



# PGU GSM GATEWAY LIFT EQUIPEMENT



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# GENERAL INSTALLATION INSTRUCTIONS

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## GENERAL NOTES

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Carefully read the notes contained in this section as they provide important information on safe correct installation, use and maintenance of the product.

- The product must be **EXCLUSIVELY** used for the purpose it was designed for, and ANEP cannot be responsible for damages arising from improper use.
- The product has been designed in compliance with the regulations in force and must be installed in systems that comply with the provisions of law.
- Always disconnect power supply before performing internal or external operations on the product (cleaning, maintenance, etc.).
- Always refer to an authorized service centre for repair.
- The device must be installed in a ventilated place, making sure that the ventilation slots are never obstructed.
- Do not install the product in environments with risk of explosion.
- Make sure that the product has been installed as required.
- Do not introduce objects, liquids or powders inside the product. Do not use sprays inside the product.
- Packing components (such as plastic bags, foam polystyrene, etc.) must be kept out of the reach of children because potentially dangerous.

# DESCRIPTION

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PGU is a device that, connected to a fixed telephone or to the PSTN input terminals of a PBX or autodialer, allows you to make and receive calls over the GSM network. For correct operation, a normal GSM SIM card is required.

PGU comes with built-in backup batteries

# FEATURES

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- Local programming via DTMF tones;
- Remote programming via SMS;
- Display of caller identification;
- Country setting;
- CLIP / CLIR;
- Roaming setting;
- Low-battery check
- Power failure control
- Low-battery, power failure/restore notification via SMS;
- Measurement of GSM signal level;
- Automatic converter of selected telephone number;
- Receiver and transmitter gain adjustment;
- Remote reboot function;
- GSM signal indicator LED;
- Status indicator LED;
- Line status indicator LED / Data transmission indicator LED
- Power supply status indicator LED;
- Dual Band GSM module;
- 2W transmission power;
- 12Vdc power supply input;
- 230Vac external adapter input;
- External antenna (cable length = 2m);
- External adapter (230Vac 50Hz input; 12Vdc 1A output).
- Dimensions : 29 x 139 x 91 mm

## LED

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The PGU is equipped with 4 outer LEDs.

LEDs flashing is described at chapter "SIGNALS" (see page 37).



**Green LED:** GSM signal indicator



**Red LED:** Status indicator



**White LED:** Line status indicator / Data transmission indicator



**Blue LED:** Power supply status indicator

# INSTALLATION

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- Remove the cover by pressing the upper side.



- A** ANTENNA cable connector
- B** SIM CARD housing with front panel
- C** LED indicating signal strength (green), LED indicating device operation status (red), LED indicating line status / data transmission (white) and LED indicating power supply status (blue)
- D** Telephone line output (RJ11 connector) for telephone set connection or PBX analogue line connection
- E** 230Vac external adapter input
- F** Telephone line output (terminal block) for connection of autodialer/PBX analogue line
- G** 12Vdc power supply terminal block
- H** Backup battery connector

## INSERTING THE SIM CARD

---

Before inserting or replacing the SIM card, always make sure that the gateway has been disconnected from the mains and that no electrostatic discharge is present in order to avoid damaging it. Take all necessary measures to avoid electrostatic discharge.

- Shift the SIM card housing cover downward (**B** in the picture at page 7) until it unblocks and lift it.
- Carefully slide the SIM card into its housing cover.
- Lower the SIM card housing cover and shift it upward until it blocks.

### WARNING

**The SIM card PIN must be DISABLED. If the PIN is enabled, it must be disabled through a mobile phone.**

## INSERTING THE ANTENNA

---

- Screw the antenna cable in to the connector on the top of the module (**A** in the picture at page 7).

### WARNING

**NEVER connect the PGU gateway without having previously installed the antenna. The gateway may get damaged.**



## WARNING

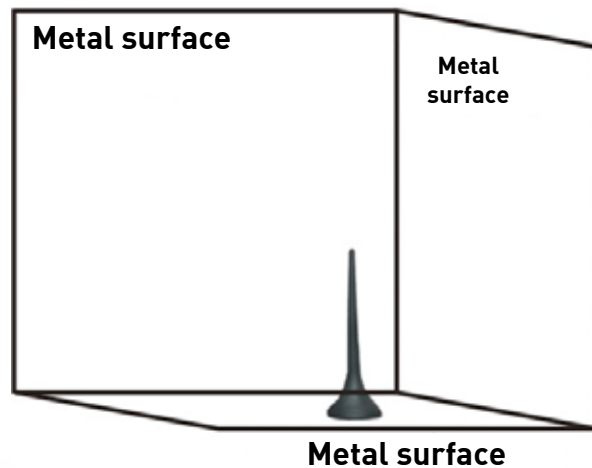
**Do not install the product near other electric or electronic devices that were not especially designed to be used with it. They could be subjected to RF interference from the module.**

- Position the antenna with magnetic base so that any metal surfaces do not block the signal.

