



Smart Power Socket
iSocket® GSM 706
iSocket® GSM 706 Light
iSocket® GSM 707
iSocket® GSM 707 Light
User Manual



Thank you for choosing iSocket. Please take a few minutes to read through these operating instructions carefully before using the product so that you can get full advantage of the functionality and get maximum enjoyment from it. Pay special attention to the safety instructions in Chapter 2! Incorrect use could affect your guarantee or jeopardise health or property. We reserve the right to make design changes on the device and its software without prior notice. Deviations not mentioned in this instruction might exist in the software, which is considered acceptable and not considered a defect.

NOTE!

- **These instructions apply to products iSocket GSM 706, iSocket GSM 707 and iSocket GSM 706 Light, iSocket GSM 707 Light. In some cases the text clearly indicates which option is not available in the "Light" version of the product. However please refer to technical information (Chapter 17) for detailed information about the differences in the devices. The "Light" model does not display commands associated with optional features. The documentation and product are subject to change without notice.**
- **The software supplied with this product is the exclusive property of Intellectronics. As an end-user you are granted a non-exclusive license to use this software solely in combination with the device on which it is installed and with which it is supplied. The license is non-transferable and you do not have the rights to grant sublicenses.**
- **Your iSocket device has a unique feature - " iSocket® Online 24/7" - that gets the device back online even after a break in the GSM-network. However the device needs a strong GSM signal in the area - it has an internal antenna and may not operate efficiently if the signal in your area is weak. Ensure that you have a strong GSM network before using the device. Do not put metal or other conductive objects near the device - this may cause signal loss. This product is designed for home and office use only.**
- **Different types of alerts that iSocket send you (power failure / power restored / temperature rise / temperature fall / sensor triggered / etc.) rely on the correct configuration of the mobile phone number for the alerts. Please follow the instructions in section 7.3 where you will find an introduction to the command ALERTNUMBER which will enable you to configure this number.**
- **The "707" model uses a Lithium-ion battery and MUST NOT be used outside the specified temperature! Please refer to technical information (Chapter 17) for detailed information about operating conditions and read the safety instruction (Chapter 2) carefully.**
- **If you wish to use the iSocket Power Notifier feature, plug in the device for 10 hours before use. This will charge the built-in battery.**
- **If you use a prepaid card you might be need to activate it first with your cell phone network provider.**

Content

Content	2
1. Device Description	3
2. Safety Instructions	5
3. Quick Start	7
4. Managing the iSocket Device	8
4.1 Managing by SMS	8
4.2 Managing by Phone Call	9
4.3 Manual Managing	10
5. Security Settings	10
5.1 Security Numbers List Settings	10
5.2 Password Protection	11
5.3 Renewal of the Configuration Interval	11
6. Command Confirmation	12
6.1 Confirmation of SMS-commands	12
6.2 Confirmation for Phone Calls	12
6.3 Incorrect Commands, Later Configuration and Commands From Unauthorised Users	13
7. Measurement and Control of Temperature	14
7.1 Thermometer	14
7.2 Thermostat	14
7.3 Temperature Monitoring – Notifications, iSocket® Temperature Notifier	15
7.4 Temperature Calibration	16
8. Date and Time	16
9. Room Control by Sensors	17
9.1 Alarm Function and Microrelay	17
9.2 Sensor Activity Alerts - iSocket® Alarm Notifier	18
9.3 Alarm Logs	19
9.4 External Sensors Scheme	19
9.5 Microrelay Scheme	19
10. Microphone and Room Listening	19
11. Scheduler	20
12. Status After Resumption of Power Supply	20
13. Credit Information and Subscription Management (experimental)	21
14. Version Information	21
15. Original Factory Settings	21
16. LED Indicators	22
17. Technical Data	22
18. Troubleshooting	23
19. Limits of Warranty and Liability	25

1. Device Description

iSocket® intelligent devices are designed for the remote control of electrical equipment. iSocket® devices can also be used for monitoring premises (security control, temperature monitoring, etc.) and can provide information about the state of the premises via the mobile network.

Smart socket iSocket GSM 706/707 is designed for remote switching of electrical equipment connected to it and has some additional useful features. This smart socket is controlled remotely by SMS-commands via the GSM network, using a standard mobile phone.

It is also possible to carry out some operations by a phone call. SIM-cards from most GSM-operators, including prepaid cards, can be installed in iSocket GSM 706/707.

iSocket GSM 706/707 may also be used as a thermostat thanks to its built-in thermometer, which turns equipment on and off according to your settings. iSocket GSM 706 can send information about the room temperature to your phone. You can also connect the various sensors via a special connector. Notification will be sent when it is triggered. For example, it could be a motion sensor, an "opening doors" sensor, fire detector, gas leakage detector and many more. A built-in microphone allows you to hear what is happening in the room from a remote location. Low-voltage equipment, such as alarms, can be connected for additional outputs. NOTE! The features mentioned in this paragraph are not available in the "Light" versions of the product.

The following additional options for using iSocket GSM 706/707

- Remote reboot of a computer or server
- Remote climate control in, and temperature notifications from, a summer cottage
- Switch on a coffee percolator by SMS, so the coffee will be ready for your arrival
- Alert about a break-in at home
- Switching on and off of lights and alarms
- Radio-guard: remote monitoring of sounds in a room in your absence
- Plus much more!
- Power failure notification
- Temperature rise / fall notifications

Please note that iSocket GSM 706/707 can only be used indoors.

Note that the facility to remotely monitor sounds in premises may not be used for illegal purposes! More information about microphone feature is available in Chapter 10.

For more information about the technical characteristics of the iSocket GSM 706/707 see Chapter 15.



Main power socket: socket for connecting external electrical equipment, which can be controlled remotely. (Figure shows socket type CEE 7/4 "Schuko", models ISGSM706EU, ISGSM707EU, ISGSML706EU, ISGSML707EU).

POWER

Indicator of input power from power network.

GSM

Status indicator for GSM network.

MICROPHONE

Indicate when microphone is activated.

OUT

Indicator of output power for main socket.

Additional information about the indicators is given in Chapter 16.

Hidden button: used to switch the main socket manual (Chapter 4.3) or reset device (Chapter 15).

Built-in microphone (Chapter 10)
(not available in "Light" model)



Input for sensors (Chapter 9)
(not available in "Light" model)

Socket for SIM-card

Microrelay (Chapter 9)
(not available in "Light" model)

Temperature sensor (Chapter 7)
(not available in "Light" model)

The temperature sensor is located inside the unit and is connected via a metal barrel to the outside of the body for more accurate temperature readings. The temperature sensor measures temperature and sends it via SMS on request. The main socket can be controlled by this sensor in thermostat mode. See Chapter 7.

Plug to connect iSocket GSM 706/707 to the wall socket to provide power for device and for connected appliance. (Figure shows socket type CEE 7/4, models ISGSM706EU, ISGSM707EU, ISGSML706EU, ISGSML707EU).

2. Safety Instructions

This appliance complies with accepted technological standards with regard to safety. Nevertheless, as manufacturers we consider it our obligation to make you aware of the following safety information. To ensure years of trouble-free enjoyment, and to maintain your guarantee, please note the following.

