iSocket® Environment Pro

User Manual

English
For all countries

www.isocketworld.com

save energy
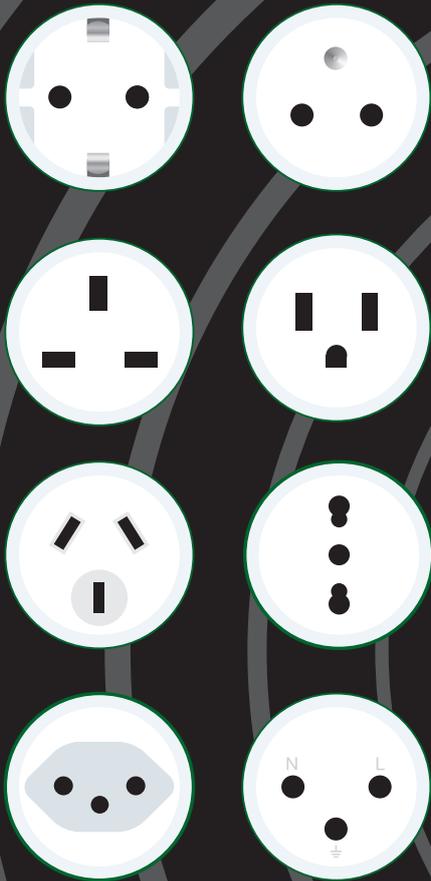
ENGLISH

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. The latest version of these instructions can be found on our website www.isocketsystems.com. Be sure to read the terms of warranty before using the device, so that you do not to lose your rights under the guarantee as a result of improper operation (Chapter 18). You agree with the terms of warranty and limitation of liability described in Chapter 18 when you purchase this product. Please keep these operating instructions in a safe place for easy access when needed. We hope you thoroughly enjoy using your iSocket.

NOTE!

- **The software supplied with this product is the exclusive property of iSocket Systems. 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 – see Chapter 5.3.**

- **This product uses a Lithium-ion battery and MUST NOT be used outside the specified temperature! Please refer to technical information (Chapter 16) 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 20 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. More information is available from www.isocketsystems.com/prepaid/**

Content

1. Device Description

iSocket® Environment Pro is designed for remote monitoring of the environment in your premises to give you peace of mind. This intelligent socket is controlled remotely by SMS-commands via the GSM network. You can use either standard mobile phones ("old" phones) or smartphones to manage and configure iSocket. 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.

The following aspects of the environment can be monitored with iSocket®.

- **Power monitoring.** You will get an alert to your cell phone when the power fails or is restored to your system. This is possible because the iSocket Environment Pro has a built-in battery. You do not need to buy any extra accessories to activate this feature.

- **Temperature monitoring.** With a precision external sensor connected to iSocket you can measure the temperature of almost any element: air, water, oil, solid surfaces, etc. Information about temperature will be sent to your cell phone. iSocket will notify you when the temperature rises beyond or falls below specified levels. iSocket has a thermostat that turns equipment on and off according to your settings. Unique features of iSocket® Smart Software will allow you to create an advanced temperature monitoring system.

- **Security and safety monitoring.** With a motion and/or door opening sensor connected to the input of iSocket Environment Pro you can create a simple home alarm system in a few minutes! An alert about a break-in will be sent to your cell phone immediately. You may connect various logical sensors to the input of the iSocket to monitor the safety environment to detect e.g. smoke (fire), water leaks or gas leakage. The alert will be sent to your cell phone when something happens. We manufacture pre-wired sensor sets for simple installation. You do not need specific skills to configure these features. Please see Chapter 9 for more information.

Remote switching and reboot. And of course iSocket supports remote switching and reboot of equipment connected to it. You will definitely appreciate the elegant design of iSocket with plugs and sockets suitable for many countries!

No service fee. We do not charge you monthly fees! You pay for the equipment once up front and then you are free to choose subscriptions from your favourite GSM mobile operator or to use prepaid (Pay-As-You-Go) cards.

Free of charge operations. Some operations (e.g. remote switching or reboot) can be performed by a call to iSocket and you can configure them to be absolutely free! Thus you may reboot your computer or modem remotely for free. See Chapter 4.2 and 6.2 for details.

For more information about the technical characteristics of iSocket Environment Pro see Chapter 16 and also visit our website *www.isocketworld.com*.

Main power socket
Socket for connecting external electrical equipment, which can be controlled remotely.

(Figure shows plug/socket type CEE 7/4 "Schuko", model ISGSMT707EU).

Plug to connect iSocket to the wall socket to provide power for device and for connected appliance.

Hidden button
Used to switch the main socket manual (Chapter 4.3) or reset device (Chapter 14).

POWER
Indicator of input power from power network.

GSM or ONLINE
Status indicator for mobile network.

OUT
Indicator of output power for main socket.

Additional information about the indicators is given in Chapter 15.

Input for sensors
3.5mm jack, BLACK (See Chapter 9) **NOT FOR TEMPERATURE SENSOR!**

Socket for SIM-card (standard size GSM SIM-card)

Socket for TEMPERATURE sensor
3.5mm jack, RED (See Chapter 7)

Warning! If you insert the temperature sensor to the wrong jack, the temperature sensor will be destroyed!

Pictures below describe the plugs and sockets of other models.
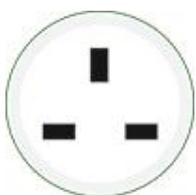
| Socket/Plug: BS 1363 (British) | Socket/Plug: NEMA 5-15 (North America) | Socket/Plug: CEE 7/5 (French) | Socket/Plug: AS/NZS 3112 (Australian) | Socket/Plug: SEV 1011 (Swiss) | Socket/Plug: CEI 23-50 S17/P17 (Italian) | Socket/Plug: SI32 (Israeli) |

English
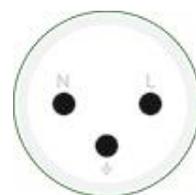
2. Safety Instructions

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.
- Provide easy access for a maintenance or emergency disconnection.
- Do not connect this device to another one similar device.
- 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.
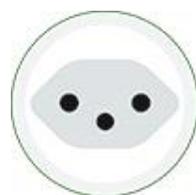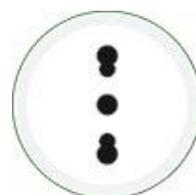- Do not use external equipment with a faulty plug!
  Do not connect to appliances which cannot be left unattended (e.g. certain heaters)!
- Do not exceed power load limit and other electrical parameters specified in the technical characteristics. Check the power of the connected device!
- The device 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 18.