### YES



### NO



## CONNECTION TO THE TELEPHONE LINE

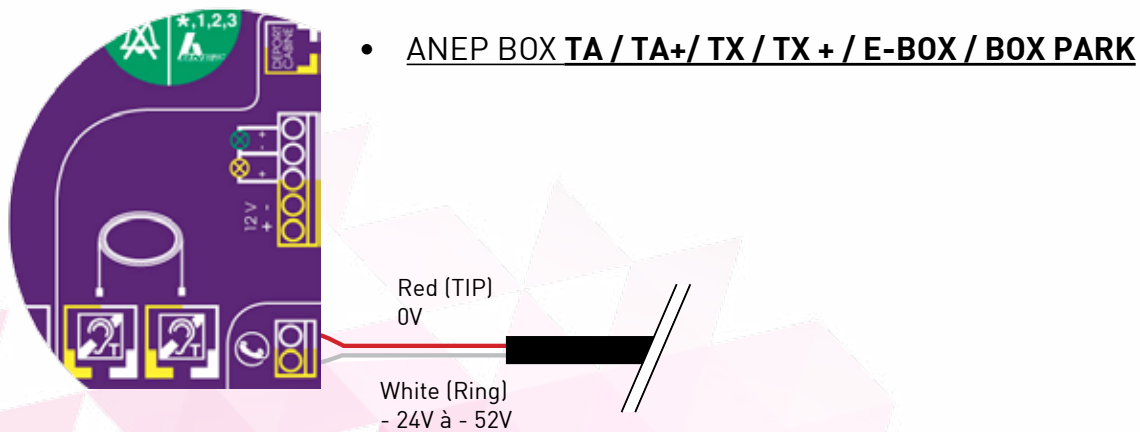
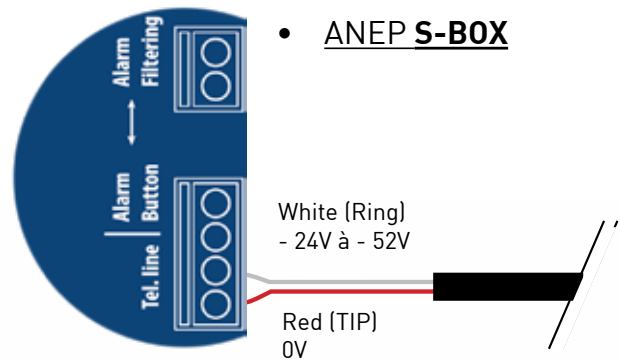
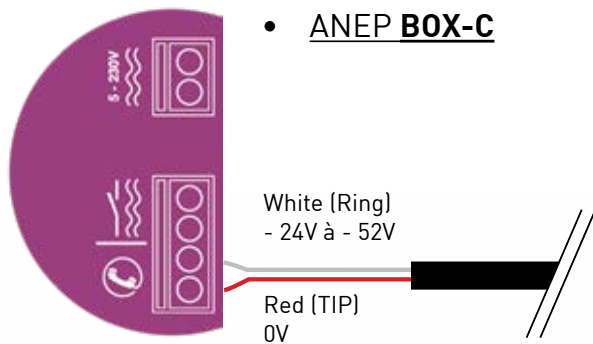
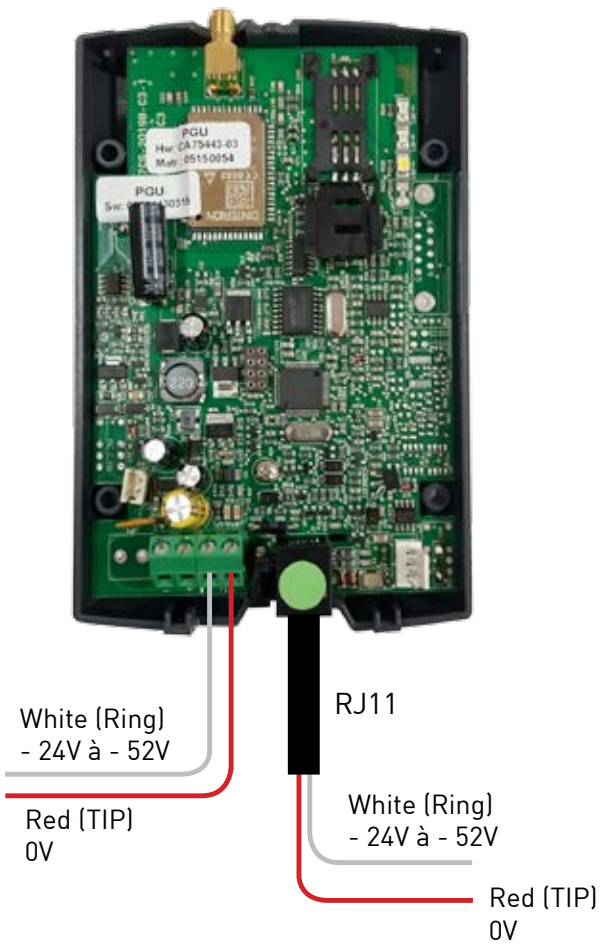
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- Connect the PGU to a standard telephone or to the PSTN input terminals of a PBX or autodialer via the RJ-11 connector (**D** in the picture at page 7);

ou bien

- Connect the PGU to a standard telephone (**F** in the picture at page 7) , autodialer or other telephone device.

## Connection to the ANEP BOX



# CONNECTION TO THE POWER SUPPLY

---

Power supply via 230Vac external adapter

- Connect the external adapter to the specific input (**E** in the picture at page 7).
- Connect the backup batteries (if present) to the dedicated input (**H** in the picture at page 7).
- Close the gateway cover.

or

12Vdc power supply

- Connect the power supply cable to the terminal (**G** in the picture at page 7) taking care to respect the polarity.
- Connect the backup batteries (if present) to the dedicated input (**H** in the picture at page 7).
- Close the gateway cover, paying attention to the power supply cable.

## WARNING

**Backup batteries, if present, may be connected only after PGU has been supplied**

- **Note** : the max voltage to be supplied to the mains terminal **G** is 17Vdc.
- **Note** : the min voltage required to supply the PGU gateway by the mains terminal **G** is 10Vdc
- **Note** : a protection cut-out switch must be installed upstream to interrupt power supply in case of fault.

# TURNING THE PGU GATEWAY ON

---

- Power the PGU.
- Wait 30 seconds after power-up to give time to the PGU to register correctly with the GSM network.

Make sure the red LED (device status) flashes briefly once every 3 seconds as shown in chapter “SIGNALS” (see page 37).

If the red LED flashes quicker and stays lit for a longer time (see page 37), the GSM gateway has not properly registered with the GSM provider:

- Disconnect PGU and make sure the SIM card is inserted correctly and that the PIN is not locking it.
- See chapter “PROBLEM-DETECTION GUIDE” (page 41).

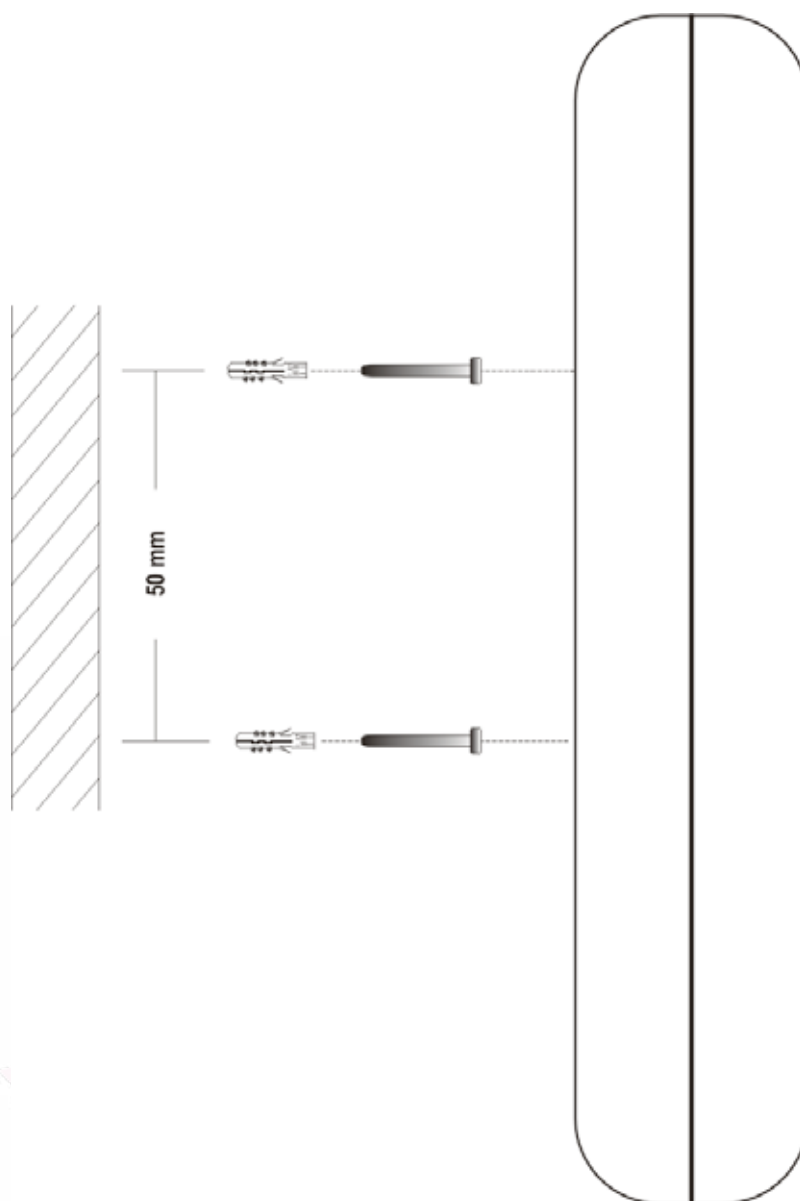
# GATEWAY MOUNTING OPERATIONS

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- Check the GSM signal strength through the green indicator LED (see chapter “SIGNALS”, page 37) and identify an area where the signal is strong enough.