- Never carry out repairs yourself! There are no serviceable parts in the device.
- The operating voltage of the appliance and the mains voltage as well as the type of current must match (see the rating plate on the underside of the appliance).
- Only plug into a correctly installed earthed mains socket.
- The device is not intended for direct plug-in equipment, which are not equipped with a plug. External equipment that connects to the device must have a cord with appropriate plug.
- Some devices are supplied with their own switch, which needs to be disconnected before they are unplugged. Do not use this product with such devices - it cannot disable the switch of a remote device.
- Do not use external equipment with a faulty plug!
Do not connect to appliances which cannot be left unattended (e.g. certain heaters)!
- Do not exceed power load limit and other electrical parameters specified in the technical characteristics. Check the power of the connected device!
- The device is intended only for domestic private non-commercial use. Do not use in emergency environments: e.g. military, hospitals etc!
- This product is not designed for safe disconnection of the controlled equipment from power network; the device is not equipped with a residual-current device (RCD). Make sure that your home electrical network meets safety standards.
- The product is designed for indoor use in dry area. Do not use it in wet or chemically aggressive environments! For example, do not use it in the bathroom. It is also not designed for industrial operation in aggressive environments.
- Do not use this device if the casing is damaged!
- Do not shake or drop the product. This could cause damage!
- Keep away from direct sunlight.
- Keep out of reach of children!
- Block access to the management and set-up of the device to unauthorised users (Chapter 5).
- Read additional safety information in Chapter 19.

Safety Instructions for the Battery

The "707" models use a Li-ion battery. The safety instruction does not tell you how to maintain the battery, because this battery is installed inside the unit. It is strictly prohibited to replace the battery yourself - an authorised specialist must be consulted. However this safety instruction does describe the care of units using a Li-ion battery.

Read all the safety information and instructions. Failure to comply with the safety information and instructions may cause fire and / or serious injury.

We pay a great deal of attention to the design of every battery to ensure that we supply you with batteries which offer maximum durability and safety. Despite all the safety precautions, caution must always be exercised when handling devices with batteries. Studies have shown that incorrect use and poor care are the main causes of the damage caused by batteries. The following points must be obeyed at all times to ensure safe use:

- Don't throw battery or device with battery into an open fire. There is a risk of explosion!
- Always comply with the storage conditions (see Chapter 17)! Don't keep the device with its battery in places where the temperature is liable to reach levels outside those specified. In particular, do not leave the device in a car that is parked in sunshine.
- If the battery suffers overloading and/or overheating, the integrated protective cut-off will switch off the charging/discharging for safety reasons. If this happens you will not be able to get a power failure alert. Using the battery at temperatures outside those specified in the technical information (Chapter 17) will cause chemical damage and may cause a fire.
- In the event of incorrect use, fluid may escape from the battery. Avoid contact with this fluid. If you touch it by mistake, rinse the affected area with water. If you get the fluid in your eyes, seek medical advice. Stop using the device if fluid is coming from it!
- Li-ion batteries are subject to a natural ageing process. The battery must absolutely be replaced when its capacity falls just 80% from the capacity as new. A weak, old battery is no longer capable of meeting the high power requirements and therefore poses a safety risk.
- Exhaustive discharge will damage the battery. The most common cause of exhaustive discharge is lengthy storage or non-use of a partly discharged battery. Don't allow the device to be stored for a long time without use. Never use a battery-driven device if you suspect that the last time the battery was charged was more than 12 months ago. There is a high probability that the battery has already suffered dangerous damage (exhaustive discharge).




Rechargeable batteries contain materials that are potentially harmful to the environment. Batteries may not be disposed of with normal domestic waste. You should dispose of used batteries at your local collection point.

3. Quick Start

To start work with iSocket GSM 706/707 is very simple. You need a SIM-card from a GSM-operator. If you have not purchased SIM-card, then do so at the nearest mobile operator's office. You can also use prepaid cards.

NOTE! You must disable PIN-code authorisation for the SIM-card! The iSocket GSM 706/707 will not work unless you do this. You can only disable PIN authorisation by using your mobile phone. Do not use SIM-cards that contain messages! Remove all messages from the SIM-card. If you use a prepaid card you might be need to activate it first with your cell phone network provider.

Quick Start comprises three simple steps:

<p>1. Turn off PIN authorisation for SIM-card.</p>	<p>Insert the SIM-card into your mobile phone and disable PIN usage using the phone menu. You can find more information in the manual for your phone or ask assistance from the shop, where you purchased the mobile subscription.</p>
<p>2. Insert the SIM-card into the special slot and push until fixed (you will hear a click). the front side of the device.</p> <p>Do not insert or eject the SIM-card on a running device! Switch off the device before you insert or eject SIM-card.</p>	
<p>3. Connect the iSocket to a wall socket.</p> <p>If you have forgotten to disable PIN authorisation the GSM indicator will start blinking rapidly. Make sure that PIN authorisation was turned off!</p> <p>If the SIM-card is not inserted correctly or is damaged the indicator POWER and OUT will signal this by specific blinks (see Chapter 16).</p>	<p>All indicators blink three times simultaneously (except GSM indicator). functioning the POWER indicator will be green. GSM indicator blinks once a second during network search and every 3 seconds when the network has been found. More information about the indicators in Chapter 16.</p> <p>The device might reject some old sim cards. Please make sure you are using a modern sim card which complies with specification.</p>

The device is now ready to work! You can carry out a simple test. Connect an appliance to the iSocket, e.g. a desk lamp (don't forget to turn on the lamp switch). Send the message **ON** to the SIM-card number and the lamp will switch on. Send the message **OFF** and the lamp will turn off.

4. Managing the iSocket Device

You can manage the device with SMS-commands, by phone call or manually. SMS management offers best performance.

4.1 Managing by SMS

Commands are sent in form of SMS messages to the SIM-card number of the iSocket. Messages have the following syntax:

COMMAND (for example, **STATUS**).

If a password was configured (see Chapter 5), then you must use following syntax:

passwordCOMMAND (for example, **12345STATUS**),

where *12345* is a password set by the command *PASSWORD=12345* (more details in Chapter 5).

There are three types of commands:

Configuration commands (marked "30min" in the tables)

- Allow parameters and functions to configure the iSocket device. The configuration can only be performed within 30 minutes after device has been powered on or after the last configuration command has been received. If you try to configure device after 30 minutes, then you will get the message "*command - Time for configuration is expired (30min)* " (only if ERROR=ON - see Chapter 6). To remind the user of this limit we have marked configuration commands as "30min" in the column "type" in the tables. Settings are stored in non-volatile memory and are not lost when power is off.

Information configuration commands (marked "Inf" in the tables)

- These commands have a question mark at the end (*COMMAND?*). These are information commands. In response you will receive the current value of the parameter, which has the same name as the command. These commands do not activate the configuration, but only inform you of the value. These commands are available at any time. You can set up the facility to reset the configuration interval (see section 5.3).

Control and management commands (marked "Ctrl" in the tables)

- Used to control the iSocket device and can be used at any time.

Each command has a default value. This is the value that was installed at the factory (for details see Chapter 15). Commands are not case sensitive. You will get a response after sending the command. This can be disabled if desired (see Chapter 6).

Should a *configuration* command have different values these will all be seen in response to the *information* command associated with this configuration command. The values will be comma-separated and the current active value will be indicated in parentheses. For example, you send the information command "*COMMAND?*". In response you will get the reply "*COMMAND=OFF,(ON)*". This means that the current active value is "*ON*", and "*OFF*" is another value acceptable for this command. This syntax is made for your convenience - you do not need to refer to the manual each time when to remember all possible values. They will be given in the response. The first value in the response is the factory default value (see Chapter 15).

If you make a mistake in the command and send an incorrect command, you will receive a message "*command - Error!*" (Only if ERROR=ON - see Chapter 6). If a command longer than 30 characters was sent, it will be deleted without any response notifications.

NOTE! Configuration commands are only accepted during the first 30 minutes after powering on. This is for security reasons. If you want to reconfigure the device, you must disconnect it from the mains outlet and turn it on again. You can also set up the facility to reset the configuration interval (see section 5.3).

The list of simple commands for management and configuration is shown in the following table. The real response may differ from those indicated in the table, depending on the command.

