr battery
- White colour