INSTALLATION MANUAL

MyAlarm SEAL

GSM/GPRS datalogger with built-in I/Os, telecontrol functions and advanced programming language



CE

ISO 9001:2008

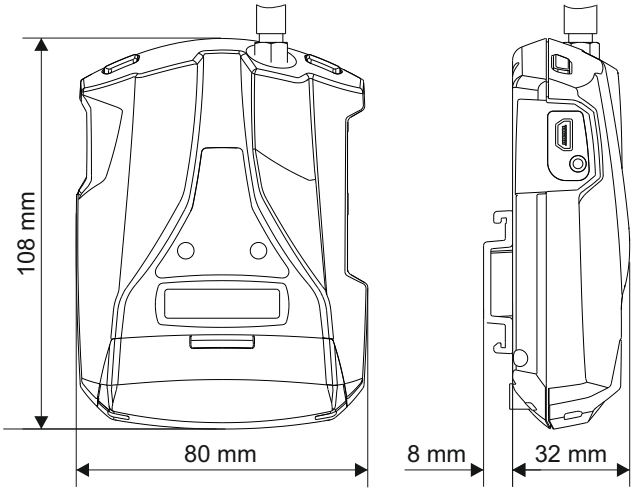
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For manuals and configuration soft ware, visit www.seneca.com/myalarm-seal

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MODULE LAYOUT

CASE DIMENSIONS



SYMBOL ON CONTAINER

	PWR Button
	GSM Antenna
	Scroll display button (SCR)
SIM	Slot for mini SIM
SD	Micro SD card slot
	Micro USB connector

Weight	150 g.	**Case**	Polycarbonate / ABS material.

LED SIGNALS ON THE FRONT PANEL

LED	STATUS	LED MEANING
GSM (Yellow)	Off	MyAlarm SEAL off
	Fast flash (64 ms ON / 800 ms OFF)	• Network search • No signal • SIM card with incorrect pin
	Slow flash (64 ms ON / 3000 ms OFF)	• Registration to the GSM network successful
	Medium flash (64ms ON / 300 ms OFF)	• Successful access to the Internet network • Correct APN • Registration to the GPRS network successful
PWR (Green)	On	MyAlarm SEAL on
	Off	MyAlarm SEAL off

PRELIMINARY WARNINGS

	Electrical and electronic waste disposal (applicable in the European Union and other countries with recycling programs). The symbol on the product or its packaging shows that the product must be disposed of at a collection centre authorised to recycle electrical and electronic waste.
	The full content of this manual must be read before operation. The device is to be exclusively used by qualified electricians.
	Damaged parts must be replaced by the manufacturer, who is also responsible for repairing the device. The product is sensitive to electrostatic discharges. Take appropriate measures during operation.
	The warranty shall become null and void in the event of improper use or tampering with the device or accessories supplied by the manufacturer as necessary for its correct operation, and if the instructions contained in this manual are not followed.

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TECHNICAL SPECIFICATIONS

POWER SUPPLY	
Voltage	6 – 15 V ⎓, 500 mA Max.
Absorption	3.5 W Max.
Internal battery (buffer)	Lithium Ion 3.7 V - 1000 mAh, rechargeable.
DIGITAL INPUTS	4 imput
Type	Reed, contacto, PNP, Pulscap
Maximum frequency	30 Hz
Threshold OFF	0 – 3 V ⎓, I < 1mA
Threshold ON	6 – 24 V ⎓, I > 3mA
ANALOGUE INPUTS	2 inputs
Type	Voltage 0 – 30 V ⎓ / Current 0 – 20 mA
Accuracy	0.1% on the full scale
VOLTAGE OUTPUT:	+12 V ⎓ 50 mA (maximum current)
TEMPERATURE SENSOR	NTC thermistor, internal, external (optional)
USB PORT	1 micro USB for configuration and power supply
DISPLAY	128 x 32 LCD Dots with visible area of 39 mm x 8.6 mm
CONNECTIONS	Spring clamps, 3.5 mm pitch, connector for Micro USB and SMA connector for GSM Antenna, MMCX for GPS (optional)
CPU	ARM 100 Mhz 32 bit
INTERNAL MEMORY	FLASH 1 MB (program) + 8 MB (log + data)
Micro SD slot *Type / Memory*	Push-Push per SD card e SD HC card / max 32GB
SIM slot *Type*	Push-Push for mini SIM (15 x 25 mm)
GSM	Quad band (850 / 900 / 1800 / 1900 MHz)
STANDARDS	**ETSI EN 301 489-7 - EN301 511 - EN301 489-1 - IEC / EN 60950**
ENVIRONMENTAL CONDITIONS	**Seneca recommends use at 0 to 45 ° C for correct operation.**
Temperature	With the power supply present: - 20 .. + 55 °C. With use of the battery (when discharged): -20 .. + 45 ° C. Charging is possible in the range: 0 .. +45°C.
Humidity	30% – 90%, non condensing.
Storage temperature	from -20 ° C to +20 ° C <1 year; from -20 ° C to +45 ° C <3 months; from -20 °C to +60 °C < 1
Protection rating	P20