Command	Description	Response	Type
ON	Turn on main power socket	Power socket ON	Ctrl
OFF	Turn off main power socket	Power socket OFF	Ctrl
ON123	Turn on main power socket for 123 minutes. Maximum value is 720 minutes.	Power ON for 123 min	Ctrl
OFF123	Turn off main power socket for 123 minutes. Maximum value is 720 minutes.	Power OFF for 123 min	Ctrl
ONM	Turn on microrelay	Microrelay ON	Ctrl
OFFM	Turn off microrelay	Microrelay OFF	Ctrl
ONALL	Turn on main socket and microrelay	All ON	Ctrl
OFFALL	Turn off main socket and microrelay	All OFF	Ctrl
RESTART	Restart (return to the same status after a certain period of time) main socket. Time for restart set by RESTARTTIME.	Power socket restarted	Ctrl
RESTARTM	Restart microrelay. Time for restart set by RESTARTTIME.	Microrelay restarted	Ctrl
RESTARTTIME=5	Configures time (in seconds) for RESTART command. Maximum value is 600 seconds.	RESTARTTIME=5 - OK	30min
RESTARTTIME?	Informs about RESTARTTIME value	RESTARTTIME=5 seconds	Inf
STATUS	Request for main power socket and microrelay status, temperature, GSM signal, date, sensor's status, etc.	Power socket ON Microrelay OFF Signal: Good (-67dBm) TEMP: 25C ALARMF: Disabled ALARM status: No activity Time: y/m/d,h:m:s	Ctrl
TEMPERATURE	Informs about temperature in the room. See details in Chapter 7.	TEMPERATURE: 25C	Ctrl
RUNTIME	Informs how long main relay has been turned on (since last restart or power on) If you turn on the main socket manually before the correct date was installed on the device, the start-up time of the device will not be recorded correctly.	Power socket is ON from: y/m/d,h:m:s	Ctrl

4.2 Managing by Phone Call

The main socket for external electrical equipment can also be managed by mobile or landline phone. For example, you can call to the phone number of the SIM-card in the device and the equipment connected to the device (e.g. computer) will be restarted. After a call to iSocket the action occurs immediately. The action must be pre-configured. There is no action configured by default. Keep in mind that you are not able to configure the active actions if the security number list (Chapter 5.1) is not configured. This is because the password protection is not available for calls, so anyone can call to the SIM-card number if there is no security numbers list protection and this call may cause unwanted reboot or microphone activation. Accordingly, if you are going to disable the security numbers list protection, then the option *RING* goes into the value "NOACTION" automatically.

In response to the activating call the device will send you a message. You can configure a call response instead of an SMS. Read more about this in Chapter 6.2. The following table indicates which actions can be pre-configured.

Command	Description	Response	Type
RING=SWITCH	Switching (changing status to negative) main power socket by phone call	RING=SWITCH – OK SECLIST is not active!	30min
RING=RESTART	Restart (return to the same status after a certain period of time) main socket by phone call. Time for restart set by RESTARTTIME.	RING=RESTART – OK SECLIST is not active!	30min
RING=MIC	Microphone is activated by phone call and you can detect sounds coming from the room. No sockets switching. See details in Chapter 10.	RING=MIC – OK SECLIST is not active!	30min
RING=NOACTION	Ignore phone calls	RING=NOACTION – OK	30min
RING?	Informs what action configured	RING=(NOACTION),RESTART, SWITCH, MIC	Inf

4.3 Manual Managing

Only the main power socket can be managed manually. You can switch it manually by a hidden button which is on the front panel next to the logo. The button can be activated with a suitable thin mechanic tool. Pressing this button switches the main power socket to a negative value. So, if it was turned off, it will be turned on and vice versa.

5. Security Settings

Block access to iSocket management for unauthorised users! **If there are no security settings, then anyone who knows the phone number of the SIM-card will be able to manage the device - which is not advisable!** The device uses two methods of protection against unauthorised access:

- Only allowing access to authorised phone numbers
- Authentication by password

Both methods can be used separately or together. In the first method the device ignores SMS-commands and calls from numbers that are not listed. The list can contain up to 10 numbers. The second method involves the use of individual 5-characters password. This password must be typed before the SMS-commands without any space or special characters as shown here:

passwordCOMMAND (for example, **12abcSTATUS**),
where *12abc* is a password set by the command *PASSWORD=12abc* (more details below).

5.1 Security Numbers List Settings

The security list allows you to configure up to 10 numbers and up to 15 digits for one phone number. Below is a list of commands that explain how to activate the security list and how to add a number. By default, the security list is disabled and does not contain any numbers.

Command	Description	Response	Type
SECNUMBER+3589123456789	Add new number to security list	SECNUMBER+3589123456789 – OK	30min
SECNUMBER-3589123456789	Delete specific number from security list	SECNUMBER-3589123456789 – OK	30min
SECNUMBER-ALL	Delete all numbers from the list	SECNUMBER-ALL – OK	30min
SECNUMBER?	Request for security list numbers	SECNUMBERS 3589123456789, 3589000000555	Inf
SECLIST=ON	Activate security list	SECLIST=ON – OK	30min
SECLIST=OFF	Disable security list	SECLIST=OFF – OK	30min
SECLIST?	Information about security list activation	SECLIST=OFF,(ON)	Inf

Telephone numbers must be added in international format (with country code) without spaces or hyphens. Here are two general examples of how to add and remove number 358-(0)9-123456789

SECNUMBER+3589123456789 – example of adding number

SECNUMBER-3589123456789 – example of removing number

Here 358 is country code for Finland, (0)9 is city code for Helsinki and 123456789 is local number.

Here are two UNITED STATES examples of how to add and remove number 5555555

SECNUMBER+12125555555 – example of adding number

SECNUMBER-12125555555 – example of removing number

Here 1 is the United States country code, 212 is the city code for New York and 5555555 is a 7-digit local number.

NOTE! Some mobile operators indicate international numbers when transmitting SMS's (in our first example 3589123456789), but during the call such operators indicate number in local format (in our first example it will be 123456789). If such behaviour was noticed in your mobile network you have to add **both numbers** to the list! It means in addition to the international number you must also add the local number by the command **SECNUMBER+123456789**.

If you add a number to the list when the list is not activated, the protection will be disabled. Do not forget after adding number to activate security list by command **SECLIST=ON**. If you deleted all the numbers by command **SECNUMBER-ALL**, the protection will be disabled automatically (**SECLIST=OFF** became active).

Make sure that Caller ID is active for the listed number. All numbers that the system does not recognise are considered to be unauthorised numbers.

We suggest that you always use security list protection, even if you use password protection. Chapter 6.3 lists more reasons for this alternative.

5.2 Password Protection

The following table shows how to set a password for managing access. The password must consist of 5 characters. Do not use a simple combination of numbers for a password! Password 12345, 11111, abcde and other such passwords are not secure!

NOTE! Don't forget to add the old password before the command **PASSWORD=x if you are going to remove password protection or update the password.**

Command	Description	Response	Type
PASSWORD=12abc	Set password 12abc	PASSWORD=***** – OK	30min
PASSWORD=NO	Disable password	PASSWORD=NO – OK	30min

5.3 Renewal of the Configuration Interval

If you're away from the device but need to reconfigure it and the configuration time has expired then you can resume the configuration. You will get another 30 minutes window for configuration. However taking into account that this timeout is an additional level of security the opportunity to reset this limit should be protected by password and configured in advance. If you have not done this in advance then you will not be able to do it remotely.

Please note the following: To be able to reset the interval you have to set a password for that. This password cannot be set if a method of protection was not configured (paragraphs 5.1, 5.2). You will get the message "*No security setup!*". Accordingly, if you remove all protection, the ability to renew the interval is also lost (*RENEWINTERVALPW=NO* setting becomes active). The password for the resumption of the interval consists of 9 characters.