**Note :** the signal strength may vary according to the telephone provider

- Drill two holes with 5 mm diameter on the wall at a distance of 50 mm..
- Insert the 2 wall plugs and screws down until the screws are at a 5 mm distance from the wall.
- Place the PGU gateway onto the two screws through the two back slots.



# PGU INSTALLATION RECOMMENDATIONS

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- The PGU gateway must be installed in a location where the radio signal allows for using the GSM system.
- It is advisable to leave plenty of space around the gateway for maintenance operations.
- Do not install the PGU gateway outdoors, since it lacks protection devices against weather conditions that can damage the gateway (water, humidity, etc.).
- Do not install the PGU gateway near electronic (radio or TV sets, Personal Computers, wired radio systems, etc.) or magnetic (credit cards, floppy disks, etc.) devices that could be subjected to RF interference from the module: recommended distance from the antenna is min. 2,5 m.
- Do not install the PGU gateway near medical devices. Its operation may cause damage to hearing aids or pacemakers.
- Always make sure that the device operation is permitted in the place of installation (e.g. installation is not allowed in hospitals, airplanes, etc.).

## ABSORPTION CHART

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Power supply	10Vdc	12Vdc	13,8Vdc	10Vdc	12Vdc	13,8Vdc
	(battery not connected)			(battery connected)		
Telephone handset down	30mA	30mA	25mA	40mA	60mA	50mA
Telephone handset up	90mA	80mA	70mA	100mA	105mA	90mA
Conversation	130mA	115mA	110mA	140mA	135mA	130mA
Data transmission	75mA	60mA	55mA	85mA	80mA	75mA

# PROGRAMMING VIA TELEPHONE

---

Allows you to customise the gateway according to your requirements. Programming can be carried out locally via a MF telephone.

## **You can program :**

- roaming service settings;
- notifications telephone number;
- administrator telephone number ;
- programming-mode password;
- low-battery check;
- power failure control;
- automatic converter of selected telephone number;
- receiver gain adjustment;
- transmitter gain adjustment;

## **Note :**

during programming, the inter-digit dialling time must not exceed 10 seconds. Once 10 seconds has elapsed without digits you will hear the dissuasion tone and you will have to hang up.

## **Note :**

at the end of each programming carried out correctly, you will hear a confirmation tone, while an error tone will be heard in case of error. In any case, the dialling tone will follow, after which you can proceed with the programming or make a call.

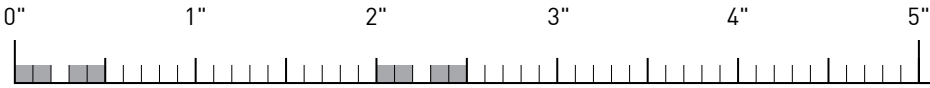
## **Note :**

programming can be carried out even if the signal is absent. After the confirmation or the error tones, the “no signal” tone will follow, after which you can proceed with programming or hang up.

# Roaming Configuration

It allows to enable or disable the roaming function of the PGU gateway.

When the roaming service is disabled, in case the PGU registers with a different provider than the programmed, it is not possible to make or receive any calls. Such a condition is signalled by the following tone sequence :



**Factory default** : roaming enabled.

### Notes

**such setting is recommended for use under neighbouring-countries areas, in order to avoid the undesired selection of foreign operators**

### Enabling roaming service



\* \* 5 \* 1 # (Confirm)

- Lift the handset and dial : \*\*5\*1.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

### Disabling roaming service

It allows to select a specific SIM's provider by disabling the PGU's operation with any other provider



\* \* 5 \* 0 \* (Confirm)

X X X (MCC) X ... X (MNC) #

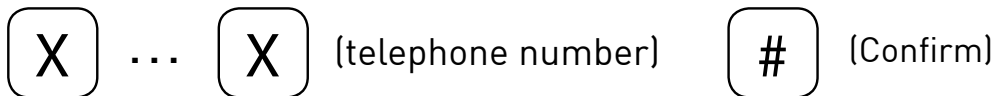
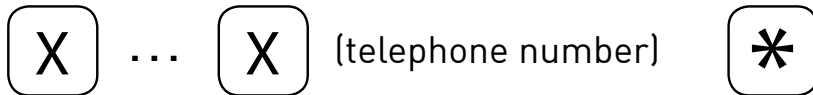


- Lift the handset and dial : **\*\*5\*0\***.
- Select the specific SIM's provider by dialling the related MCC (Mobile Country Code) and MNC (Mobile Network Code) codes.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

## SETTING TELEPHONE NUMBER FOR NOTIFICATION SERVICE

---

It allows to enter the telephone number appointed for notifications via SMS of power failure/ restore, low-battery and battery status.



- Lift the handset and dial: \*\*40\*.
- Enter the telephone number to which the notification SMS must be sent.
- Dial \*.
- Enter again (for confirmation) the telephone number to which the notification SMS must be sent.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

### **Deleting**

It allows to delete the telephone number appointed for SMS notifications or warnings.



\* \* 4 0 # (Confirm)

- Lift the handset and dial: \*\*40.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

## **SETTING THE ADMINISTRATOR TELEPHONE NUMBER**

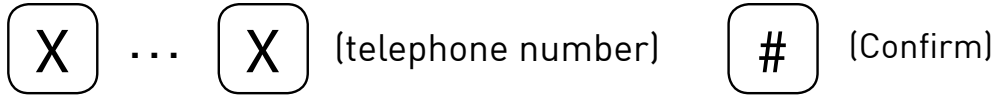
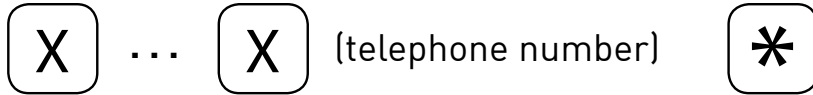
---

SMS programming mode may be effected by any mobile phone or other device sending out SMS. After setting the administrator telephone number, programming mode via SMS is only allowed by the administrator's telephone number.

**Once it has been entered, the administrator number will receive the notification SMS related to the "Automatic converter" service**

**Note :**

**for a proper use please enter first the country code and then the administrator number without the first zero (for example: if the administrator number is 07715123456 and the PGU is located in England please enter 00447715123456).**



- Lift the handset and dial: \*\*18\*.
- Enter the administrator telephone number.
- Dial \*.
- Enter the administrator telephone number again (for confirmation)
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

### **Deleting**

It allows to delete the administrator telephone number.