CE iSocket Systems hereby declares that this iSocket Environment Pro complies with the essential requirements and other relevant provisions of Directive 1999/5/EC.

At the end of the product's useful life, please dispose of it at appropriate collection points provided in your country.

FC NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: reorient or relocate the receiving antenna; increase the separation between the equipment and receiver; connect the equipment into an outlet on a circuit different from that to which the receiver is connected; consult the dealer or an experienced radio/TV technician for help.

English

Safety Instructions for the Battery

This unit 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 16)! 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 16) 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.

English

3. Quick Start

Quick Start comprises three simple steps:

Step 1. Install SIM-card.

You need a standard size SIM-card from a GSM-operator to be installed in the unit. If you use a prepaid card you might need to activate it first with an unlocked GSM cell phone. More information is available from www.isocketsystems.com/prepaid/

Install SIM-card into the special slot and push until fixed (you will hear a click). SIM-card orientation is shown on the front side of the device. Do not insert or eject the SIM-card on a running device! Switch off the device before you insert or eject SIM-card. Do not use SIM-cards that contain messages! Remove all messages from the SIM-card. Do not use SIM-cards with NFC chip embedded in a SIM (chip for payments from mobile phone).

NOTE! You must disable PIN-code authorisation for the SIM-card! You can only disable PIN authorisation by using mobile phone that support standard size SIM-card. Insert the SIM-card into mobile phone and disable PIN usage using the phone menu. You can find more information in the manual for the phone or ask assistance from the shop, where you purchased the mobile subscription. If you have forgotten to disable PIN-code the GSM indicator will be blinking every second and the POWER and OUT indicators will signal this by specific blinks (see Chapter 15). The same blinking can occur when the SIM-card is not inserted correctly or is damaged.

Step 2. Apply power to the device.

Connect iSocket to a wall socket. POWER and OUT indicators blink three times simultaneously. If everything is functioning correctly the POWER indicator will be a constant light green. The 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 15.

Step 3. Execute your first command and make yourself the main user.

Your device with iSocket® Smart Software has the unique feature "Make Me Boss!". Send SMS-command *MAKEMEBOSS* to the phone number of the SIM-card installed in the unit and it will automatically assign the phone number from which you have sent it as the number for all types of alerts and will also enable protection by the list of phone numbers and will add the number to the list.

NOTE! Make sure that you don't use the "hide my number" option for the number from which you execute the command. If the system cannot recognise the number it will not add it to the number for alerts and to the security list. Alternatively you can use the methods of adding these numbers which is described in Chapter 5.1 (for SECNUMBER) and 5.3 (for ALERTNUMBER). **Please also read the IMPORTANT NOTE in Chapter 5.1 about the specific requirements of some mobile networks!**

First test.

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. Remove the iSocket from the wall-socket. You will soon get a power failure alert!

English

4. Managing the iSocket Device

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

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).

Commands are not case sensitive. There are three types of commands on device:

1. Configuration commands (marked *"Conf"* in the tables).
These commands configure some parameters on the device and usually (not always) have the syntax *COMMAND=VALUE*, so they have symbol "=" after the command name. 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 expired (Conf)!*" (only if ERROR=ON - see Chapter 6). To disable this limitation you must configure security on device – see Chapter 5. **Settings are stored in non-volatile memory and are not lost when power is off.** Each configuration command has a default value. This is the value that was installed at the factory (for details see Chapter 14).

2. Information commands (marked "Inf" in the tables).
These commands inform you about different statuses of the device or about other corresponding statuses, so they have information nature. If a command has a question mark at the end (COMMAND?), then this command will inform you about current value of the parameter, which has the same name as the command. These commands are available at any time. 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=VALUE1,(VALUE2)". This means that the current active value is "VALUE2", and "VALUE1" 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 14).

3. Control and management commands (marked "Ctrl" in the tables).
Used to control the iSocket device - perform some active action. They are not limited by configuration window and can be used at any time.

You will get a response after sending the commands. This can be disabled if desired (see Chapter 6). If you make a mistake in the command and send an incorrect command, you will receive a message "*COMMAND - No such command exists on the device!*" (Only if ERROR=ON - see Chapter 6). If a command longer than 30 characters was sent, it will be deleted without any response notifications.

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
ON30	Turn on main power socket for 30 seconds. Maximum value is 65000 seconds.	Power ON for 30 seconds	Ctrl
OFF30	Turn off main power socket for 30 seconds. Maximum value is 65000 seconds.	Power OFF for 30 seconds	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
RESTARTTIME=5	Configures time (in seconds) for RESTART command. Maximum value is 600 seconds.	RESTARTTIME=5 – OK	Conf
RESTARTTIME?	Informs about RESTARTTIME value	RESTARTTIME=5 seconds	Inf
STATUS	Request for main power socket status, temperature, GSM signal, date, sensor's status.	Power socket ON Signal: Good (-67dBm) TEMP: 25C(77F) ALARMF: Disabled ALARM status: No act Time: y/m/d,h:m:s	Ctrl
TEMPERATURE	Informs about temperature. See details in Chapter 7.	TEMPERATURE: 25C(77F)	Ctrl
RUNTIME	Informs how long main power socket 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. router) 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. 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!	Conf
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!	Conf
RING=NOACTION	Ignore phone calls	RING=NOACTION – OK	Conf
RING?	Informs what action configured	RING=(NOACTION), RESTART,SWITCH	Inf

English

4.3 Manual Managing

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.