Command	Description	Response	Type
RENEWINTERVALPW=123456abc	Set password 123456abc for configuration interval renew	RENEWINTERVALPW=*** ***** – OK No security setup!	30min
RENEWINTERVALpassword	This will renew configuration interval and you will get another 30min window for configuration commands. "password" must be changed to your actual password configured for this feature	Configuration interval renewed Renew password was not setup Invalid renew password!	Ctrl
RENEWINTERVALPW=NO	Remove password for configuration interval renew (renewal is not possible anymore)	RENEWINTERVALPW=NO – OK	30min
RENEWINTERVAL?	Informs whether it is possible to reset configuration interval limit or not	Password presented, renew possible	Inf

6. Command Confirmation

It is important to confirm that the command was executed successfully. For this purpose we have implemented notifications of each executed command. If you wish to receive execution confirmations the setting "hide my number" should not be activated on the phone from which you are sending messages or making calls to iSocket.

6.1 Confirmation of SMS-commands

If you activate this notification, you will be informed about each command execution. It is the default setting, but you can disable these notifications to save the cost of SIM-card messages.

Command	Description	Response	Type
SMSCONFIRM=ON	Response messages to SMS-commands will be sent	SMSCONFIRM=ON – OK	30min
SMSCONFIRM=OFF	Do not send response messages to SMS-command	SMSCONFIRM=OFF – OK	30min
SMSCONFIRM?	Information about SMSCONFIRM configuration	SMSCONFIRM=ON,(OFF)	Inf

The next commands are not affected by the SMSCONFIRM setting due to the specific nature of the commands: STATUS, TEMPERATURE, RUNTIME, SHOWALARMLOG, SALDO, HARDWARE, SERIALNUM, FIRMWARE, DATE and all information commands ("Inf").

6.2 Confirmation for Phone Calls

When managing by phone call, your command will be also confirmed by return SMS, but you can configure the device to call back to the mobile phone instead of sending SMS. In this case iSocket will call to your phone within about 10 seconds and then hangs-up. So, SIM-card credit will not be spent. If you pick up the handset the microphone will be activated (not available in "Light" model) and you can hear what is happening in the room. You are free to hang up whenever you want. You can also disable any responses for the phone calls.

Command	Description	Response	Type
RINGCONFIRM=ON	Notify the results after phone call to the device	RINGCONFIRM=ON - OK	30min
RINGCONFIRM=OFF	Don't notify results after phone call to the device	RINGCONFIRM=OFF - OK	30min
RINGCONFIRM?	Information about RINGCONFIRM configuration	RINGCONFIRM=(ON),OFF	Inf
RINGCONFIRMTYPE=SMS	Send response SMS after call to device	RINGCONFIRMTYPE=SMS - OK	30min
RINGCONFIRMTYPE=CALL	iSocket call back to your phone within 10 seconds and then hang-up	RINGCONFIRMTYPE=CALL - OK	30min
RINGCONFIRMTYPE?	Information about RINGCONFIRMTYPE config.	RINGCONFIRMTYPE=(SMS), CALL	Inf

6.3 Incorrect Commands, Later Configuration and Commands From Unauthorised Users

If an incorrect command was sent to the device (typo mistake, for example), you will get the "*command - Error!*" response. If you have password protection, but forgot to specify it before command (see Chapter 5.2), you will get the "*Invalid access password!*" response. If you are trying to assign an invalid value to the configuration command, you get the message "*Incorrect value!*". You will get "*Time for configuration is expired (30min)!*" response when you try to send a configuration command after the configuration time is up (see Chapter 4). If an unexpected error occurred during the command execution you will get the message "*Execute error!*". You can disable all the above error messages by setting options *ERROR=OFF*.

If the security list was configured (see Chapter 5.1) and someone tries to execute a command no response will be received until you install SMSCONFIRMUNAUTH=ON. If you set "ON" value for this parameter, then unauthorised numbers will receive the message "*Access deny!*" in response to an attempt to execute any command. **We do not recommend you to set "ON" value for this option, because unauthorised users who know the phone number of the SIM-card can deplete the card's credit with such response messages. Therefore, we also strongly suggest using protection with security list (Chapter 5.1), and not just password protection!** This is due to the fact that a command typed without a password is considered an incorrect command and the illegal sender will receive "*command - Error!*" in response. And he can also deplete SIM-card credits by such responses.

Command	Description	Response	Type
ERROR=ON	Activates sending of information SMS for each received SMS command, which was not executed due to any error.	ERROR=ON - OK	30min
ERROR=OFF	Disable the error messages responses	ERROR=OFF - OK	30min
ERROR?	Information about ERROR configuration	ERROR =(ON),OFF	Inf
SMSCONFIRMUNAUTH=ON	Send reports (errors, not permitted, time out) to unauthorized numbers	SMSCONFIRMUNAUTH =ON - OK	30min
SMSCONFIRMUNAUTH=OFF	Don't send reports to unauthorized numbers	SMSCONFIRMUNAUTH =OFF - OK	30min
SMSCONFIRMUNAUTH?	Information about SMSCONFIRMUNAUTH configuration	SMSCONFIRMUNAUTH =(OFF),ON	Inf

Generally, it should be noted that the *ERROR=OFF* command disables all reports about errors and later configuration for all senders. By default, this option is set to "ON", so that during the familiarisation period you can get all responses about errors and will not

be confused when there is no response from the device. Once you are familiar with the device, you can then disable the error message responses. In the beginning however, we strongly recommend configuring the list of allowed numbers (Chapter 5.1) and keeping the option *SMSCONFIRMUNAUTH*, which is set to *OFF* by default.

7. Measurement and Control of Temperature

The features described in this chapter are not available on the "Light" models.

NOTE! iSocket can be supplied in Celsius or Fahrenheit degree versions. The standard for the "US" models is Fahrenheit.

7.1 Thermometer

iSocket GSM 706/707 has a built-in thermometer, which measures the temperature of the environment and can provide it via SMS. Information about the temperature can be available 10 minutes after the device is switched on.

Command	Description	Response	Type
TEMPERATURE	Informs about temperature in the room	TEMPERATURE: 25C, TEMPERATURE: 77F	Ctrl
STATUS	Request for socket's status and temperature information includes	Power socket OFF ... TEMP: 25C	Ctrl

7.2 Thermostat

The device has a built-in thermostat that can control both heating and cooling systems. In the latest model, operation with the thermostat is much simpler! The thermostat feature allows you to control the main power socket and change it depending on the pre-configured off-temperature. The thermostat is operational 10 minutes after the power is switched on. The temperature reading interval is 1 minute (for models manufactured after July 2012). If the thermostat is enabled, the first reading will occur 10 minutes after the power was switched on. If the thermostat was already activated, then the first reading will occur no later than 1 minute from the time it was activated. The thermostat is an optional extra for iSocket GSM 706/707 which should not be considered a precision instrument. The accuracy of the thermostat is $\pm 2^{\circ}\text{C}$ ($\pm 3.6\text{F}$).

