Thank you for purchasing the TUTA S30.

The TUTA S30 GSM power socket is a remote controlled socket consisting of a GSM module. The power supply output of the socket can be turned on or off remotely by the SMS (Short Message System) command or local controlled by pressing button. It is an intelligent power supply socket controlled by users’ mobile phone at anytime and anywhere.

TUTA S30 is suitable for controlling electrical appliances which power consumption less than 3000W in household or office. It is universal for all kinds of indoor power supply sockets.

With extended-connected temperature sensor, TUTA S30 can switch on or off the socket output according to the environment temperature. It's available for power control of the heating or refrigeration plant, to keep the environmental temperature within presetting range or at a fixed temperature value. Furthermore, a SMS notification will be sent to master’s mobile phone if TUTA S30 detects the rapid-changing or the reaching of pre-set alert value of surroundings temperature.

TUTA S30 is mainly applied for house and office usage. It is not suited for industry application, especially in humidity or dust condition.

All services and functions need to be supported by the GSM network and a SIM card.

This brochure suits for TUTA S30 model.

Details of the functioning and advanced operation of this socket are described in this instruction manual.
CONTENT

For your safety ........................................................................................................ 5
Exception clause ........................................................................................................ 6
Chapter 1 Features and accessories ........................................................................... 7
  1.1 Main function ........................................................................................................ 7
  1.2 Package contents .................................................................................................. 8
  1.3 Sockets instructions ............................................................................................. 9
  1.4 Light indicator and “Beep” warning tone .............................................................. 10
Chapter 2 Quick start ................................................................................................. 12
  2.1 Install the SIM card and temperature sensor .................................................... 12
  2.2 GSM Power on/ off ............................................................................................. 12
  2.3 Add a Master number to the socket .................................................................... 13
  2.4 The regulation of time ........................................................................................ 14
  2.5 Socket output switching on/off .......................................................................... 14
  2.6 External power supply notification ..................................................................... 15
Chapter 3 Advanced settings .................................................................................... 16
  3.1 Define the users ................................................................................................... 16
  3.2 Change password ................................................................................................. 19
  3.3 Switching on/off the socket output manually ....................................................... 19
  3.4 Delayed-switch on/off the socket output .............................................................. 21
  3.5 Timed switching on the socket output ................................................................. 22
3.6 Auto-control the socket output by temperature .......................... 24
3.7 Temperature alarm ................................................................... 27
3.8 SMS notification upon the socket output changing .................... 28
3.9 SMS notification upon external power supply changing .......... 29
3.10 “Beep” warning tone ............................................................... 29
3.11 Check status .......................................................................... 30
3.12 Resetting the socket ................................................................ 31

Chapter 4 Maintenance ....................................................................... 33
Chapter 5 General Troubleshooting ..................................................... 34
Chapter 6 Main Technical Parameters ................................................. 36
Appendix: SMS commands list ............................................................ 36
1. Purchase a GSM SIM card (mobile phone card) from GSM network service provider and install it in the socket. This SIM card number is referred as TUTA S30 number on this brochure.

2. The user needs to activate the Caller ID Presentation function of SIM card, and deactivate PIN code of the SIM. Contact with GSM network service provider for support.

3. Change the original password at the beginning use. Be sure to keep the password and SIM card number secret. Do not disclose this information to anyone other than the authorized users in order to ensure your safety.