GPS CARD SPECIFICATIONS (OPTIONAL)

RECEIVER	22 channels
SENSITIVITY	-165 dBm
FIX TIME	32 s usually
ACCURACY	up to 2.5 m

RELAY EXPANSION CARD SPECIFICATIONS (OPTIONAL)

DIGITAL OUTPUTS	2 outputs Relay 3 A max - 250V SPST (with shared terminal)

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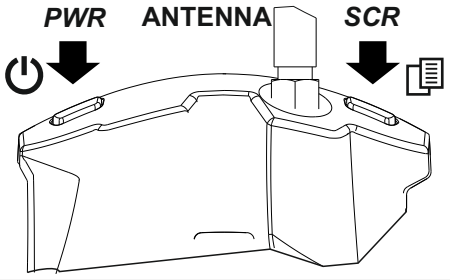
INITIAL POWERING ON OF THE DEVICE

MyAlarm SEAL is supplied in shipping mode. This mode allows you not to unnecessarily discharge the battery during transport and to prevent accidental switching on. **In order to exit this mode, simply supply power to the device via USB cable or power supply cable.**

N.B.: During the shipping mode the power button is deactivated.

• ON/OFF BUTTON AND SCROLL DISPLAY BUTTON

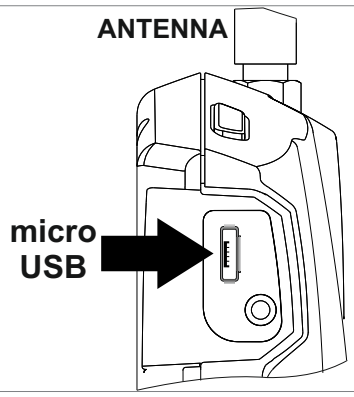
MyAlarm SEAL is equipped with a PWR button located on the top left side (front panel view). Pressing this button turns the module on and off. To switch it off, hold the PWR key down for a few seconds.
MyAlarm SEAL is also equipped with a SCR button, located on the top right side (front panel view). Pressing this key displays the parameters.



• MICRO USB PORT AND POWER SUPPLY

The device has a micro USB connector on the left side of its enclosure, which can be used for configuration, firmware updates and to recharge the internal battery.
To recharge the internal battery, use:
- the power cord with cigarette lighter socket, equipped with a fuse connecting the cables to the + and- (GND) terminals.
- a PC via the micro USB port with a standard cable.

Power supply through the USB jack is not suitable for fixed installations, or configurations where relays and/or digital inputs are used.



• AUTO SHUTOFF

If the display indicates "**LOW BAT**", it means that the internal battery is almost empty: after 60 seconds from this indication, the device switches off automatically. To restore the battery charge to an appropriate value, power the device using one of the recommended modes.

INSERTING THE SIM CARD AND SD CARD

• INSERTING THE SIM CARD

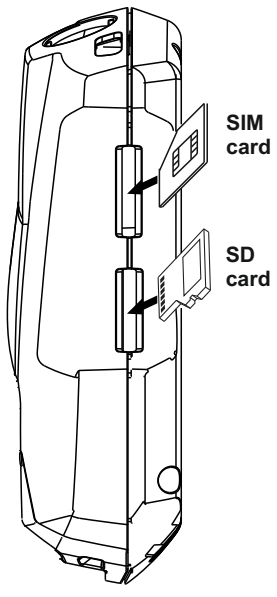
MyAlarm SEAL has an entry for mini SIM located in the right side of the enclosure. To insert the card in its corresponding slot, make sure the metal contacts are facing right (as seen in the figure).

• INSERTING THE MICRO SD CARD

MyAlarm SEAL is equipped with an SD card input that can be used to update the device's firmware and update the information and connection parameters with the world's best known telephony operators.

Note: DO NOT REMOVE THE CONTENT OF THE SD CARD PROVIDED. THIS MAY RESULT IN FAILED DATA CONNECTION WITH THE MyAlarm SEAL SERVICE.