- Lift the handset and dial: \*\*18.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

# PROGRAMMING PASSWORD

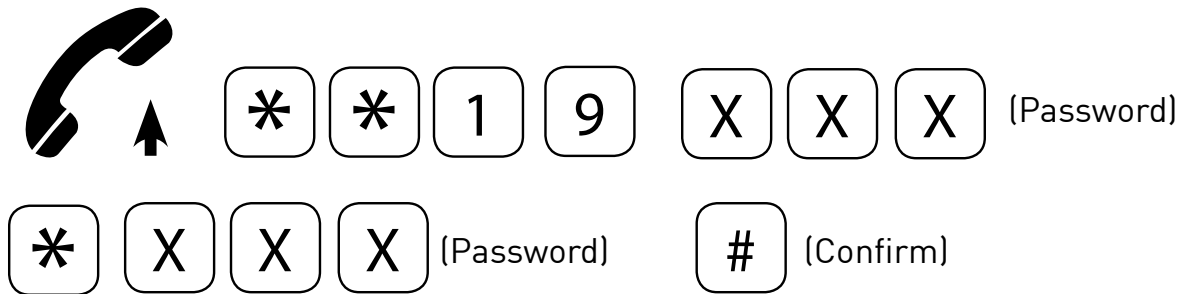
---

It allows to change the programming password.

**Factory default** : 0.

**Note :**

make sure the password has been noted down. In case it is lost, please contact the nearest technical service center.



- Lift the handset and dial: \*\*19\*.
- Enter the new programming password (max. 3 digits).
- Dial \*.
- Enter the new password again (for confirmation).
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings

## LOW-BATTERY CHECK

---

If the low-battery check is enabled, PGU checks the battery status every second. When the charge goes below the previously-programmed threshold ensuring the minimum number of operating hours in idle mode, a notification SMS is sent to the programmed telephone number (see "Setting telephone number for notification service"). The device sends out one notification SMS only. A new SMS will be sent out if the charge status rises and goes again below the previously-set threshold.

The SMS text is the following: "Discharged battery".

The low-battery check is only available on models: GC, R2R and .net.

The built-in backup batteries ensure 8 operating hours in idle mode and 1 operating hour in conversation mode.

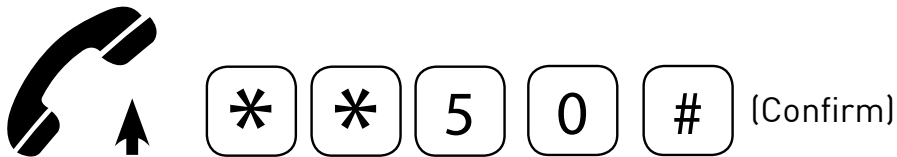
**Factory default:** disabled.

# Enabling

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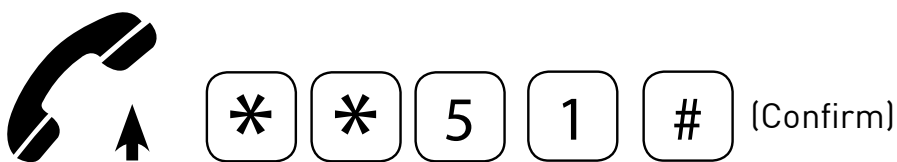
It allows to activate the low-battery check.

## Enabling :



- Lift the handset and dial: \*\*50.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

## Disabling :



- Lift the handset and dial: \*\*51.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

# POWER FAILURE CONTROL

---

If the control on power failure is enabled, PGU constantly controls the mains power supply. If the power failure lasts longer than the preset time interval, a notification SMS is sent to the programmed telephone number (see "Setting telephone number for notification service").

The SMS text is the following: "Power failure".

A new SMS will be sent if the power supply is restored for a time interval equal to the preset threshold.

The SMS text is the following: "Power restored".

The power failure control is only available on models: R2R and .net.

**Factory default** : disabled.

## Enabling

---

It allows to activate the power failure control

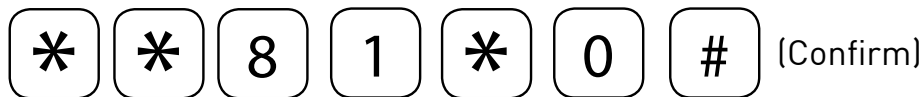
**Enabling** :



\* \* 8 1 \* X (Minutes) # (Confirm)

- Lift the handset and dial: \*\*81\*.
- Enter the minutes of power failure/restore (1 ~ 9).
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

## **Disabling :**



- Lift the handset and dial: \*\*81\*0.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

## **AUTOMATIC CONVERTER OF SELECTED TELEPHONE NUMBER**

This service allows to enter up to 5 telephone numbers automatically receiving any outgoing call, regardless of the real telephone numbers dialled out by the telephone or autodialer connected to the PGU gateway.

Each preset telephone number is matched with a corresponding telephone number , either by programming and/or automatic learning. When dialing out the corresponding telephone number , the PGU will make a call to the previously-matched telephone number instead of calling the real one. When dialing out a telephone number not associated with any preset number, the call will be automatically forwarded to the first preset telephone number.

### **Note :**

to enable the “Automatic converter” service, you simply need to preset one telephone number; to disable this service, all preset telephone numbers must be deleted.

### **Example :**

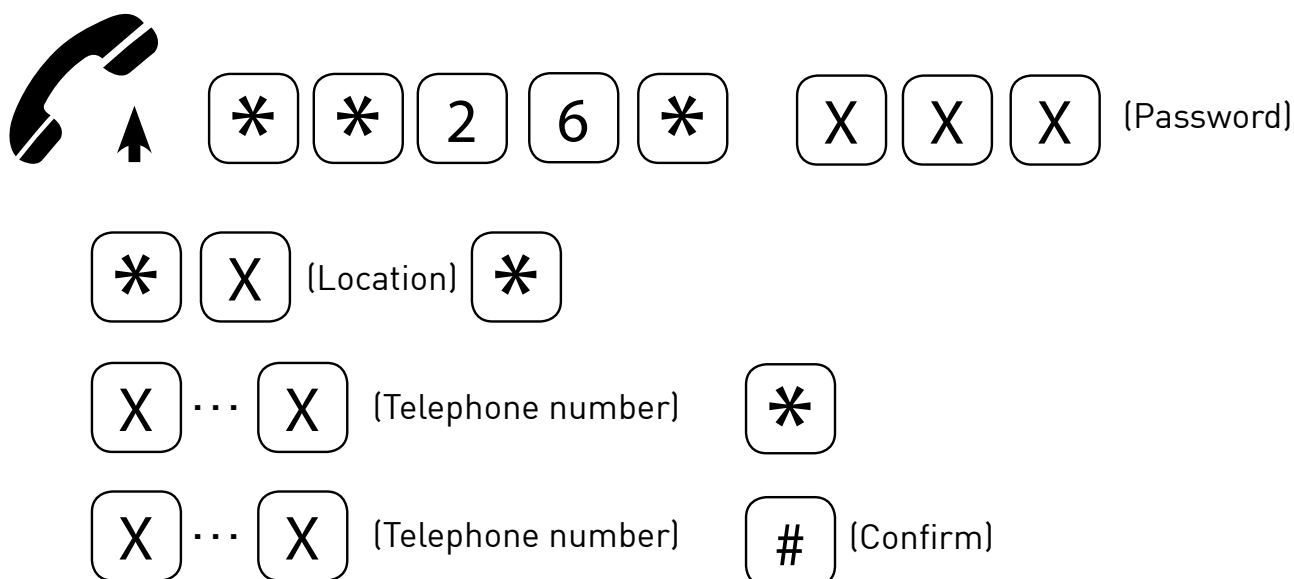
Preset table :