Command	Description	Response	Type
THERMOSTATON	Activate thermostat	THERMOSTATON – OK THERMOSTAT=HEATING TEMPOFF=10 Attention! Thermostat is working now!	Ctrl
THERMOSTATOFF	Disable thermostat	THERMOSTATOFF – OK Attention! Thermostat was disabled!	Ctrl
THERMOSTAT=HEATING	Set the condition of thermostat. Use this value if heating system is connected to device	THERMOSTAT=HEATING – OK TEMPOFF=10 THERMOSTAT: Disabled	30min
THERMOSTAT=COOLING	Set the condition of thermostat. Use this value if cooling system is connected to device	THERMOSTAT=COOLING – OK TEMPOFF=22 THERMOSTAT: Enabled	30min
TEMPOFF=10	Set the temperature for turning off the main socket (the value from 0 to 50 Celsius, or from 32 to 122 Fahrenheit for "US" models). Works only if thermostat is enabled.	TEMPOFF=10 – OK THERMOSTAT=HEATING THERMOSTAT: Disabled	30min
THERMOSTAT?	Information about thermostat configuration	THERMOSTAT: Enabled THERMOSTAT=HEATING TEMPOFF=10	Inf

A typical example of temperature control would be heating activation in remote area if the temperature drops below 10C (50F). The following settings must be used: THERMOSTAT=HEATING, TEMPOFF=10 (or TEMPOFF=50 in Fahrenheit for "US" models), THERMOSTATON. With these settings the thermostat will keep the temperature in the range of about 10C (50F). This means that as soon as the room is heated up to 10C (50F) the main socket is turned off. If the current temperature in the room is over 10C (50F) the main socket does not turn on until the temperature drops below 10C (50F).

Another example is air conditioning activation when the temperature exceeds 22C (THERMOSTAT=COOLING, TEMPOFF=22, THERMOSTATON). This means that as soon as the room is cooled to 22C the main socket is turned off. If current temperature in the room is less than 22C the main socket does not turn on until the temperature rises above 22C. TEMPOFF could be installed in Fahrenheit for "US" models in that case as well.

7.3 Temperature Monitoring – Notifications, iSocket® Temperature Notifier

You can receive a message when the "switch-off" temperature (set by TEMPOFF=X) is reached. This feature is related with thermostat and works only if thermostat is enabled. Before setting up such alerts you must set up at least one phone number for alerts. If you remove all phone numbers, then alerts will be also disabled (THERMALERT=OFF will be active value).

Command	Description	Response	Type
ALERTNUMBER+358912345678	Set the number for SMS. This number is used in some other cases - Chapters 9.2, 11 and 12. You can install up to 10 numbers. Instructions how to add a number are similar to those given in Chapter 5.1. You must set up this number before doing other configurations!	ALERTNUMBER+358912345678 - OK	30min
ALERTNUMBER-3589123456789	Remove number from list	ALERTNUMBER - 3589123456789 - OK	30min
ALERTNUMBER-ALL	Remove all numbers	ALERTNUMBER-ALL - OK	30min
ALERTNUMBER?	Information about numbers	ALERTNUMBERs: 3589123456789, 3589223456789 No ALERTNUMBERs!	Inf
THERMALERT=ON	Enable SMS sending when TEMPOFF is reached and main socket is therefore deactivated. Works only if thermostat is enabled.	THERMALERT=ON - OK	30min
THERMALERT=OFF	Disable SMS alert	THERMALERT=OFF - OK	30min
THERMALERT?	Show current settings for THERMALERT	THERMALERT=(OFF),ON	Inf
TRISEALERT=35	Set the temperature at which you should receive a temperature rise alert (the value from -10 to 50 Celsius, or from 14F to 122F for "US" models).	TRISEALERT=35 - OK	30min
TRISEALERT=OFF	Disable temperature rise alert	TRISEALERT=OFF - OK	30min
TRISEALERT?	Show current settings for TRISEALERT	TRISEALERT=30	Inf
TFALLALERT=15	Set the temperature at which you should receive a temperature fall alert (the value from -10 to 50 Celsius, or from 14F to 122F for "US" models).	TFALLALERT=15 - OK	30min
TFALLALERT=OFF	Disable temperature fall alert	TFALLALERT=OFF - OK	30min
TFALLALERT?	Show current settings for TFALLALERT	TFALLALERT=5	Inf

iSocket® Temperature Notifier

iSocket® Temperature Notifier - this is a feature of the iSocket device which notifies you in the event of the room temperature falling below or rising above critical levels. This feature does not affect the thermostat and can work independently.

If you need to know when the temperature drops below the specified level, set TFALLALERT. If you need to know when the temperature exceeds the specified value, set TRISEALERT. This feature might not be available on the "ISGSM706xx" models. This feature is available on the "ISGSM707xx" models. However this feature is considered experimental. **Correct operation of these experimental features cannot be guaranteed. We reserve the right to remove these features in future versions of devices. The absence or incorrect function of these features on your device will not be covered by warranty.**

Please note, information about the temperature can be available 10 minutes after the device is switched on.

7.4 Temperature Calibration

Temperature measurements are often influenced by internal heating from the built-in electronics, so the built-in thermometer can give temperature readings which are a little higher than the actual. For this reason a temperature calibration constant is factory-set, based on practical experience, to the value of 5 which means 5C or 41F. This calibration can be changed individually for each monitored environment. The value can be decided empirically, by comparing with the exact thermostat temperatures measured.

Command	Description	Response	Type
TEMPCAL=7	Change calibration constant (from 1 to 9) The meanings of calibration constants: 1 – 1C – 33.8F 2 – 2C – 35.6F 3 – 3C – 37.4F 4 – 4C – 39.2F 5 – 5C – 41.0F 6 – 6C – 42.8F 7 – 7C – 44.6F 8 – 8C – 46.4F 9 – 9C – 48.2F	TEMPCAL=7 – OK	30min
TEMPCAL?	Show current calibration constant	TEMPCAL=5	Inf

8. Date and Time

The features described in this chapter are not available on the "Light" models.

Date and time are used for logging alarms (Chapter 9.3) and to configure the scheduler (Chapter 11). The date can also be seen in the *STATUS* response.

The device automatically sets the date as soon as you start to use it. No action is required! However, if for some reason at the beginning of the operation an incorrect date or time was set, and then set it again manually or automatically. Automatic date/time settings are based on the GSM operator's network date/time.

The device saves date and time settings for several hours after a power failure.

Command	Description	Response	Type
DATESMS	This message is automatically set with the date based on time taken from the SMS	DATE yy/mm/dd, hh:mm:ss+zz – OK	30min
DATE=yy/mm/dd, hh:mm:ss+zz	Manually set the date and time zz – is GMT time zone	DATE=yy/mm/dd, hh:mm:ss+zz – OK	30min
DATE	Request for actual date and time in device	DATE yy/mm/dd, hh:mm:ss+zz	Ctrl

9. Room Control by Sensors

The features described in this chapter are not available on the "Light" models.

With iSocket GSM 706/707 you can set up protection and control of your premises. If you do not have the required skills, then ask for help from a specialist. This section only provides brief explanations needed for a specialist to configure the device and not a detailed explanation.

9.1 Alarm Function and Microrelay

You can connect various sensors to the special connector on iSocket GSM 706/707 - for example a door sensor and/or a motion sensor. You should add a phone number for notification when a sensor is activated. This connects the sensors, but the alarm function is not active. When you leave the home you activate the alarm function. Now, when the sensor is triggered you will receive an alert on your phone and, if you have connected an external siren to the micro relay socket, it will also be activated. Before entering on returning home you need to deactivate the alarm function. The following table lists all the SMS-commands needed for the above.

Entering the house without having disabled the alarm function will send alerts and sound the siren (if connected) because the sensors have been activated. In this event the alarm function can be deactivated manually by using the hidden button. Push the hidden button once. After this, the button returns to the normal operation mode for which it is intended. This facility is available should you have forgotten or lost your phone.