The input for micro SD card is located on the right side of the enclosure.
To insert the SD card in its corresponding slot, make sure the metal contacts are facing right (as seen in the figure).



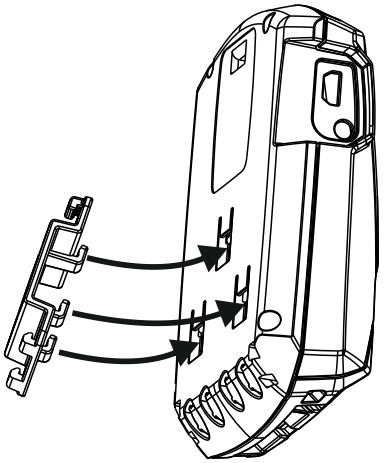
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INSTALLATION RULES

The device can be installed on a wall or on a DIN rail EN 60715, in vertical position.
Never place this device inside metal cabinets or near heat sources.

INSTALLATION ON IEC EN 60715 DIN RAIL AND WALL FIXING

Insertion on DIN rail:
1) Insert the three hooks of support for DIN rail into the three holes in the rear side of the MyALARM2-3 and fix the device to the support.
2) Hook support and device to the CEI EN 60715 DIN rail.
Wall mounting:
1) The two holes on the support for DIN rail allows to fix it to the wall with included plugs and screws.
2) Fix the device on the support to the wall by the three holes in the rear side of the case.

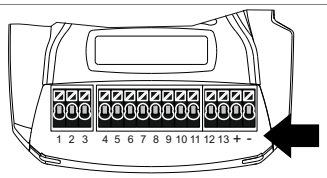


ASSEMBLY STANDARDS

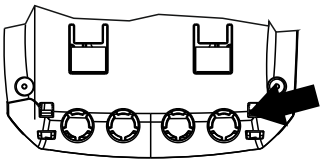
For optimum reception of the GPS signal from satellites, it is best to place the MyAlarm SEAL in an area not covered by metal structures. If this is not possible, an optional external antenna with 3m cable (code AGPS) is available. Follow the procedure supplied with the package for the installation of the external antenna.

SAFETY INFORMATION

MyAlarm SEAL has a terminal block inside its enclosure.
To access the internal terminal block of the device, unscrew the screw at the centre of the black cover positioned at the bottom of the enclosure and lift up.
In the side figure, the cover has been removed.



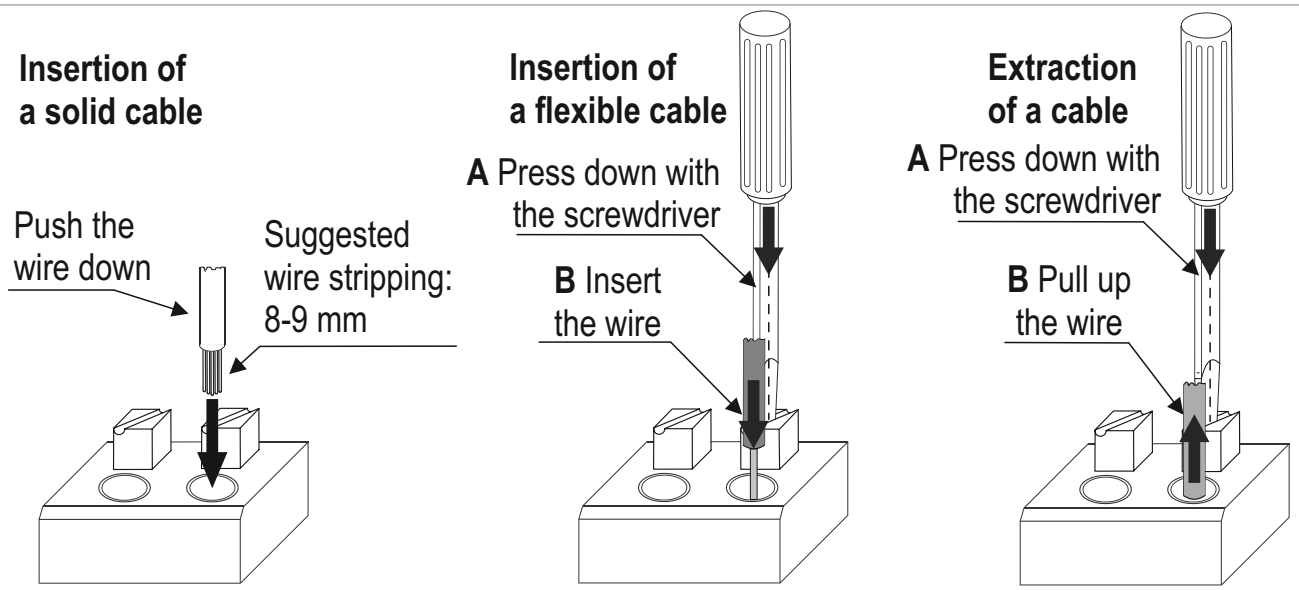
IMPORTANT: With the relay card, mobile wirin g of cables connected to terminals is not permitted. To make the cables from the terminals safe, use the break-out passages in the back of the enclosure. When the wiring is complete, fasten the protective cover on the device with the screw to prevent any accidental contact.