Location	Selected tel. number	Preset tel. number
1	0331234567	0717506065
2	0339876543	0717506066
3	0733434343	0717506067
4	0733445566	0717506068
5	0733778899	0717506069

- when selecting tel. number 3331234567, the PGU will make a call to 0717506065;
- when selecting number 3339876543 , the PGU will make a call to 0717506066;
- etc;
- when selecting any number not included in the “Selected telephone number” column, PGU will send a call to the first telephone number included in the “Preset telephone number” column.

## Entering preset numbers

It allows to enter up to 5 telephone numbers receiving any outgoing call sent out by PGU.



- Lift the handset and dial : \*\*26\*.
- Enter the programming password.
- Dial: \*.
- Enter the desired telephone number location (from 1 to 5) in the related table.
- Dial \*.
- Enter the telephone number to be preset.
- Dial \*.
- Enter again the telephone number to be preset.
- Dial # to confirm the entered parameter.
- After the confirmation tone hang up or carry on with other programmings.

### Deleting a preset telephone number

It allows to delete a preset telephone number.

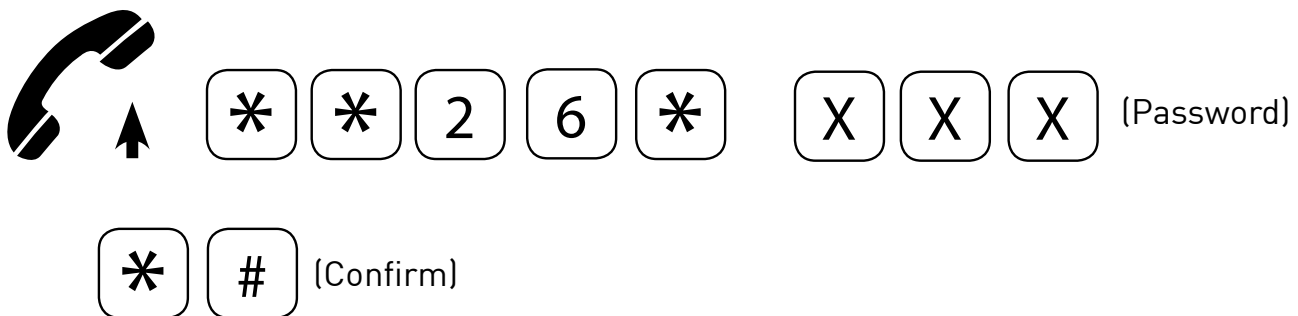




- Lift the handset and dial: \*\*26\*.
- Enter the programming password.
- Dial \*.
- Enter the location of the telephone number to be deleted.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

### **Deleting all preset telephone numbers.**

It allows to delete all the preset telephone numbers.



- Lift the handset and dial: \*\*26\*.
- Enter the programming password.
- Dial \*.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

## **Matching telephone numbers manually**

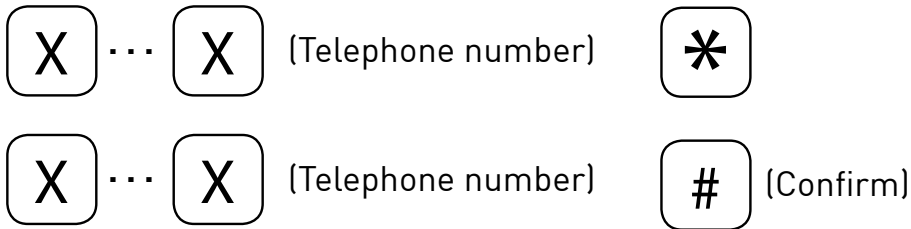
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It allows to associate a specific telephone number to each preset number.

### **Note :**

in case no telephone number is manually matched to any preset number, the association is automatically carried out by auto- learning procedure.

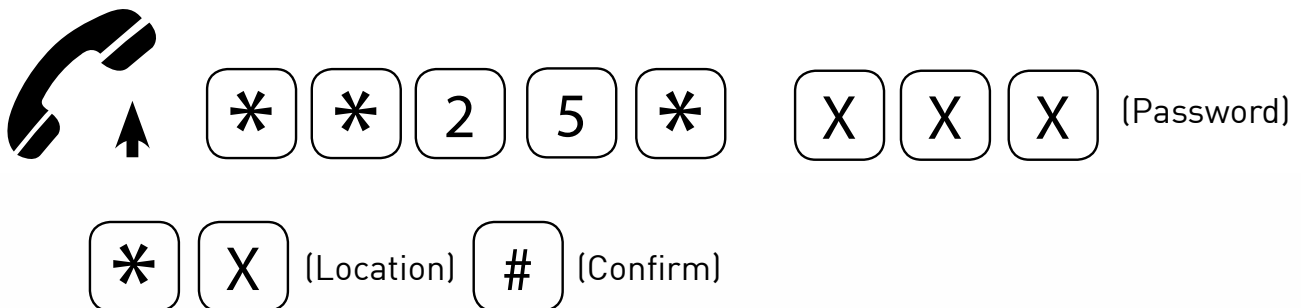




- Lift the handset and dial: \*\*25\*.
- Enter the programming password.
- Dial \*.
- Enter the position of the preset number to be matched, 1 to 5.
- Dial \*.
- Enter the telephone number to be matched.
- Dial \*.
- Enter again the telephone number to be matched.
- Dial # to confirm the entered parameter.
- After the confirmation tone hang up or carry on with other programmings.

**Deleting a previously matched telephone number.**

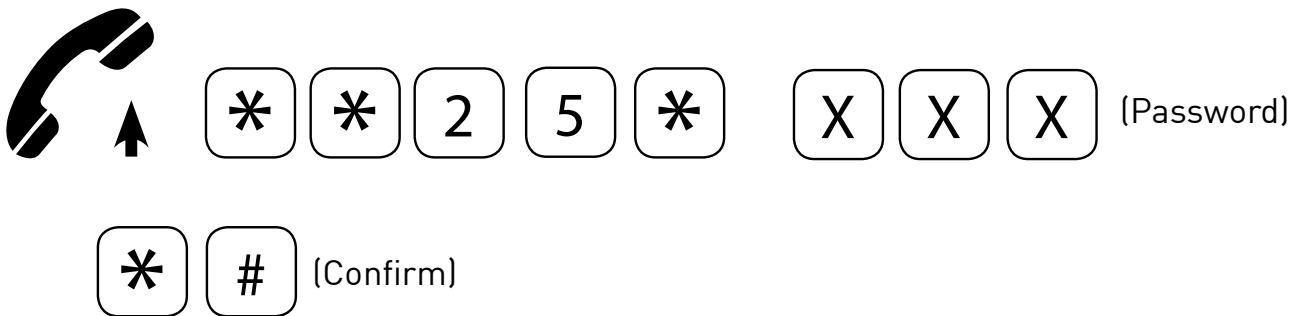
It allows to delete a telephone number previously matched with a preset number.