> **Would you like to see more features? You are welcome to send us your feedback: www. isocketsystems.com/contacts/**

5. Security & Notifications 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 and deplete the card's credit - 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. The first number can be added in a simple way by executing command MAKEMEBOSS - see introduction to this feature in the "Quick Start" (Chapter 3, Step 3). However all the next numbers must be added using the command SECNUMBER+, described in the table below, because all the next numbers from which you try to execute the MAKEMEBOSS command will already be treated as non-authorised.

Command	Description	Response	Type
MAKEMEBOSS	This will add the number from which you send message to the list and will enable security list (SECLIST=ON will be active), also it will add your number for all types of other alerts (Chapter 7.3, 9.2 and 10)	Your phone number has been assigned for all types of alerts and was added to security list which has been activated	Conf
SECNUMBER+3589123456789	Add new number to security list	SECNUMBER+3589123456789 – OK	Conf
SECNUMBER-3589123456789	Delete specific number from security list	SECNUMBER-3589123456789 – OK	Conf
SECNUMBER-ALL	Delete all numbers from the list	SECNUMBER-ALL – OK	Conf
SECNUMBER?	Request for security list numbers	SECNUMBERs: 3589123456789, 3589000000555	Inf
SECLIST=ON	Activate security list	SECLIST=ON – OK	Conf
SECLIST=OFF	Disable security list	SECLIST=OFF – OK	Conf
SECLIST?	Information about security list activation	SECLIST=OFF,(ON)	Inf

                                                                                            English

Telephone numbers must be added in international format (with country code) without spaces or hyphens!

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.

> **IMPORTANT NOTE!** Some mobile operators indicate international numbers when transmitting SMS's (in our example *12125555555*), but during the call such operators indicate number in local format (in our example it will be *2125555555 or even 5555555*). If such behaviour was noticed in your mobile network you have to add **both international and local numbers** to the list! It means in addition to the international number you must also add the local number by the command *SECNUMBER+2125555555* or/and *SECNUMBER+5555555*.

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 you don't use the "hide my number" option. 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.

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	Conf
PASSWORD=NO	Disable password	PASSWORD=NO – OK	Conf

5.3 Configuration of the Numbers for Alerts

Before enabling different alerting (Chapter 7.3, 9.2 and 10) you must setup at least one number for alerts. There are few optional ways to setup this number. One is the feature "Make me boss!" (see introduction in the "Quick Start", Chapter 3, Step 3 and more in Chapter 5.1). Another option is the feature "Alert me!" – send the command *ALERTME* from the number which you want to be the number for alerts and the system will automatically assign the phone number from which you have sent it as the number for all types of alerts. You can send *ALERTME* from any number which is included on the security list (Chapter 5.1). You can also use the command *ALERTNUMBER+* to add a number for alerts manually (see description in the table below).

                                                                                    English

> **NOTE!** Make sure that you don't use the "hide my number" option for the number from which you execute the command ALERTME and make sure that the number is in the security list. If the system cannot recognise the number or if the number is not authorised it will not add it to the number for alerts.

Command	Description	Response	Type
ALERTME	This will automatically add the number from which you send the message to the list for all types of other alerts.	Your phone number has been assigned for all types of alerts!	Conf
ALERTNUMBER+358 912345678	Set the number for alerts manually. Instructions how to add a number are similar to those given in Chapter 5.1 (see examples there). DO NOT ADD THE PHONE NUMBER IN LOCAL FORMAT - USE THE FULL INTERNATIONAL NUMBER ONLY (WITH COUNTRY CODE).	ALERTNUMBER+358912 345678 – OK	Conf
ALERTNUMBER-3589123456789	Remove number from list	ALERTNUMBER - 3589123456789 – OK	Conf
ALERTNUMBER-ALL	Remove all numbers	ALERTNUMBER-ALL – OK	Conf
ALERTNUMBER?	Information about numbers	ALERTNUMBERs: 3589123456789, 3589223456789	Inf

> **NOTE!** Do not keep wrong or non-existent numbers in the list of ALERTNUMBERs! Do not keep numbers in local format in the list of ALERTNUMBERs, use only the international format (with country code). Ignoring this advice will delay alerts to good numbers.

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	Conf
SMSCONFIRM=OFF	Do not send response messages to SMS-command	SMSCONFIRM=OFF – OK	Conf
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, CREDIT, 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. This allows you to perform reboot or switch operations free of charge!

         English

Command	Description	Response	Type
RINGCONFIRM=SMS	Send response SMS after call to device	RINGCONFIRMTYPE=SMS - OK	Conf
RINGCONFIRM=CALL	iSocket call back to your phone within 10 seconds and then hang-up	RINGCONFIRMTYPE=CALL - OK	Conf
RINGCONFIRM=OFF	Don't notify results after phone call to the device	RINGCONFIRM=OFF – OK	Conf
RINGCONFIRM?	Information about RINGCONFIRM configuration	RINGCONFIRM=(SMS),CALL,OFF	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 - No such command exists on the device!*" 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 (Conf)!*" 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 - No such command exists on the device!*" 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	Conf
ERROR=OFF	Disable the error messages responses	ERROR=OFF - OK	Conf
ERROR?	Information about ERROR configuration	ERROR =(ON),OFF	Inf
SMSCONFIRMUNAUTH=ON	Send reports (errors, not permitted, time out) to unauthorized numbers	SMSCONFIRMUNAUTH =ON – OK	Conf
SMSCONFIRMUNAUTH=OFF	Don't send reports to unauthorized numbers	SMSCONFIRMUNAUTH =OFF – OK	Conf
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

iSocket Environment Pro supports one external digital temperature sensor that can measure the temperature of different elements (air, liquid, solid, etc) from -55C(-67F) to 120C(248F) with an accuracy of ±0.5˚C. You can buy sensors with different lengths of cable from us. Sensors are waterproof. The sensor must be connected to the **RED** 3.5mm jack socket on the rear of device.