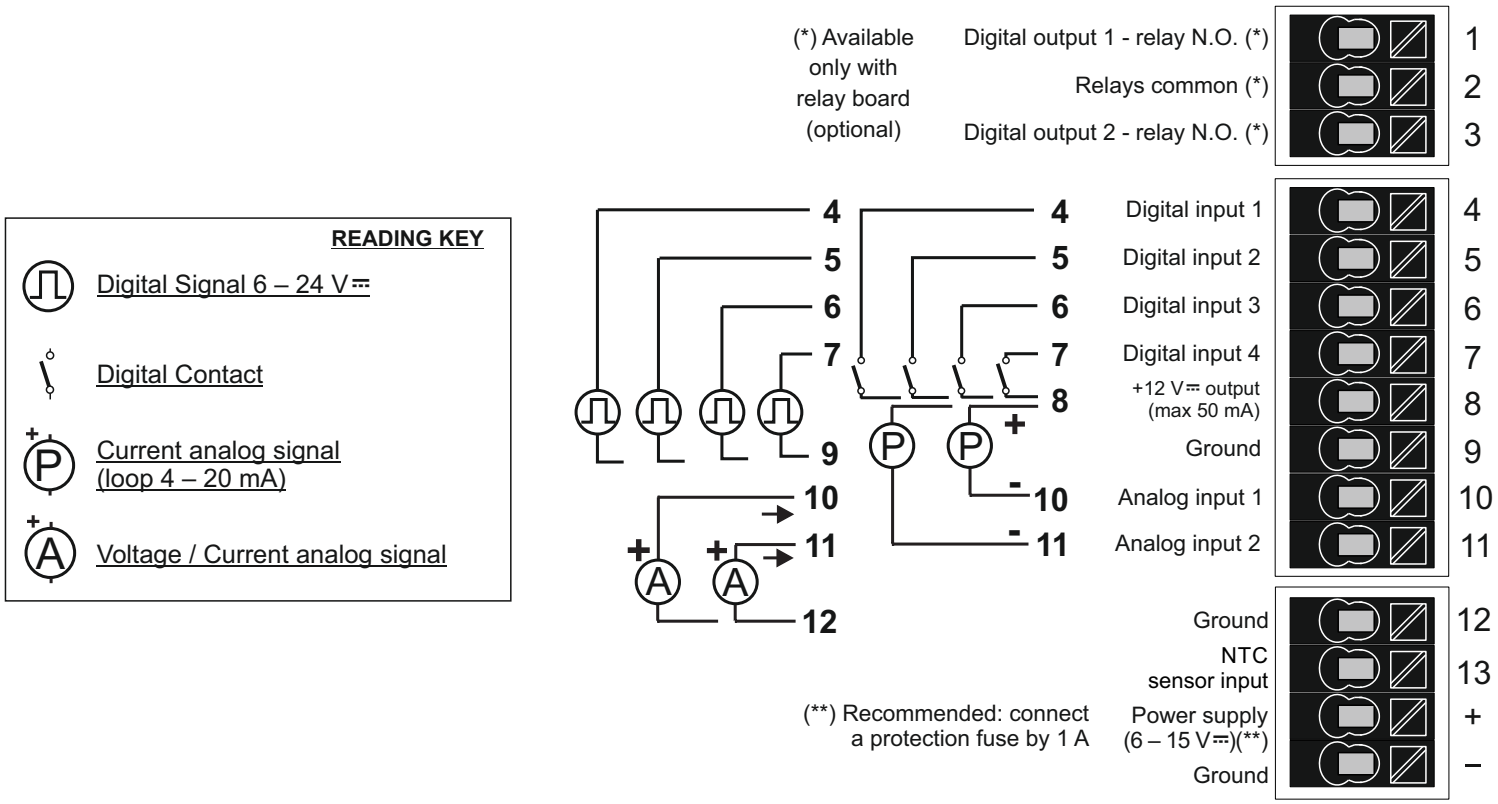
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ELECTRICAL CONNECTIONS