Command	Description	Response	Type
ALERTNUMBER+358912345678	Add number for alerts about sensors activation. Maximum 10 numbers. Guidance how to add the number equivalent to those in Chapter 5.1. Other commands related to this ALERTNUMBER are given in Chapter 7.3, 11 & 12	ALERTNUMBER+358912345678 – OK	30min
ALARMON	Switch sensors to standby mode (activates the Alarm Function)	ALARMON – OK ALARM function: Enabled	Ctrl
ALARMOFF	Deactivates standby mode for sensors (nothing happens if sensor is triggered)	ALARMOFF – OK ALARM function: Disabled	Ctrl
ALARM?	Information about Alarm Function status	ALARM function: Disabled Sensor(s): Connected ALARM status: No activity Micro relay: Disabled	Inf
MICRORELAYTIME=10	Switch contacts of micro relay to a certain period of time (1-900 sec) when sensor is activated. Available only when Alarm Function is enabled. Can be used to activate external siren, etc. MICRORELAYTIME=0 disables this feature.	MICRORELAYTIME=10 – OK	30min
MICRORELAYTIME?	Information about MICRORELAYTIME value	MICRORELAYTIME=10 seconds	Inf
SENSORTYPE=NO	The value depends on the sensor type. Set this value if the sensor is N/O type.	SENSORTYPE=NO – OK	30min
SENSORTYPE=NC	The value depends on the sensor type. Set this value if the sensor is N/C type.	SENSORTYPE=NC – OK	30min
SENSORTYPE?	Information about SENSORTYPE configuration	SENSORTYPE=(NO),NC	Inf

9.2 Sensor Activity Alerts - iSocket® Alarm Notifier

iSocket® Alarm Notifier - a feature of the iSocket device which will notify you in the event of a break-in and some other case. You can receive notifications in various ways. iSocket GSM 706/707 can call you or send an SMS when the sensor is triggered. You can also be informed by SMS on each change of sensor's status (change of logical value).

If you have configured notifications by messages the device will send messages to all numbers. If call alerts are configured, the device will call you within about 20 seconds. If you pick up the handset the microphone will be activated and you will hear sounds from the room. If you don't pick up after 20 seconds the device will try to reach the next number on the list. The device will only try to call each number once. The call-notification cycle is considered complete as soon as someone answers or hangs up. If no number is reached during the call-cycle, the device will send messages to all alert-numbers, thus completing the notification cycle. SMS-notification cycle is considered complete as soon as all messages have been sent by the device. Therefore the most important numbers for notifications have to be placed at the beginning of the list.

Only one alarm within 60 seconds is indicated. This means that if two (or more) sensors were activated within one minute, you will only get the one alert. During the notification cycle the device will not detect new sensor triggering. The device will be ready to detect sensor activity no later than one minute after completion of the notification cycle. If the sensor is still active at this time the device will start a new session of notifications.

For these reasons the *ALERT=CALL/SMS* is the ideal option for many PIR sensors, which changes its logical "0" to logical "1" value and back to "0". In this case only one alert is generated and you receive a notification. However, this setting is not suitable, for example, for door sensors which change their logical state from "0" to "1" and stay in this state. Since they remain in this state you will receive endless alerts until you deactivate the alarm function with the command *ALARMOFF*. For sensors that change their status and stay in that status, the option *ALERT=SMSCHANGE* was designed. With this configuration you will be notified only once - when a logical value is changed.

The microrelay will be active for the time configured by command *MICRORELAYTIME*. However it will be deactivated as soon as someone picks up the phone during the call-notification cycle. The microrelay is active only if the alarm function is active.

Command	Description	Response	Type
ALERT=CALL	Notify by phone call to predefined number when the sensor is triggered	ALERT=CALL - OK	30min
ALERT=SMS	Send SMS to predefined number when the sensor is triggered	ALERT=SMS - OK	30min
ALERT=SMSCHANGE	Send SMS to predefined number when the sensor's status is changed (logical value was changed)	ALERT=SMSCHANGE - OK	30min
ALERT=OFF	Disable alerts. (This is useful if you want just to activate Micro relay when sensor was triggered)	ALERT=OFF - OK	30min
ALERT?	Information about ALERT configuration	ALERT=(SMS),CALL,SMSCHANGE, OFF	Inf

9.3 Alarm Logs

You can read alarm logs which record sensor activity. The device keeps the last 10 events sorted by time. One of the simplest ways to use this feature is to monitor people entering the room (when room was visited).

Command	Description	Response	Type
SHOWALARMLOG	Show alarm logs	yy/mm/dd:hh:ss	Ctrl

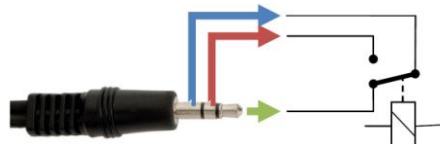
9.4 External Sensors Scheme

The sensors are connected using a 3.5mm mini-jack. Do not insert or eject the jack on an operating device! Before you insert or eject the jack you should switch off the device. You can connect several sensors in parallel, but the sensors will not be recognised individually. You can find various sensors on the market: motion, door opening, fire, smoke, gas or water leak, etc. The total power consumption of the sensors connected should not exceed 300mA. We recommend that you only use approved sensors, failing which we will not be held responsible for the operation of the device.



9.5 Microrelay Scheme

Microrelay designed for switching of external electrical contacts.



It can switch 24VDC / 2A max.

Connectors and sensors are not supplied with the device. These can be bought directly from us or our dealer network.

10. Microphone and Room Listening

The features described in this chapter are not available on the "Light" models.

Please note that the illegal collection of information is prohibited in most countries. The microphone feature may only be used for lawful purposes. For instance, you can use the device as a remote listening station. If this device is installed in a room and the alarm is triggered in your absence, you can call the device and listen to sounds emanating from the room. Each time the device calls you (for example, sensor triggering) the microphone is activated when you pick up the handset.

Command	Description	Response	Type
MICLEVEL=15	Setup mic level (value from 0 to 15)	MICLEVEL=15 – OK	30min
MICLEVEL?	Inform about MICLEVEL value	MICLEVEL=15	Inf
CALLBACK	If you send this SMS to the device, then it will call you back. This is convenient if you do not want to spend money on your own number. The device hangs up after about 30 seconds if you not pick up the phone	Call-back to your number if it can be recognized	Ctrl

Remember that you are not able to execute CALLBACK if the security number list or password protection is not configured (Chapter 5.1, 5.2)

11. Scheduler

The features described in this chapter are not available on the "Light" models.

The main power socket can be controlled in the automatic mode, based on pre-scheduled rules. Some other commands could be executed at pre-defined intervals. For example, enable/disable Alarm Function or regularly send status of the device. The schedule accepts a maximum of 8 rules.

Command	Description	Response	Type
SCHEDULER+hh:mm,day,action	This command adds a new rule for a specified time valid for all days within a week	SCHEDULER+hh:mm,*, ON – OK	Ctrl
SCHEDULER-hh:mm	Delete record for configured time	SCHEDULER-hh:mm - OK	Ctrl
SCHEDULER-ALL	Remove all tasks	SCHEDULER-ALL - OK	Ctrl
SCHEDULER?	Request for scheduler configuration	11:59,*,AON	Inf

* = any day; 1=Monday, 2=Tuesday, 3=Wednesday, 4=Thursday, 5=Friday, 6=Saturday, 7=Sunday

Actions: ON=Turn on, OFF=Turn off, INF=Send status of iSocket (STATUS command execute), AON=Alarm function activation (premises will be under surveillance),
AOF= Alarm function deactivation (disable premises protection)

Examples:

SCHEDULER+08:00,*,ON	Turn on main power socket every day at 8:00
SCHEDULER+20:30,*,OFF	Turn off main power socket every day at 20:30
SCHEDULER+09:00,1,AON	Activate Alarm function every Monday at 09:00
SCHEDULER+18:00,5,AOF	Disable Alarm function every Friday at 18:00
SCHEDULER+17:00,6,INF	Send status of iSocket every Saturday at 17:00

Status information is sent to the number specified by command **ALERTNUMBER+** (see Chapter 7.3).

