ENGLISH

DESCRIPTION
EXPERT GSM module sends an alarm phone call to report the anomaly of the cold room. It's able to send all the alarms of the cold room and also the power supply break.

PRINCIPAL CHARACTERISTICS
- GSM module 2G.
- Two digital inputs to activate the alarm (1 NO and 1 NC).
- Antenna included.
- Sending alarms up to 10 phone numbers.
- Easily programmable via SMS.
- PEGO programming philosophy guaranteeing immediate start-up.
- DIN rail mounting.
- 115÷230 VAC power supply.
- Rechargeable Li-Ion battery UR14500P to indicate the lack of power supply (optional).
- It requires an active SIM Card (Mini-SIM) from any carrier that uses GSM networks 900/1800 MHz (not included).

MODELS

PEGO CODE	DESCRIPTION
200GSM	Power 115÷230Vac ±10% 50/60Hz 2 digital inputs. Fixed clamps.
200GSMB	Power 115÷230Vac ±10% 50/60Hz 2 digital inputs. Fixed clamps. Rechargeable Li-Ion battery.

STATUS LED

LED	MEANING
GREEN	**Status LED.** LED OFF = Module off / error 64ms ON/ 800ms OFF = Module not connected to the network 64ms ON/ 3000ms OFF = Module connected to the network 500ms ON / 500ms OFF = Call/operation in progress.
RED	**LED error signal.** LED OFF = no error. When there is an alarm, it generates a sequence of flashing lights with half second intervals displaying the error code. There is a 2-second pause before the sequence repeats.

SMS CONFIGURATION LIST

FUNCTION	SMS
Saving a new number.	ADDxxxxxxxxxx
Saving more than one number. The numbers must be separated by a ';'.	ADDxxxxxxxxxx;yyyyyyyyyy
Deleting a number.	DELxxxxxxxxxx
Deleting more than one number. The numbers must be separated by a ';'.	DELxxxxxxxxxx;yyyyyyyyyy
Recall the list of saved numbers. The module sends an SMS containing the list of numbers saved. In the event of an alarm, calls are made in accordance with the order of the numbers in the said list.	LISTGSM
Request device information. The module sends an SMS containing information regarding: - software installed; - power supply status (**P230**, >=100 OK); - battery status (**P3.7**, >=625 OK); - antenna signal status (**SQ**, <10 low, >=10 and <20 medium, >=20 high, =100 not available); - digital inputs status (**I_NO, I_NC**).	INFOGSM Expert GSM r3 P230=1023 P3.7=731 SQ=30 I_NO=open I_NC=open

The maximum SMS configuration length is 160 characters and it must not contain spaces.
Telephone numbers are stored in the module. Therefore, you do not need to reprogram it if the SIM Card is replaced.

Telephone costs related to sending SMSs and calls made from the device are charged to the SIM inserted in the module. If a prepaid SIM is used, you must periodically check that there is available credit in order to ensure the correct functioning of the module.

COMMISSIONING
Take a valid SIM Card (Mini-SIM). Disable the SIM Card PIN from a normal mobile phone.

The GSM module cannot connect to the GSM network if the PIN is active.

Insert the SIM Card into the appropriate slot and connect the antenna to the connector.
Make the electrical connections and attach the Li-Ion battery (if provided). Turn the module on by the switch on the left side. Configure the module via SMS.

BATTERY INSTALLATION
Switch off the GSM module. Loosen the screws on the rear and remove the cover; insert the battery into the provided compartment, making sure the polarity is correct.

OPERATION
The module starts the cycle of calls if, starting with a situation in which there are no active alarms, at least one of the following alarm situations occur:
- closure of a NO input;
- opening of a NC input;
- no 230V power supply for more than 15 minutes (only if the battery is present)

If the NC input is not used, connect a bridge between terminals 1 and 3.

It is recommended to periodically check the correct operation of the GSM module and SIM card.