Short sensor to measure temperature near a device. Can be a good option if you want to monitor the temperature just inside a room. No messy cables. (Model: ITS00J).

Sensor with long cable, e.g. 3m (10ft). Can be a good option to measure temperature outside, or temperature of a liquid or some surface. The probe has a "wing" for screwing. A sensor with a long cable is also a good option if the iSocket unit is located close to the heating system, which may affect temperature measurements. A sensor with a cable will allow you to install the sensor far from the source of heating in that case and you can measure the temperature at precisely the point you want: e.g. ceiling, floor or in the middle of room. (Model: ITS30J).

IMPORTANT NOTES!

- **Do not insert the temperature sensor to the black 3.5mm jack, which is input. The temperature sensor will be damaged by 12V coming from this input!**

- Do not insert or remove the temperature sensor on a running device! Switch off the device before you insert or remove the temperature sensor.

- If the sensor shows 85C, 127C or 0C when the temperature is obviously different from these values, it might be a sign that the sensor is not properly inserted or is damaged.

NOTE! Check that the sensor is inserted into the 3.5mm red jack socket to the very end. The connection is taught and you have to ensure that there is no gap between the connector of the sensor and the jack socket!

English

7.1 Thermometer

The external temperature sensor measures the temperature of the environment in the particular area where it is installed and iSocket can provide this information via SMS. Information about the temperature can be available immediately the sensor is connected to iSocket. Information available in Celsius and Fahrenheits.

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

7.2 Thermostat

iSocket® Smart Software has an advanced thermostat feature that allows you to control both heating and cooling systems with a wide choice of settings and be very simple in the same time.The thermostat feature allows you to control the main power socket and change it depending on the pre-configured "switch-off" temperature. The interval between temperature readings from sensors is one minute.

Command	Description	Response	Type
THERMOSTATON	Activate thermostat	THERMOSTATON – OK THERMOSTAT=HEATING Switch-off temperature: 10C(50F) Note! Thermostat is working now!	Ctrl
THERMOSTATOFF	Disable thermostat	THERMOSTATOFF – OK Note! Thermostat was disabled!	Ctrl
THERMOSTAT= HEATING	Set the condition of thermostat. Use this value if heating system is connected to device	THERMOSTAT=HEATING – OK Switch-off temperature: 10C(50F) THERMOSTAT: Disabled	Conf
THERMOSTAT= COOLING	Set the condition of thermostat. Use this value if cooling system is connected to device	THERMOSTAT=COOLING – OK Switch-off temperature: 22C(72F)	Conf

English

		THERMOSTAT: Enabled	
SWITCHOFFTEMP=10C **or** **SWITCHOFFTEMP=50F**	Set the temperature for turning off the main socket when thermostat enabled. Values from -55C to 120C, or from -67F to 248F. Do not forget to type C (means Celsius) or F (means Fahrenheits) after the value. Only integer values must be used! Please only use even numbers for Fahrenheit temperatures.	SWITCHOFFTEMP=10C(50F) – OK THERMOSTAT=HEATING THERMOSTAT: Disabled	Conf
THERMOSTAT?	Information about thermostat configuration	THERMOSTAT: Enabled THERMOSTAT=HEATING Switch-off temperature: 10C(50F)	Inf

---

**Do you particularly agree, or disagree with anything in our software?
Give us your opinion: www.isocketsystems.com/contacts/**

Example of heating system control. 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, SWITCHOFFTEMP=10C
(or SWITCHOFFTEMP=50F), 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).

Example of cooling system control. Another example is air conditioning activation when the temperature exceeds 22C (72F): THERMOSTAT=COOLING, SWITCHOFFTEMP=22C (or SWITCHOFFTEMP=72F), THERMOSTATON. This means that as soon as the room is cooled to 22C (72F) the main socket is turned off. If current temperature in the room is less than 22C (72F) the main socket does not turn on until the temperature rises above 22C (72F).

7.3 Temperature Monitoring – Notifications, **iSocket**® Temperature Notifier

Before enabling alerts you must set up at least one number for alerts – see Chapter 5.4. There are several type of alerts related to temperature in iSocket Smart Software installed on your iSocket Environment Pro: switch-off alert (**SWITCHOFFALERT**), temperature fall alert (**TFALLALERT**), temperature rise alert (**TRISEALERT**), and alert when temperature sensor has failed (**TSENSFAILALERT**).

- **SWITCHOFFALERT -** enable SMS sending when "switch-off" temperature is reached and a relay was therefore deactivated. This just allows you to know that main power socket was switched off and shows at which temperature this happened. This feature is related with thermostat and works only if thermostat is enabled. Note! It will send an alert every time the "switch-off" temperature was reached, so this event could be too often during the work of thermostat. We do not recommend to enable this alert!

- **TSENSFAILALERT -** send alert if some temperature sensor has failed or a reading problem occurred on an active temperature sensor. Only one alert will be sent until you change something in thermostat settings and some new failure occurred. If a temperature sensor has failed, then the thermostat will remain activated, but will not operate.

These two types of alert are related to the thermostat and work only if thermostat is enabled.

> **NOTE!** When a thermostat was deactivated because of temperature sensor failure or when you disable a thermostat manually, the relay will remain in the same condition as it was just before thermostat was disabled. This means that disabling the thermostat won't change the previous status of relay and you must do it yourself if you need to.

iSocket® **Temperature Notifier** - a feature of the iSocket device which notifies you in the event of the room temperature falling below (**TFALLALERT**) or rising above (**TRISEALERT**) critical levels. This is another type of temperature alert which your iSocket can provide for you. This feature does not affect the thermostat and can work independently. This feature is not related to output, but to temperature sensors connected to the unit. 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**.