12. Status After Resumption of Power Supply

These settings are stored in non-volatile memory and are not upset by power supply interruptions.

Command	Description	Response	Type
POWERSTATE=REMEMBER	The main power socket remembers its state and returns to it after the resumption of power supply to the device	POWERSTATE=REMEMBER – OK	Conf
POWERSTATE =ON	The main power socket always turns on when resuming power supply to the device	POWERSTATE=ON – OK	Conf
POWERSTATE =OFF	Main power socket is always turned off when resuming power supply to the device	POWERSTATE=OFF – OK	Conf
POWERSTATE?	Information about POWERSTATE configuration	POWERSTATE=(REMEMBER), ON, OFF	Inf

iSocket® Power Notifier

iSocket® Power Notifier - a feature of the iSocket device which will notify you in the event of a power failure and/or the restoration of the power supply.

This feature is available on the "707" models, which have a built-in rechargeable battery. Some "706" models partially support this feature and can inform you of the restoration of power supply, but cannot inform of interruptions of power, since they do not have a built-in battery. The availability of this feature on the "706" models cannot be guaranteed.

To receive such alerts you need to configure the number for alerts using the command **ALERTNUMBER**. Description of this command can be found in Chapter 7.3. Once this number has been configured you will receive messages whenever power is interrupted

and/or restored. This number is also used for other notifications. You can only disable this feature by removing the number for notification.

Note! This feature might be unstable if you use more than one ALERTNUMBER. On the "707" model, the unit might sometimes remain turned on after you have disconnected it from the power source. This is because of the built-in battery. If this happens please remove the sim card from the unit and wait for a while. It will switch off after a maximum of 6 minutes.

13. Credit Information and Subscription Management (experimental)

NOTE! Correct operation of these experimental features cannot be guaranteed. We reserve the right to remove these features in future versions of devices. The absence or incorrect function of these features on your device will not be covered by warranty. The ISGSM707xx models do not come with this feature.

You can get SIM-card credit information. Not all operators provide such service. With prepaid cards this service is usually available. For the monthly mobile subscriptions it is not available. You can also activate some UMS codes remotely.

Command	Description	Response	Type
SALDO	Information about balance (SALDOUMS must be pre-installed)	Response from mobile operator	Ctrl
SIMCARD*X#	To manage your subscription by UMS codes	Response from operator	30min
SALDOUMS=*X#	To install UMS code for balance check. For ex., SALDOUMS=*100#. Ask UMS code from your mobile operator	SALDOUMS=*100# - OK	30min
SALDOUMS=NO	Remove UMS code for balance from memory	SALDOUMS=NO - OK	30min
SALDOUMS?	Information about SALDOUMS settings	SALDOUMS: *100#	Inf

14. Version Information

Command	Description	Response	Type
HARDWARE	Reports the name of the product and the version of the hardware	iSocket GSM 706, Hardware v1.1	Ctrl
SERIALNUM	Reports the serial number of the device	S/N: 12345678987654321	Ctrl
FIRMWARE	Reports the version of the firmware	(c) Intellectronics, v1.0.0	Ctrl

15. Original Factory Settings

Each new device has pre-configured factory settings. These are the so-called default values. These settings are described in the table below. The device can be returned back to these default values at any time. The reset button is positioned on the front panel next to the logo (see Chapter 1). To reset the device, press this button with a suitable thin object, hold it for 5 seconds and then release. When you release the button, all indicators (except GSM) should start blinking for next 10 seconds.

Please press the button again within these 10 seconds to confirm reset to factory defaults. Then wait until the device reboots. Your device is now returned to the original factory configuration.

NOTE! All your personal settings will be erased during this reset procedure

Default factory settings

Main socket is switched off
 Alarm function is deactivated
 Scheduler is empty
 Thermostat is not activated
 RESTARTIME=10
 RING=NOACTION
 SECLIST=OFF
 PASSWORD=NO
 RENEWINTERVALPW=NO
 SMSCONFIRM=ON
 RINGCONFIRM=ON
 RINGCONFIRMTYPE=SMS
 ERROR=ON

SMSCONFIRMUNAUTH=OFF
 THERMOSTAT=HEATING
 TEMPOFF=10 (or 50 for the "US" models)
 THERMALERT=OFF
 TRISEALERT=OFF
 TFALLALERT=OFF
 TEMPCAL=5
 MICRORELAYTIME=0
 SENSORTYPE=NO
 ALERT=SMS
 MICLEVEL=15
 POWERSTATE=REMEMBER
 SALDOUMS=NO

16. LED Indicators

The LED positions were described in Chapter 1. Below we list possible LED modes.

POWER (green)

Lights constantly

GSM (blue)

Blinks every second

Blinks every 3 seconds

Not logged to GSM network yet, searching (the same blinking if PIN protection still activated)
 Logged to GSM network

MICROPHONE (yellow)

No light

Lights constantly

Blinks every second

Microphone is not active

Microphone is active now

Device is calling to somewhere (for ex., call alert)

OUT (red)

No light

Lights constantly

Blinks 4 times per second

Main power socket is turned off

Main power socket is turned on

An error or possibly a problem with sim card (see also Chapter 18)

17. Technical Data

Product	iSocket GSM 706 / iSocket GSM 707 / iSocket GSM 706 Light / iSocket GSM 707 Light Features marked as "optional" are not available on the "Light" models. None of the SMS commands associated with these functions exist on the device. Please refer to our website for a detailed comparison of the devices.
Available Socket/Plug	Socket/Plug: CEE 7/4 ("Schuko") - Model Number: ISGSM(L)706EU, ISGSM(L)707EU Socket/Plug: CEE 7/5 (French) - Model Number: ISGSM(L)706FR, ISGSM(L)707FR Socket/Plug: BS 1363 - Model Number: ISGSM(L)706UK, ISGSM(L)707UK Socket/Plug: NEMA 5-15 - Model Number: ISGSM(L)706US, ISGSM(L)707US Socket/Plug: AS/NZS 3112 - Model Number: ISGSM(L)706AU, ISGSM(L)707AU Socket/Plug: SI32 (Israel) - Model Number: ISGSM(L)706IL, ISGSM(L)707IL "L" in model name means "Light", so iSocket GSM Light (model without optional features)
Power Input	100-240VAC, 50-60Hz
Output Relay	Max. switching 16A/250VAC, protected by 15A fuse
Microrelay (optional)	Max. switching 24VDC/2A, not fused (3.5mm mini-jack on the back side of device)

Input for sensors (optional)	Alarm input for external sensors (motion, door switch, fire, CO, etc.), provide 12VDC / 300mA, fused by PTC resettable fuse 350mA, mini-jack 3.5mm connector on the rear of the device
Indicators	POWER green, GSM blue, MICROPHONE yellow (optional) , OUT red
SIM socket	Push-push type, plug-in SIM card 3V
GSM	850/900/1800/1900MHz, integrated strip antenna
Temperature control (optional)	Built-in thermometer and thermostat, temperature measurement provided by SMS, turn on/off equipment by thermostat's settings.
Built-in rechargeable battery	Power failure / power restored alerts (on the "707" models only – see Chapter 12 for additional information)
Security	Password, phone number list, limited configuration interval
Management and Main Features	SMS control and configuration, call control, manual switching Turn on/off or restart of 120VAC/240VAC appliances by main relay Turn on/off of appliances up to 24VDC by micro relay (optional) Temperature measurement, provided by SMS (optional) iSocket® Alarm Notifier – alarm notification over external sensors actuation (optional) Scheduling start, stop, status info, Alarm Function on/off (optional) iSocket® Temperature Notifier (optional, experimental) – see Chapter 7.3 for additional information iSocket® Power Notifier (on the "707" models only – see Chapter 12 for additional information) iSocket® Online 24/7 – gets the device back online even after a break in the GSM-network
	Operation conditions: Indoors, dry conditions -10C – +50C (14F – 122F) for the "706" models 0C – +40C (32F – 104F) for the "707" models (with Li-ion battery) Store conditions: -30C – +50C (-22F – 122F) for the "706" models 0C – +40C (32F – 104F) for the "707" models (with Li-ion battery) Important notice! The "706" models can operate at low temperatures in a dry place. However, according to technical specification most sim cards cannot be used in cold conditions. A sim card is not supplied with the device and is therefore not a part of the device. You cannot turn on the device if there has been an abrupt change of conditions from cold to warm or vice versa. The "707" model is fitted with a Li-ion battery, therefore it is strictly forbidden to use it outside the specified temperature!
Weight Net / Gross	ISGSM706(EU/UK/FR/AU/IL): 245g/378g; ISGSML706(EU/UK/FR/AU/IL): 241g/374g ISGSM707(EU/UK/FR/AU/IL): 251g/383g; ISGSML707(EU/UK/FR/AU/IL): 246g/379g ISGSM706US: 0.507lb/0.8lb; ISGSML706US: 0.498lb/0.791lb ISGSM707US: 0.518lb/0.81lb; ISGSML707US: 0.5lb/0.8lb