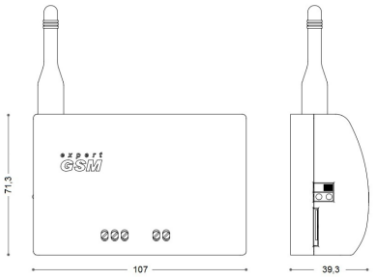
ALARM CODES TABLE

Flashing red LED	MEANING
0	No anomaly.
1	GSM module status error
2	PIN enabled.
3	No network registration.
4	Low network signal.
5	No 230V power supply and low battery (only if the Li-Ion battery is present).
6	No 230V power supply (only if the Li-Ion battery is present).

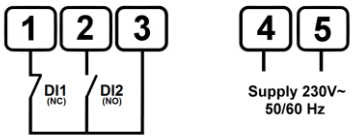
TECHNICAL DATA

Power voltage	
Model EXPERTGSM	115÷230V~ ±10% 50/60Hz
Absorbed power	4 VA Max
Environment conditions	
Operating temperature	0T45°C - humidity < 90% Rel. Hum. Not condensing
Storage temperature	-20T70°C - humidity < 90% Rel. Hum. Not condensing
Unsuitable operating environments	Environments with strong vibrations or impacts; aggressive, polluted or corrosive atmospheres, exposure to direct solar radiation, explosive atmospheres or flammable gas.
General characteristics	
Model EXPERTGSM	Fixed screw clamps with cross-section from 0.2 to 2.5mm^2
Software class: A / Parameters saved on non-volatile memory (EEPROM)	
Input characteristics	
Digital inputs	1 NO Input; 1 NC input.
Dimensional, insulation and mechanical characteristics	
Dimensions	107x71,3x39,3mm
Front protection rating	IP20
Installation	On a 35mm DIN rail
Casing	Plastic PC+ABS UL94 V-0 body
Insulation type	Class II
Conformity with EEC low voltage directives, electromagnetic compatibility and EC mark	
EEC Directive: 1999/5/CE R&TTE Harmonised standards: ETSI EN 301 489-1 v1.9.2 (2011-09), ETSI EN 301 489-7 v1.3.1 (2005-11), EN 60950-1 (2007-02) + A11(209-03) + A1(2009-12) + A12(2011-02)	

DIMENSIONS (mm)