- Lift the handset and dial: \*\*25\*.
- Enter the programming password.
- Dial \*.
- Enter the location of the telephone number to be deleted, 1 to 5.
- Dial # to confirm
- After the confirmation tone hang up or carry on with other programmings.

## Deleting all previously-matched telephone numbers

It allows to delete all previously-matched telephone numbers associated with preset numbers



- Lift the handset and dial: \*\*25\*.
- Enter the programming password.
- Dial \*.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings

## Matching telephone numbers automatically

---

The auto-learning procedure allows to match automatically each preset number with the selected numbers dialed by the telephone and/or autodialer connected with PGU.

- Enter the preset numbers after the corresponding programming codes.
- Select a telephone number to be called by the telephone or autodialer connected with the PGU module.

PGU will check if the number is already matched with a preset telephone number. If so, it will send a call to the preset number; if not, it will match the selected number to the first available preset number and will make a call to it.

In case there are not available preset numbers, but it's still possible to make associations, the selected number will be automatically matched with the first preset number.

In case all 5 possible associations have been effected, the call will be sent to the first preset number.

An SMS containing the selected number and the preset number is sent out to the administrator number (if present) upon creating any new matching.

An SMS is also sent out every time a different selection from the 5 preset ones is effected.

# ADJUSTMENTS

This programming allows you to adjust the receiver gain as well as the transmitter gain.

**WARNING**

**The factory-default settings are optimal values, please do not change them unless it is strictly necessary.**

## Transmission

Factory default : +6dB.



\* \* 1 0 \* X (Value) # (Confirm)

- Lift the handset and dial: \*\*10\*.
- Enter the value (1 ~ 7) according to the table below:

1	2	3	4	5	6	7
-2dB	0dB	+4dB	+6dB	+9dB	+11dB	+12dB

- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

## Reception

Factory default : -8dB.



\* \* 1 0 \* X (Value) # (Confirm)

- Lift the handset and dial: \*\*11\*.
- Enter the value (1 ~ 5) according to the table below:

1	2	3	4	5
-8dB	-6dB	-4dB	-2dB	-0dB

- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

## RESTORING DEFAULT SETTINGS

---

It is possible to restore the factory - default settings at any time, by dialling :



\* \* 9 9 # (Confirm)

- Lift the handset and dial: \*\*99.
- Dial # to confirm.
- After the confirmation tone hang up or carry on with other programmings.

The factory-default values are :

Roaming	enabled
Low-battery check	disabled / 4h
Power failure control	disabled
Transmitter gain	+6dB
Relay settings	-8dB

### Note :

restoring factory default does not modify the programming password and the settings entered for the "Automatic Converter" service.

# RESET

---

You can reset the PGU gateway at any time, without powering it off, with the following code:



**\*** **\*** **9** **8** **#** (Confirm)

- Lift the handset and dial: \*\*98.
- Dial # to confirm.
- Hang up.

## Note :

resetting the PGU gateway does not modify its programming profile.

# PROGRAMMING VIA SMS

---

Programming via SMS is possible by any mobile phone or other device supporting SMS. In case the administrator number has been previously set, programming via SMS is only allowed from such telephone number.

An SMS notifying that programming has been completed will be sent back by the PGU to the same telephone number that forwarded the programming SMS.

## WARNING

**Programming outgoing SMS from the Internet may not be successful if the requested format is not respected.**

# Message format

---

Each programming SMS must contain the password, allowing to access programming, and the codes corresponding to the desired settings.

The message format is required to be as follows:

**ET-IG5\*xxx#c..c#**

Or :

**ET-IG5** : programming string start

**\*xxx#** : password string (default xxx = 0)

**c..c** : programming string as per table below

**#** : separator character or end string character

Programming	Code (c..c)
Enabling roaming service	5^1
Disabling roaming service	5*0*XXXYYY
Setting telephone number for notification service	40*X..X*X...X
Deleting notification numbers	40
Setting administrator number	18*X..X*X...X
Deleting administrator number	18
Setting programming password	19*XXX*XXX
Low-battery check enabling	50
Low-battery check disabling	51
Power failure control enabling	81*X
Power failure control disabling	81*0
Entering preset number	26*XXX*X^X...X*X...X
Deleting preset number	26*XXX*X
Deleting all preset numbers	26*XXX^
Reading preset numbers	26*XXX*XR
Entering selection	25*XXX*X^X...X*X...X
Deleting selection	25*XXX*X
Deleting all selections	25*XXX^
Reading selections	25*XXX*XR
Transmitter gain setting	10*X
Receiver gain setting	11*X
Relay settings	93*XX
Restoring default settings	99
Reset	98
Measuring the GSM signal level	30
Reading battery status	91

For each programming refer to the relevant paragraph

#### Example:

it is required to enable low-battery check and to set the telephone number for notifications

Outgoing message text:

**ET-IG5\*0#50#40\*X..X\*X...X#**



# Notification message format

---

The format of the message notifying the user or the administrator who previously sent out a programming SMS, is the same as the programming message format.

SMS notifying an accepted command:

**ET-IG5\*xxx#c..c#**

SMS notifying a rejected command:

**ET-IG5\*xxx#c..cERR#**

## Example :

outgoing SMS to enable low-battery check and to set the following incoming notification number: 3330123456.

Outgoing message text:

**ET-IG5\*0#50#40\*3330123456\*3330123456**

Message text notifying accepted command:

**ET-IG5\*0#50#40\*3330123456\*3330123456#**

# SERVICES

---

## INCOMING CALLS

---

Allows you to answer incoming calls.

Upon receiving a phone call, the LED indicating the line status (white) will blink shortly 4 times every 4 seconds as described at chapter "SIGNALS" (see page 37) and the telephone will be ringing.

- Pick up the handset.

The LED indicating the line status (white) and the LED indicating the device status (red) will turn on and the communication with the calling party will be set up

## OUTGOING CALLS

---

Allows you to dial over the GSM network.

If the PGU gateway is connected to a PBX, please refer to the switchboard's manual.

If the PGU gateway is connected to a telephone :

- Pick up the handset.

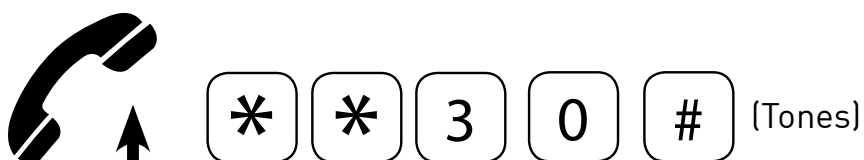
The LED indicating the line status (white) will turn on and the dialling tone will be heard.

Dial the telephone number to be called.

## MEASURING THE SIGNAL LEVEL

---

This procedure allows you to check the GSM signal level through your telephone.