Command	Description	Response	Type
SWITCHOFFALERT=ON	Enable SMS sending when SWITCHOFFTEMP is reached and main socket is therefore deactivated. **Works only if thermostat is enabled.**	SWITCHOFFALERT=ON – OK	Conf
SWITCHOFFALERT=OFF	Disable above alert	SWITCHOFFALERT=OFF – OK	Conf
SWITCHOFFALERT?	Show current settings for SWITCHOFFALERT	SWITCHOFFALERT=(OFF),ON	Inf
TSENSFAILALERT=ON	Enable sending alerts if some temperature sensor failed.	TSENSFAILALERT=ON - OK	Conf
TSENSFAILALERT=OFF	Disable failed alerts	TSENSFAILALERT=OFF - OK	Conf
TSENSFAILALERT?	Show current settings of TSENSFAILALERT	TSENSFAILALERT =(ON),OFF	Inf
TRISEALERT=35C **or** **TRISEALERT=96F**	Set the temperature at which you should receive a temperature rise alert. Values from -55C to 120C, or from -67F to 248F. Do not forget to type C (means Celsius) or F (means Fahrenheits) after value. Only integer values must be used! Please only use even numbers for Fahrenheit temperatures.	TRISEALERT=35C(96F) – OK	Conf
TRISEALERT=OFF	Disable temperature rise alert	TRISEALERT=OFF – OK	Conf
TRISEALERT?	Show current settings for TRISEALERT	TRISEALERT=35C(96F)	Inf
TFALLALERT=15C **or** **TFALLALERT=60F**	Set the temperature at which you should receive a temperature fall alert. Values from -55C to 120C, or from -67F to 248F. Do not forget to type C (means Celsius) or F (means Fahrenheits) after value. Only integer values must be used! Please only use even numbers for Fahrenheit temperatures.	TFALLALERT=15C(60F) – OK	Conf
TFALLALERT=OFF	Disable temperature fall alert	TFALLALERT=OFF – OK	Conf
TFALLALERT?	Show current settings for TFALLALERT	TFALLALERT=15C(60F)	Inf

English

8. Date and Time

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	Conf
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	Conf
DATE	Request for actual date and time in device	DATE yy/mm/dd, hh:mm:ss+zz	Ctrl

> **Would you like to see more features or is there something in our software or documentation that you dislike? You are welcome to send us your feedback!**
> **www.isocketsystems.com/contacts/**

9. Monitoring Rooms Using Sensors

With iSocket Environment Pro you can set up security or safety monitoring of your premises. You can connect various sensors: motion sensor, door opening detector, smoke detector, water sensor, etc on the input (black 3.5mm jack) of your iSocket. Notification will be sent to your cell phone when the sensor is activated. Both N/C and N/O types of sensors are supported. The output can also be controlled by input: you can set up a particular time for which main power socket should be switched on or off when a sensor is activated. This allows you to activate external equipment, which will behave according to your specific environment (e.g. pump will start to drain water when the water sensor detects a signal or a siren will be activated when door movement is detected). Unique iSocket® Smart Software installed on your iSocket provides plenty options for configuration, which allows you to create a really advanced, but at the same time, simple system.

This section only provides brief explanations needed for a specialist to configure the device and not a detailed explanation. If you do not have the required skills, then ask for help from a specialist. The features described in this section are supplementary options only and should not be considered a substitute for professional security systems. Nevertheless, at a reasonable cost you can set up simple protection for your home or office, because we sell ready-to-go pre-wired sensors kits with detailed connection instructions.

9.1 iSocket Sensors

Sensors are not supplied with the device. These can be bought directly from us or our dealer network. Our wired sensor kits have several benefits compared to wireless solution. The most important of them are:

- **high reliability**, because of the reliable wired connections that use special professional copper alarm-grade cable;
- **high security**, because the connection cannot be interrupted by wireless scanners;

English

- **maintenance free**, because you do not need to check and change batteries.

| **KIT1 for burglar alarm** | **KIT2/KIT3 for fire alarm** | **KIT4 for gas leak alarm** | **iSocket Water Sensor for water leak alarm** | **Splitter for connecting several sensors in parallel** |
| (Model: ISKIT1) | (Models: ISKIT2/ISKIT3) | (Model: ISKIT4) | (Model: ISWSNO1) | (SPLIT2W15CM) |

Refer to our website www.isocketworld.com for up-to-date information about the sensors we have for your iSocket.

Command	Description	Response	Type
SENSORTYPE=NO	The value depends on the sensor type. Set this value if the sensor is N/O type.	SENSORTYPE=NO – OK	Conf
SENSORTYPE=NC	The value depends on the sensor type. Set this value if the sensor is N/C type.	SENSORTYPE=NC – OK	Conf
SENSORTYPE?	Information about SENSORTYPE configuration	SENSORTYPE=(NO),NC	Inf

IMPORTANT NOTES!

- **Do not insert alarm sensors to the red 3.5mm jack, which is the socket for the temperature sensor only!**

- Do not insert or remove sensors on a running device! Switch off the device before you insert or remove sensors.

- Check that the sensor is inserted to the 3.5mm black jack socket to the very end. Connection is taught and you have to ensure that there is no gap between connector of sensor and jack socket, otherwise you may receive false alarms.

- You can connect several sensors in parallel, but the sensors will not be recognised individually.***** All sensors must be configured as N/O in this case – see table below and follow instruction supplied with specific sensor.

- The total power consumption of the sensors connected should not exceed 300mA.*****

- We recommend that you only use approved sensors purchased from us, failing which we will not be held responsible for the operation of the device.

* If you intend to install many different sensors we would recommend you take a look at our professional equipment from iSocket Smart House family on www.isocketworld.com, e.g. iSocket Smart Relay.

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 when sensor was activated. You can receive notifications in various ways. iSocket Environment Pro 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). To enable such notifications you must setup at least one

number for alerts (see Chapter 5.3). Place the most important numbers for notifications at the beginning of the list. Read below to understand the reason.