18. Troubleshooting

Please read the safety instructions carefully (Chapter 2) as well as the warranty terms (Chapter 19). You may not repair the device yourself. Here are descriptions of the possible problems and their rectification. Only the simplest problems are mentioned.

Described situations may not be a malfunction. If you are unable to eliminate any problem yourself, then, during the warranty service, you can take the device to the store from which you bought it. Postal warranty service is provided by the manufacturer or authorised service centres. Some advice can be given by e-mail. When contacting sure to specify the device model and firmware version (you can check this by sending the SMS-commands FIRMWARE and HARDWARE to device).

Please read Chapter 16 for information about the indicators. Indicators can signal different faults.

Possible malfunction	Possible solutions
No lights on indicators after iSocket switched into a wall outlet	Make sure that the wall outlet is functioning and that power is available
The device is plugged into a wall outlet, the POWER indicator is on, but the device does not accept any commands	Make sure that all indicators are correctly lit (see Chapter 16), the SIM-card is inserted correctly, PIN-code authorisation is removed on the SIM-card and the GSM network is available
The device attached to the main socket will not turn on, although the main socket itself is working	Check whether the connected device functions and whether its own switch is turned on
Command was sent, but no response and nothing happens	<p>The iSocket could have lost contact with the GSM-network or there is no electricity in the home network. If you're away from the device and cannot verify the existence of electricity in the home network or the GSM-signal you can carry out a simple test. Try to call to the device's number. If this works, you will hear a ringing tone instead of a "subscriber not available" signal (only if RING=NOACTION). If you are sure that the device is online, you need to look for other possible problems.</p> <p>One possibility is that the phone number from which you send a message is unauthorised and therefore you will not receive any messages and no action will be carried out (Chapter 5.1).</p> <p>A mistake in writing the command could have occurred and error suppression could have been set (ERROR=OFF). In this case you would not know if you had made a mistake in the command. Check your outgoing messages to see what command was sent and check that it was written correctly, according to the manual.</p> <p>Read about other potential problems below.</p>
	<p>If the OUT indicator blinks 4 times per second, even only occasionally (e.g. at the start of the device), it is likely that there is some problem with the sim card. Check that the sim card in the device doesn't contain any data (such as stored phone numbers and messages). If the sim card has data on it then clean it using your cell-phone. Also try using another sim card. Make sure you are using a modern sim card.</p> <p>If the OUT indicator is blinking constantly and the blue GSM indicator is always off, there is probably a problem with the power of the GSM module. Contact the service department.</p>
The phone from which device was controlled has been lost, but the number was recorded in the list of allowed numbers. So you cannot control the device any longer.	The device must be reset to the factory defaults and set again with another phone. (Chapter 15).
The device is behaving strangely – e.g. no response to commands.	Try to reset to factory default and configure the device again (Chapter 15). You can also check that the sim card in the device doesn't contain any data (such as stored phone numbers and messages). If the sim card has data on it then clean it using your cell-phone.
The device doesn't send power failure / power restore alerts.	Firstly please check that your model supports the iSocket® Power Notifier feature. Second, make sure that the number for alerts is installed properly (see Chapter 7.3). Lithium-ion batteries are subject to a natural ageing process. When the capacity falls below a critical value you will not be able to receive the power failure alerts. If this happens during the warranty period you have the right to get a replacement battery for your product. If you use the device outside the specified temperature range this can also be the reason for not receiving power failure alerts.

19. Limits of Warranty and Liability

Our products are subjected to stringent final quality inspection. Intellectronics guarantees that your device is free from material and production defects. Intellectronics will not be liable for any direct or indirect material loss to the owner or other persons caused by use of this device. This warranty only covers production defects. The rights and benefits under this guarantee are additional to your statutory rights which are not affected by this guarantee. If your device produces any of the defects mentioned above within a period of 12 months after purchase, Intellectronics offers, at its discretion, either a free-of-charge repair or exchange. The guarantee applies only for you as the original end customer. It does not apply to damage to fragile components such as the housing, damage caused by improper use, culpable damage, damage caused by breakage, heat, water or acts of God, damage caused by unauthorised tampering with the device or exposure to chemicals, damage caused by overloading in the house power network. The life cycle of the relays depends on how often it is turned on and off, but Intellectronics guarantees its function at least during the warranty period. Any replacement hardware product will be warranted for the remainder of the original warranty period, or thirty (30) days, whichever is longer or for any additional period of time that may be applicable in your jurisdiction (on condition that the device was purchased from an authorised distributor in this country). Intellectronics does not guarantee the preservation of personal settings on the device after its repair. Repair or replacement may involve the use of functionally equivalent new or used parts. Replaced parts become the property of Intellectronics. The warranty will be lost if safety instructions not complied with (see Chapter 2) when using the device, and if the conditions of use were violated. Intellectronics disclaims any responsibility for damage to health or property suffered as a result of using this device and failure to comply with safety instructions. Improper use, disassembling or product modification causes warranty loss. Intellectronics does not guarantee that this product will provide uninterrupted operation of the controlled equipment; this device is not an uninterruptible power supply (UPS). This product is not designed for safe disconnection of the controlled equipment from power network; the device is not equipped with a residual-current device (RCD). Correct function of the switching function all that is guaranteed. Security features in this device, as well as functions related to temperature control, are optional and cannot be considered as a substitute for professional systems. Intellectronics assumes no liability for damage to property in connection with the operation of these functions. Intellectronics provides protection against unauthorised access to the device, but gives no guarantees regarding the impossibility of such access and is not responsible for the consequences of such lack of access. Intellectronics reserves the right to modify the device and its software without further notice. Differences in the software not covered in these instructions are acceptable and not considered as defects and cannot be a matter for warranty service. Releasing new software, including new functions, is not an excuse for its replacement under warranty terms and can be done for an additional fee. Illegal use of remote listening option and the illegal extraction of information is a violation of the law in most countries. Before using this function consult with a lawyer. Intellectronics categorically prohibits the use of this device for unlawful purposes and is not responsible for illegal use of the device. Please make sure that mobile network is available in the area. Bad coverage is not a warranty matter. Please ensure that mobile phones are permitted in the area before operating the unit (eg, hospitals, petrol stations, etc.). If the use of a mobile phone is forbidden, do not use the device, as it can have negative influence to other electronic systems. To get warranty service, you must provide proof of payment and this guarantee. The guarantee must be duly filled in and must specify the serial number of the device, if it does not contradict the legislation of the country where product was legitimately purchased.