- Lift the handset.
- Dial: \*\*30#;
- Wait for the signal reading

The system will send a number of short tones corresponding to the signal level :

Tones	Quality
No signal	No signal
1 tone	Low
2 tones	Medium
3 tones	Good
4 tones	High

Since the signal can be subject to variations, we recommend repeating the code **\*\*30#**, 2 or 3 times a few seconds apart, in order to have a reliable measurement.

**Note :**

In case of low signal, we recommend installing the PGU in a different area with a better signal.

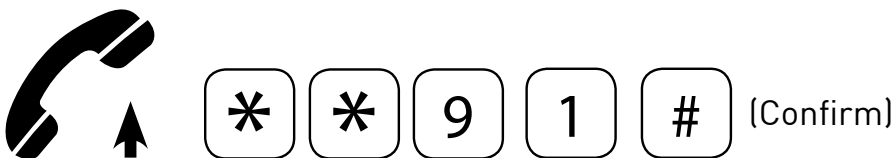
**Note :**

If you receive the “no signal” tone, it means that the gateway has not been registered correctly by the provider. We recommend trying again after a few moments, and in case of no result, make sure that the SIM card is working correctly.

## READING THE BATTERY STATUS

---

If the low-battery check has been previously enabled, it is possible to check the battery status



- Lift the handset and dial: **\*\*91#**.
- After the confirmation tone hang up.

After receiving the request, PGU will send an SMS to the number programmed to be alerted.

The outgoing message text is the following: “Level battery: x”, where x is the value corresponding to the minimum number of operating hours guaranteed by the battery in idle mode, according to the table at paragraph “Low-battery check”.

The request will not be accepted (an error tone will be received) if the low-battery check is disabled, if the notification number to be alerted has not been previously entered or if the PGU is not correctly registered to the GSM network.

# READING “AUTOMATIC CONVERTER” NUMBERS

---

It is possible to check remotely, via SMS, the preset numbers and the stored selected numbers (see chapter “Programming via SMS” for the use of SMS).

## Reading preset numbers

The programming code to be contained in the message text must be the following :

2 6 \* X X X \* X R

**XXX** : programming password

**X**: preset number location

## Reading previously selected numbers

The programming code to be contained in the message text must be the following :

2 5 \* X X X \* X R

**XXX** : programming password

**X** : selected number location

An answer message will be returned to user or the system administrator who sent out the SMS.

## Example :

an SMS has been sent out to ascertain the preset number stored at location 1 (071123456).

Outgoing message text:

**ET-IG5\*0#26\*0\*1R#**

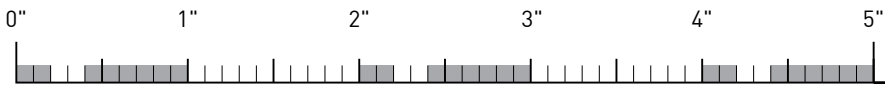
ANSWER MESSAGE TEXT :

**ET-IG5\*0#26\*0\*1R0711234**

# SIGNALS

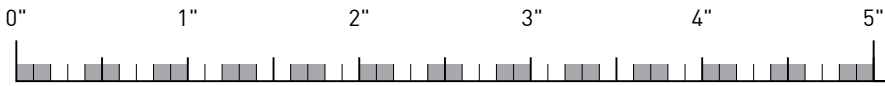
## TONES

### Dialling :



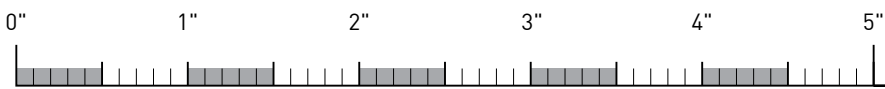
It indicates that the PGU is ready for dialling.

### Dissuasion :



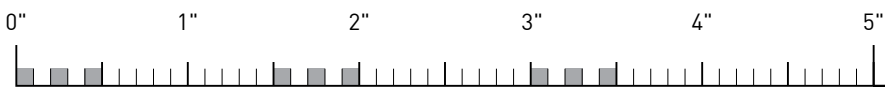
It indicates: delay in dialling, end of conversation, access to services not permitted.

### Busy :



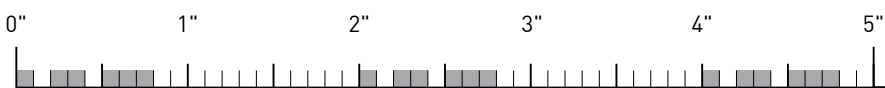
It indicates that the called party is busy.

### Confirmation :



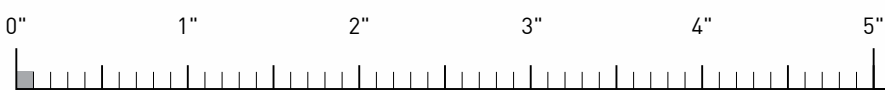
It indicates that the requested service or programming has been accepted.

### Error :



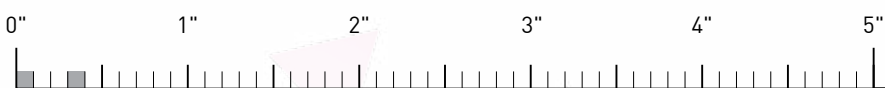
It indicates that the requested programming has not been accepted.

### GSM signal level :



Low signal level.

### Medium signal level :



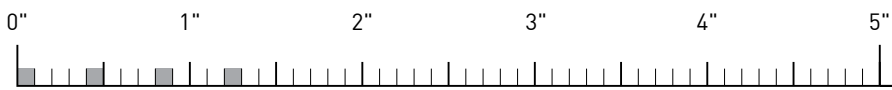
Medium signal level.

### Good signal level :



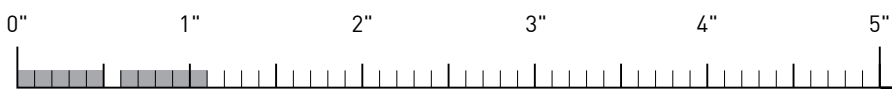
Good signal level.

### High signal level :



High signal level.

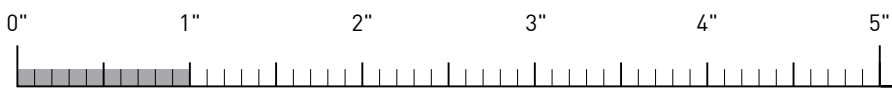
### No signal :



No signal.

## CALL SIGNALS

---



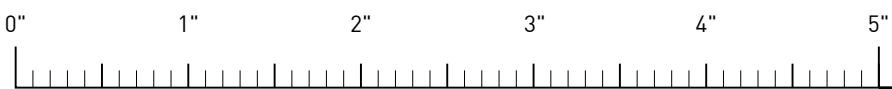
It indicates an incoming call.