Notification cycle logic. 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 answer (pick up the handset) within these 20 seconds, the call-notification cycle is considered complete and no one else from the list receive call or message. Thus, by answering the call you will stop the notification cycle. That means that you are aware of the alarm event and must act accordingly. If you don't answer or if you drop the call (hangs 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. If no number is answered 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.

Alarm detection and alerting logic. 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 by SMS or call is the ideal option for motion or vibration 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, smoke, gas or water 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. For sensors that change their status and stay in that status, the option "SMSCHANGE" was designed. With this configuration you will be notified only once - when a logical value is changed.

Command	Description	Response	Type
ALERT=SMS	Send SMS to predefined number when the sensor is triggered	ALERT=SMS – OK	Conf
ALERT= SMSCHANGE	Send SMS to predefined number when the sensor's status is changed (logical value was changed)	ALERT=SMSCHANGE – OK	Conf
ALERT=CALL	Notify by phone call to predefined numbers when the sensor is triggered. It is just a call, there is no any voice notification.	ALERT=CALL - OK	Conf
ALERT=OFF	Disable alerts. (This is useful if you want just to activate Micro relay when sensor was triggered)	ALERT=OFF - OK	Conf
ALERT?	Information about ALERT configuration	ALERT=(SMS),CALL, SMSCHANGE, OFF	Inf

NOTE! Do not keep wrong or non-existent numbers in the list of ALERTNUMBER! This will delay alerts to good numbers.

9.3 **Input/Output Relations**

The relay of the main power socket can be switched on or off for the time configured by command RELAYTIME when the sensor is triggered. This allows you to activate external equipment according to your specific needs. This feature is only available when Alarm Function is enabled.

Command	Description	Response	Type

RELAYTIME=ON60	Turn on main power socket 60 seconds when sensor is activated. Maximum value is 65000 seconds.	RELAYTIME=ON60 – OK	Conf
RELAYTIME=ON	Turn on main power socket permanently when sensor is activated.	RELAYTIME=ON – OK	Conf
RELAYTIME=OFF60	Turn off main power socket 60 seconds when sensor is activated. Maximum value is 65000 seconds.	RELAYTIME=OFF60 – OK	Conf
RELAYTIME=OFF	Turn off main power socket permanently when sensor is activated.	RELAYTIME=OFF – OK	Conf
RELAYTIME=0	Do not change status of main power socket when sensor is activated.	RELAYTIME=0 – OK	Conf
RELAYTIME?	Information about RELAYTIME value	RELAYTIME=0	Inf

ALERT=SMSCHANGE case. If alert type is SMSCHANGE (see Chapter 9.2) then the relay returns to the opposite status as soon as the sensor returns to default status regardless of the time configured by RELAYTIME=ONxx or RELAYTIME=OFFxx. However when you configure permanent activation (RELAYTIME=ON or RELAYTIME=OFF) returning of sensor to its default status will not affect the relay. Opposite statuses means the following: If RELAYTIME=ON (or =ONxx), then the relay will be turned off after the sensor returns to default status. Accordingly, if RELAYTIME=OFF (or =OFFxx), then the relay will be turned on after the sensor returns to default status. This logic is not affected by intermediate statuses of the relay. It means that no matter what the relay's status was between the activation of the sensor and returning it to default status, behaviour will be the same: following above logic.

ALERT=SMS/CALL/OFF. For these types of alerts the relay will change its status only once when alarm is detected. The relay will change its status according to the setting configured by the command RELAYTIME. NOTE! The relay changes its status according to RELAYTIME each time the alarm is activated.
The above allows you to configure any behaviour suitable for your environment:

Example 1 (flood detection alarm and water drain). The iSocket Water Sensor is connected to the input and the pump to drain water from basement is connected to the main power socket. Assuming you do not know how much time the pump requires to drain all the water out of the basement. You do not want the pump to circulate permanently, but to stop as soon as the water is drained. You configure ALERT=SMSCHANGE for the water sensor and RELAYTIME=ON (turn on permanently, because you do not know how much time it need). As soon as the water sensor detects water, the pump will be activated. Imagine after 30 minutes the pump has drained all the water. The sensor's contact becomes dry and the sensor returns to default status. This deactivates the relay and the pump is switched off even though RELAYTIME=ON was configured.

Example 2 (door opening alarm with siren). A door opening sensor is connected to the input and a siren to the output (to main power socket). Because of the nature of the door sensor it requires the ALERT=SMSCHANGE setting (see Chapter 9.2, "Alarm detection and alert logic" section). You want thieves to be frightened off by the siren, but you do not want to disturb neighbours permanently with the siren while the door is still open. You want the siren to sound for two minutes only. Therefore you configure RELAYTIME=ON120. As soon as the door is opened you will get an SMS and the siren will sound for maximum 2 minutes or until the door is closed.

Example 3 (motion detection with siren). A motion sensor is connected to the input and a siren to the output. You want the siren to sound for 10 seconds each time motion is detected and you get a notification by SMS. You should configure RELAYTIME=ON10 and ALERT=SMS. As soon as motion is detected you will get an SMS and the siren will sound for 10 seconds. If new motion is detected after one minute or more you will get another SMS and the siren will sound again for 10 seconds.

9.4 **Alarm Function**

We assume that sensors have been connected and configured and a phone number for notifications has been installed. Now when you leave the home or office you can activate

the Alarm Function. Now, when the sensor is triggered the event will occur according to configuration. For example you will receive an alert and/or equipment connected to main power socket will be switched on or off. Before entering on returning room you need to deactivate the Alarm Function.

Command	Description	Response	Type
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	Inf

> **NOTE!** Entering the house without having disabled the Alarm Function will activate equipment connected to main power socket and/or send you alert depend on your configuration. 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.