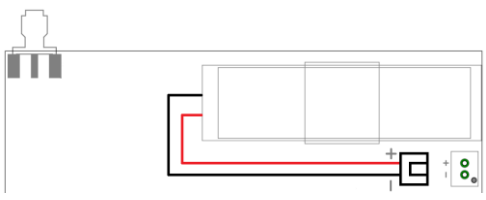


ELECTRICAL CONNECTIONS



SIM CARD INSERTION

Li-Ion BATTERY CONNECTIONS



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ENGLISH

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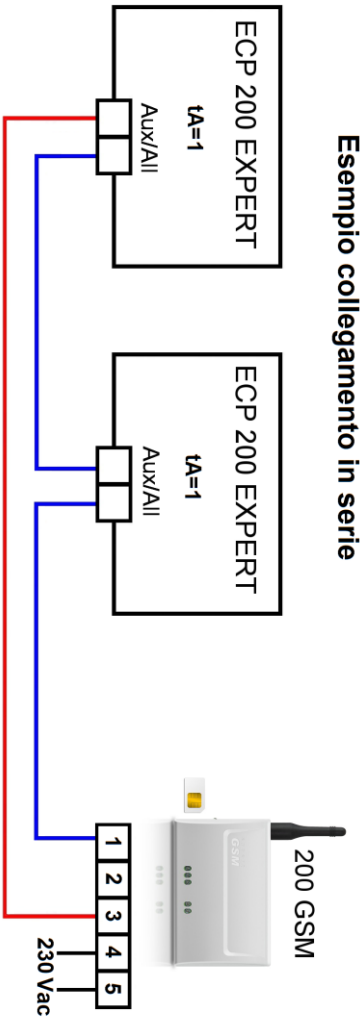
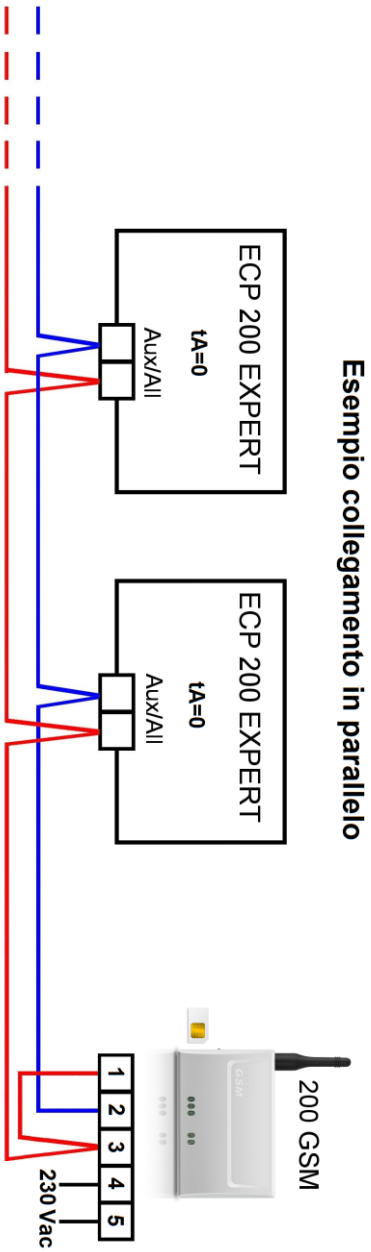
ELECTRICAL PRESCRIPTIONS
Avoid using multipolar cables with conductors connected to inductive and power loads and signal conductors such as probes and digital inputs. Avoid installing in the same channels power cables and signal cables (probes, digital inputs or RS485 connections). Reduce to a minimum the length of the connecting cables, avoiding that the cabling takes on a spiral form which may have inductive effects on the electronic system. All conductors used in the cabling must be appropriately sized in order to support the load which they must provide.

SAFETY PRECAUTIONS
Envision a general protection magnetothermic switch upstream of the module.
Do not short-circuit the battery.
Do not drop or knock the battery.
Do not handle lithium ion batteries (Li-Ion) that are damaged or leaking.
Do not dispose of the batteries or the device by burning them. Adhere to local regulations with regard to disposal of batteries and devices.
Never place the batteries or the device over or inside heating devices. Overheated batteries can explode.
Do not disassemble or puncture the batteries since they may explode or catch fire. Avoid exposing the batteries to high outdoor temperatures, which may cause them to short-circuit internally or overheat.
Do not expose the device or batteries to extremely cold or hot temperatures.
Extreme temperatures may damage the device components and reduce the loading performance and duration of the device and batteries.
Keep the batteries at temperatures between 0 °C and 45 °C.
Do not place the batteries in contact with metal objects since they may create contact between the +/- terminals and cause temporary or permanent damage to the batteries.
Never use damaged batteries.
Do not use the device in hospitals or near medical devices, which might be affected by the radio frequencies.
Do not use the device in potentially explosive areas and petrol stations, near fuel or chemical products.
Do not use or keep the device in areas having high concentrations of dust or airborne materials.
Do not expose the device to direct sunlight for long periods of time.
The device may not operate correctly or the battery may discharge if exposed to magnetic fields.
The use of generic batteries can cause the device to malfunction. The batteries installed in the module EXPERTGSM must be purchased from authorised dealers. Any other type of battery will automatically void the warranty.
Handle the SIM card with care. Do not remove the card whilst the device is transferring data or accessing information since this may lead to loss of data and/or damage the card or the device.
Do not connect or disconnect the antenna when the device is on. Do not switch the device on without having connected the antenna correctly.
Avoid shielding the instrument inside metal containers.





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