## LED

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### GSM signal indicator LED (GREEN)

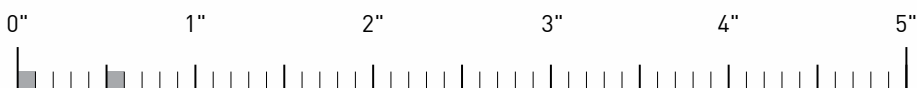
---



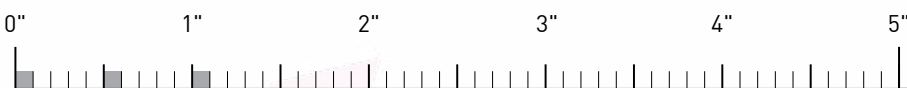
No signal.



Low signal level.



Medium signal level.



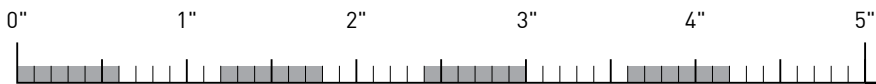
Good signal level.



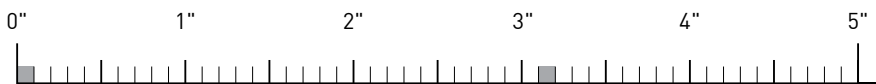
High signal level.

## Status indicator LED (RED)

---



Upon switch on, it indicates GSM network login in progress; if it keeps blinking, it may indicate that the PGU has not been correctly registered with the network, the SIM card is protected by the PIN code or other problems.



It indicates the PGU is correctly registered to the network.



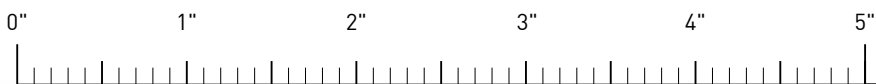
It indicates voice connection in progress.

## Line status indicator / Data transmission indicator LED (WHITE)

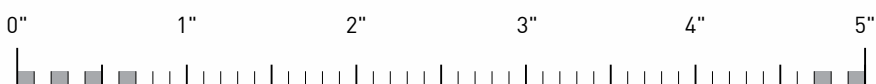
---



It indicates that the line is in use.



It indicates that the line is not in use.



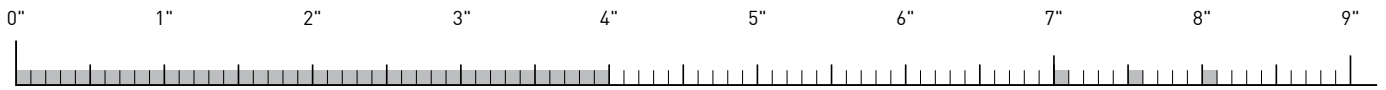
It indicates an incoming call.

## Power supply status indicator LED (BLUE)

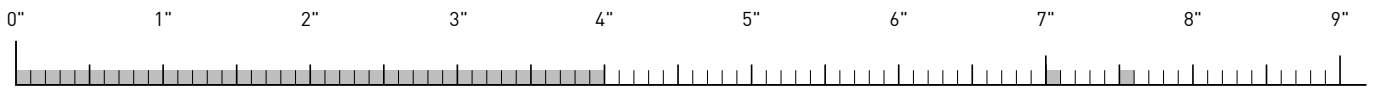
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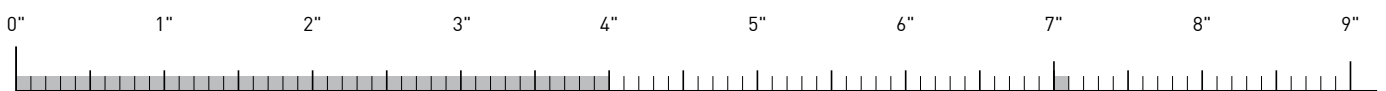
It indicates that the power supply is connected and the battery has max capacity charge



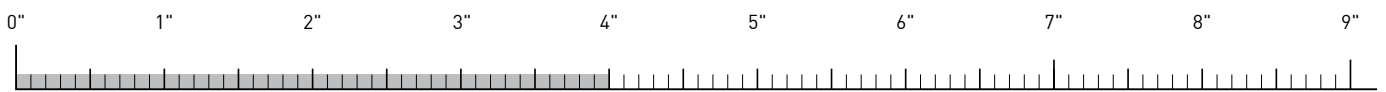
It indicates that the power supply is connected and the battery has good capacity charge.



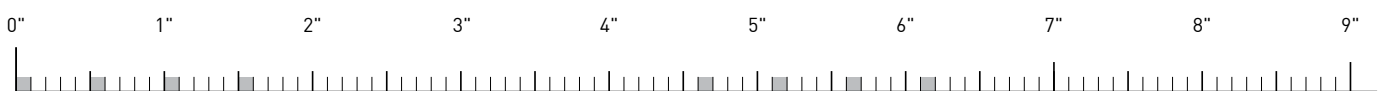
It indicates that the power supply is connected and the battery has medium capacity charge.



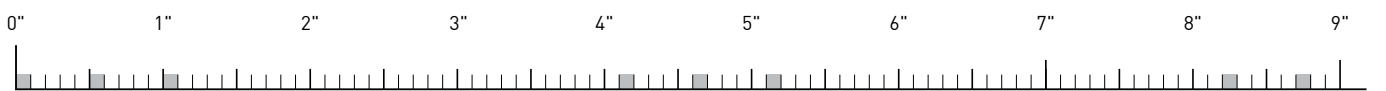
It indicates that the power supply is connected and the battery has low capacity charge.



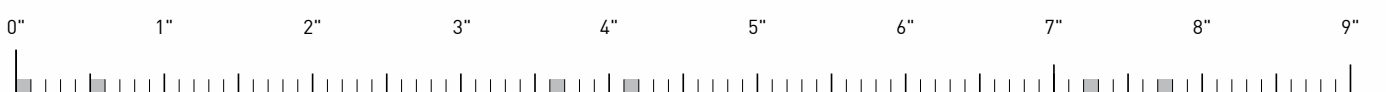
It indicates that the power supply is connected and the battery is either disconnected or dead.



It indicates that the power supply is disconnected and the battery guarantees more than 7-hour operation in idle state.



It indicates that the power supply is disconnected and the battery guarantees up to 7-hour operation in idle state.



It indicates that the power supply is disconnected and the battery guarantees 2-hour operation in idle state.



It indicates that the power supply is disconnected and the battery guarantees 1-hour operation in idle state.



# PROBLEM-DETECTION GUIDE

This section shows a list of solutions to the most commonly encountered problems.

Detected problem	Root cause	Solution
All LEDs are unlit	PGU not supplied	Check power supply
La LED rouge clignote rapidement	SIM card not present or not correctly inserted	Correctly insert the SIM card in the dedicated location
	SIM card locked by PIN code	Disable the PIN code through your mobile phone
	SIM card expired or damaged	Check the SIM card operation on your mobile phone
	SIM card not supported (e.g. UMTS)	Use a GSM SIM card
		Make a test with a SIM card from a different GSM provider
	Unconnected antenna or damaged connection cable	Check the antenna connection and the correct operation of the cable
	GSM signal absence	Check the signal strength by your mobile phone
	Insufficient power supply	Check the power supply
Generic SW problem	Switch off and back on PGU	
The red LED blinks slowly, but the green LED is unlit	GSM signal level is too low to allow outgoing calls	Move the PGU and the antenna into a better position







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