9.5 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

10. Scheduler

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. Information about statuses is sent to the alert numbers – see Chapter 5.3 for configuration. 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
Hours and minutes must be typed with first zero (so "08" and not "8"). **Actions:** ON=Turn on main power socket, OFF=Turn off main power socket, INF=Send status of iSocket (STATUS command execute), AON=Alarm function activation (premises will be under surveillance), AOF= Alarm function deactivation (disable premises surveillance)

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 в 09:00
SCHEDULER+18:00,5,AOF   Disable Alarm function every Friday at в 18:00
SCHEDULER+17:00,6,INF   Send status of iSocket every Saturday at 17:00

11. iSocket® Power Notifier & Status After Resumption of Power Supply

iSocket® Power Notifier - this feature of the iSocket device will notify you in the event of a power failure and/or the restoration of the power supply. Your iSocket is equipped with a high quality Li-ion re-chargeable battery with excess capacity unlike other cheap products with weak batteries or an unreliable supercapacitor. Using such a battery ensures that the customer will receive a power failure notification even in the event of a break in the mobile network. The iSocket Smart Software is able to detect a break and wait for a signal before sending the power failure message. The high quality battery allows a delay. As soon as the message is sent the device will shut down. The battery will be charged later, when device is powered again. To receive such alerts you need to configure at least one number for alerts – see Chapter 5.3. Once numbers have been configured you will receive messages whenever power is interrupted and restored. These numbers are also used for other notifications, e.g. for Alarm Function (Chapter 9). If you do not want to receive power failure alert you can disable it – see table below.

You can install power resume mode for main power socket. The option "REMEMBER" is the factory default and is suitable for most configurations, so you probably will not need to change it.

Command	Description	Response	Type
POWERALERT=ON	Enable power failure/restore alerts	POWERALERT=ON - OK	Conf
POWERALERT=OFF	Do not send power failure/restore alerts	POWERALERT=OFF - OK	Conf
POWERALERT?	Information about POWERALERT setting	POWERALERT=(ON),OFF	Inf
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

NOTE! 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 20 minutes.

12. 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.

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 usually not available. You can also activate some UMS codes remotely.

Command	Description	Response	Type
CREDITUMS=*X#	To install UMS code for balance check. For ex., CREDITUMS=*100#. Ask UMS code from your mobile operator	CREDITUMS =*100# - OK	Conf
CREDITUMS=NO	Remove UMS code for balance from memory	CREDITUMS =NO - OK	Conf
CREDITUMS?	Information about CREDITUMS settings	CREDITUMS: *100#	Inf

English

| CREDIT | Information about balance (CREDITUMS must be pre-installed) | Response from mobile operator | Ctrl |
| SIMCARD*X# | To manage your subscription by UMS codes | Response from operator | Conf |

13. Version Information

Command	Description	Response	Type
HARDWARE	Reports the name of the product	iSocket Environment Pro	Ctrl
SERIALNUM	Reports the serial number of the device	S/N: 12345678987654321	Ctrl
FIRMWARE	Reports the version of the firmware	v1.0.0 (c) iSocket Systems	Ctrl

14. Original Factory Settings

Each new device has pre-configured factory settings. These are the so-called default values. These settings are described 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 about 10 seconds until the POWER and OUT indicators start blinking simultaneously. Then release the button and the reset procedure will start. Reset will take about 30 seconds and POWER indicator will blink every second during the reset procedure. Then the device will restart - the POWER and OUT indicators blink 3 times and the device starts to search the network. Your device is now returned to the original factory configuration.
NOTE! All your personal settings will be erased during this reset procedure.

Default factory setting

Main socket is switched off	SMSCONFIRM=ON	THERMOSTAT=HEATING
Alarm function is deactivated	RINGCONFIRM=SMS	SWITCHOFFTEMP=10C(50F)
Scheduler is empty	ERROR=ON	SWITCHOFFALERT=OFF
Thermostat is not activated	SMSCONFIRMUNAUTH=OFF	TRISEALERT=OFF
RESTARTIME=10	RELAYTIME=0	TFALLALERT=OFF
RING=NOACTION	SENSORTYPE=NO	TSENSFAILALERT=OFF
SECLIST=OFF	ALERT=SMS	POWERALERT=ON
PASSWORD=NO	CRDITUMS=NO	POWERSTATE=REMEMBER

15. LED Indicators

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

POWER (green)

Lights constantly	Input power to device is OK
Blinks 4 times per second then lights 2 seconds	SIM card problems (missed, incorrect placed, PIN protection is enabled)
Blinks every second	Alarm Function is enabled, sensors are not in active status
Blinks 4 times per second	Sensors triggered, so sensors in active status

GSM (blue)

Blinks every second	Not logged to GSM network yet, searching (the same blinking if PIN protection still activated)
Blinks every 3 seconds	Logged to GSM network

OUT (red)

No light	Main power socket is turned off
Lights constantly	Main power socket is turned on
Blinks 4 times per second	An error or possibly a problem with SIM card (see also Chapter 17)