INSERTION AND REMOVAL FROM THE TERMINALS WITH PUSH-WIRE CONNECTION



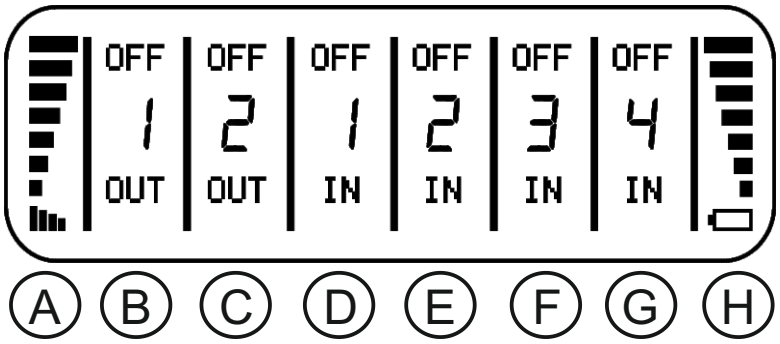
PUSH-WIRE TERMINALS



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FUNCTIONS AND USE OF THE DISPLAY

The main MyAarm SEAL display page provides the following information:



A - GSM signal level
B = Output 1 status
C = Output 2 status
D = Digital input 1 status
E = Digital input 2 status
F = Digital input 3 status
G = Digital input 4 status
H = Battery charge level

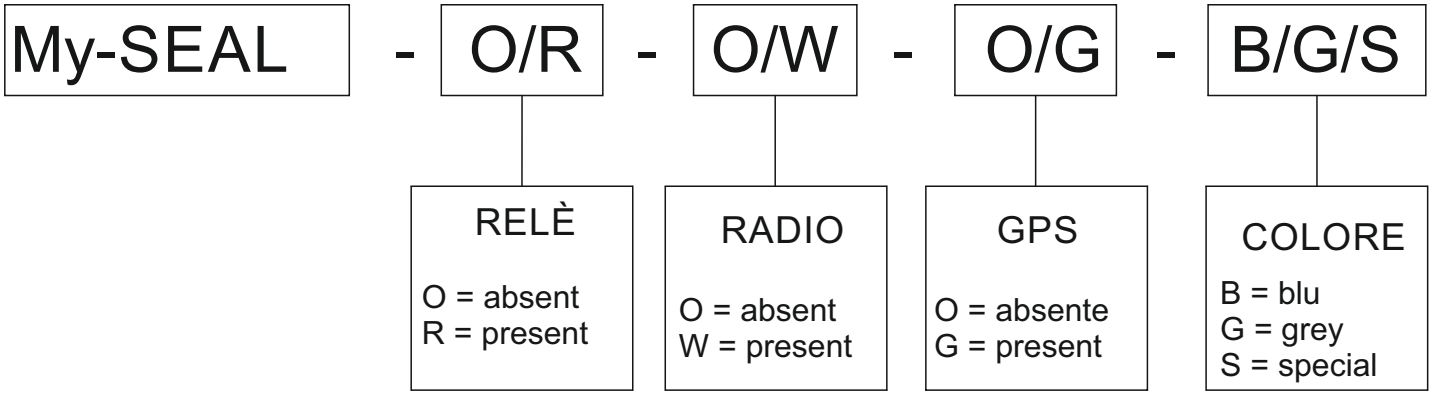
To change the displayed page, press the SCR key. The key is illustrated in the initial powering paragraf.
Press and hold down the left PWR key for several seconds to open the main menu.



To choose the desired command use the SCR key. This button allows you to scroll various options: to confirm the desired one press the PWR button.
It is also possible to recall the contextual menu of a page by holding down the SCR key for a few seconds. Through a contextual menu it is possible to visualize other sub-pages and/or information. Pages with context menus can be identified by a triangle icon in the top right of the display.

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ORDER CODE



ACCESSORIES

OPTIONAL ACCESSORIES	
A-GPS	External GPS antenna with 3 m cable
A-GSM/QUAD-N	External GSM / QUAND-N antenna with 5 m cable
NTC EXTERNAL TERMISTOR	

CONTACTS

Technical support	support@seneca.it
Product information	sales@seneca.it

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