16. Technical Data

| Product | iSocket Environment Pro |

Available Socket/Plug	Socket/Plug: CEE 7/4 ("Schuko") - Model Number: ISGSMT707EU Socket/Plug: CEE 7/5 (French) - Model Number: ISGSMT707FR Socket/Plug: BS 1363 (British) - Model Number: ISGSMT707UK Socket/Plug: CEI 23-50 S17/P17 (Italian) - Model Number: ISGSMT707IT Socket/Plug: SEV 1011 (Swiss) - Model Number: ISGSMT707CH Socket/Plug: NEMA 5-15 (North America) - Model Number: ISGSMT707US Socket/Plug: AS/NZS 3112 (Australian) - Model Number: ISGSMT707AU Socket/Plug: SI32 (Israeli) - Model Number: ISGSMT707IL
Power Input	100-240VAC, 50-60Hz
Consumption	Stand-by power <1W, Green Power
Output Relay	Max. switching 16A/250VAC, protected by 15A fuse. Turn on/off or restart of 120VAC/240VAC appliances by sms or call.
Hidden button	For manual switching of main relay and for reset to factory defaults.
Input for Sensors	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 (BLACK). **iSocket**® **Alarm Notifier** – alarm notification over external sensors actuation.
Input for Temperature Sensor	Mini-jack 3.5mm connector on the rear of the device, RED colour. Only sensors from the original manufacturer are supported. Sensors are water-proof, measurement limits from -55C(-67F) to 120C(248F). ±0.5°C accuracy from -10°C to +85°C.
Temperature control	Thermometer and thermostat features, temperature measurement provided by SMS, turn on/off equipment by thermostat's settings. **iSocket**® **Temperature Notifier** – send temperature rise/fall notifications.
Indicators	POWER green, GSM blue, OUT red
SIM socket	Push-push type, plug-in SIM card 1.8/3V, for standard size GSM contract or prepaid (PAYG) SIM-cards
Mobile Network	4-band worldwide GSM 850MHz/900MHz/1800MHz/1900MHz, built-in antenna. **iSocket**® **Online 24/7** – gets the device back online even after a break in the GSM-network.
Built-in rechargeable battery	Li-ion or Li-po high quality batteries with excess capacity cater for signal delays in the event of a break in the GSM-network before sending the power failure alert. Charging from internal charger about 20 hours if totally discharged. **iSocket**® **Power Notifier** – power failure/restore alerts.
Scheduler	Scheduling the following functions to be executed at a particular time: turn on/off relay, activation/deactivation of Alarm Function, sending status with temperature information.
Security	Password, phone number list, limited configuration interval.
Operation conditions, Store conditions	**Operation conditions:** Indoors, dry conditions, -10C – +40C (14F – 104F) **Store conditions:** -30C – +50C (-22F – 122F) **Important notes!** While the product can operate at low temperatures (below zero) this is not supported due to the technical specification for most SIM-cards. A SIM card is not supplied with the device and is therefore not a part of the device. You must not turn on the device when the temperature falls below zero - the device must be already turned on at this moment, and then the heat from the electronics will compensate for the low ambient temperature. You must not turn on the device if there has been an abrupt change of conditions from cold to warm or vice versa. Please wait a few hours to stabilise conditions before turning on the device.
Weight	Net/Gross: 258g(0.56lb)/410g(0.9lb), Temperature sensors: ITS00J 7g(0.24oz), ITS30J 72g(2.5oz)

17. Troubleshooting

Please read the safety instructions carefully (Chapter 2) as well as the warranty terms (Chapter 18). You may not repair the device yourself. Here are descriptions of the possible problems and their rectification. Only the simplest problems are mentioned. More information can be found on the website www.isocketsystems.com. Some of the 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. Post warranty service is provided by the manufacturer or authorised service centres if such exist. 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 15 for information about the indicators. Indicators can signal different faults.**

Possible malfunction: No lights on indicators after iSocket switched into a wall outlet.
Possible solution: Make sure that the wall outlet is functioning and that power is available.

Possible malfunction: The device is plugged into a wall outlet, the POWER indicator is on, but the device does not accept any commands.
Possible solution: Make sure that all indicators are correctly lit (see Chapter 15), the SIM-card is inserted correctly, PIN-code authorisation is removed on the SIM-card and the GSM network is available.

Possible malfunction: The device attached to the main socket will not turn on, although the main socket itself is working.
Possible solution: Check whether the connected device functions and whether its own switch is turned on.

Possible malfunction: Command was sent, but no response and nothing happens.
Possible solution: 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. 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). 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. Read about other potential problems below.

Possible malfunction: The OUT indicator reports an error (blinking 4 times per second)
Possible solution: 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. 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.

Possible malfunction: 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.
Possible solution: The device must be reset to the factory defaults and set again with another phone. (Chapter 14).

Possible malfunction: The device is behaving strangely – e.g. no response to commands.
Possible solution: Try to reset to factory default and configure the device again (Chapter 14). 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.

Possible malfunction: The device doesn't send power failure / power restore alerts.
Possible solution: Make sure that the number for alerts is installed properly (see Chapter 5.3). 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.

18. Limits of Warranty and Liability

These Warranty and Liability Terms ("terms") are subject to change without notice. Current terms are available from https://www.isocketsystems.com/warranty/. The warranty terms below apply to customers who purchase products directly from iSocket Systems for personal use. Warranty terms for products purchased from dealers may be different. Contact the dealer who sold you the product for details. Our products are subjected to stringent final quality inspection. iSocket Systems guarantees that your device is free from material and production defects. iSocket Systems 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 (for some countries 2 or 3 years extended warranty is available – check our website), iSocket Systems 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 iSocket Systems 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 through an authorised channel). iSocket Systems 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 iSocket Systems. 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. iSocket Systems 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. iSocket Systems 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. Alarm features in this device, as well as functions related to temperature control, are optional and cannot be considered as a substitute for professional systems. iSocket Systems assumes no liability for damage to property in connection with the operation of these functions. The ability to send different types of alerts depends on the mobile network and other factors. iSocket Systems provides the best technological solutions to perform these operations successfully, but iSocket Systems do not allow use of the device for purposes related to life support and assumes no liability for damage to property, loss of profit or any other loss in connection with the operation of device. The maximum liability is limited by the cost of device in a case of its failure. iSocket Systems 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. iSocket Systems 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. iSocket Systems 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. iSocket Systems will not be responsible for changes in mobile operators' networks if they for example cancel a service, reduce performance, change network settings or shut down a network, which is required for operation of the device. If the device stops operating due to any changes on mobile network it may not be considered as warranty case. 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.

19. Contacts

The most current product and contact information can be found on the ***World of iSocket*** website *www.isocketworld.com* and corporate website *www.isocketsystems.com*. **Thank you for choosing our state-of-the-art products!**

                                                                    English