For your safety

- This socket was designed for home or office use. Do not use it on the electrical appliance which is for industry or business operation, for example, iatrical appliances, large heaters and refrigerates.
- Before using this socket, make sure that the mobile phones can be used well in the area, otherwise, do not put this socket into operation.
- The power consumption of the appliances connected with the socket cannot exceed 3000W and the current cannot exceed 16A.
- The electrical appliance which power consumption is higher than 1500W must be grounded.
- Do not make two plugs of socket short circuit.
- Do not touch the socket jack by any metal objects or hand.
- This socket was designed for indoor use. Don’t use it in wet, chemically aggressive or dusty environment.
- Do not open the case unless maintenance needed.
- Do not keep shaking or fall down this socket, otherwise it can be damaged.
- This socket is a wireless signal transmission socket. Keep it away from electronic equipment likely to interfere with the wireless signals, in order to avoid signals interference.
- Switch off this socket and mobile phone when entering areas marked "Explosive", "Might explode", "Closed wireless transceiver sockets" etc.
- Do not cast this socket in a fire, as this may cause explosion.
- This socket should only be operated from power approved by the socket manufacturer. The use of any other types of power may damage the socket.
- Keep the socket and its accessories out of the children reach.

**Exception clause**

1. We operate on a policy of continuous development. We reserve the right to make changes and improvements to any of the sockets described in this document without prior notice.
2. For the latest socket information, please visit: [http://www.i-tuta.com](http://www.i-tuta.com). We don’t guarantee for the document veracity, reliability or any content except regulate in proper laws. Including no guarantee for socket suitable market or suitable area promise.
3. We hold no responsibility for the illegal use of this socket.
4. We hold no responsibility for any loss of income or any special, incidental, consequential or indirect damages howsoever caused.
5. The contents of this document are provided “as is”. Except as required by applicable law, no warranties of any kind, either expressed or implied, including, but not limited to the accuracy, reliability or contents of this document. We reserve the right to revise this document or withdraw it at any time without prior notice.
Chapter 1 Features and accessories

1.1 Main function

- This socket uses a GSM SIM card.
- Remotely operate by SMS command: The socket be controlled and set by sending SMS commands.
- Input: 110V-250V/50Hz.
- Output: Max.16A for long-duration operation.
- Relay: 30A/250V relay with two working status power on/off for output outlet.
- M button: To manual control output power on/off.
- Delayed control socket output.
- Auto operates by preset schedule: Fixing-time control output power on/off.
- External temperature sensor supported: Send environmental temperature SMS to mobile phone.
- Auto operates by temperature: Available for power control of the heating or refrigeration plant, to keep the environmental temperature within presetting range or at fixed temperature value.
- SMS alarm when temperature rapid-changing or reaching the pre-set value: When it detects the rapid-changing or the reach of pre-set alert value of surroundings temperature, it can auto-send the SMS alarm message to master’s mobile phone.
- Support 5 mobile phone users.
- Auto time-synchronization.
- SMS notification upon external power source changing.
1.2 Package contents

GSM power socket (1 unit)

Temperature sensor (1 unit)

User manual (1 unit)
1.3 Sockets instructions

Figure 1: TUTA S30 instructions
1.4 Light indicator and “Beep” warning tone

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Action</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power (Green) light</td>
<td>Turning off</td>
<td>No power supply input</td>
</tr>
<tr>
<td></td>
<td>Constant light</td>
<td>Has power supply input</td>
</tr>
<tr>
<td>GSM (Blue) light</td>
<td>Turning off</td>
<td>Not installed SIM card, or the power switch of socket is “OFF”.</td>
</tr>
<tr>
<td></td>
<td>Flash</td>
<td>Be busy or searching GSM network.</td>
</tr>
<tr>
<td></td>
<td>Constant light</td>
<td>Successfully load to GSM network.</td>
</tr>
<tr>
<td>Output (Red) light</td>
<td>Constant light</td>
<td>The socket outlet has power supply.</td>
</tr>
<tr>
<td></td>
<td>Turning off</td>
<td>The socket outlet cuts power supply.</td>
</tr>
<tr>
<td>“Beep” warning tone</td>
<td>One time</td>
<td>The socket outlet changes power supply status.</td>
</tr>
</tbody>
</table>
Several times | TUTA S30 lost external power supply.
Long Beep | TUTA S30 is successfully register GSM network, or it is successfully reset to its factory settings.

Note:
The “Beep” warning tone can be turn on or turn off by SMS command. Refer to Chapter 3.10 for details.
If the GSM signal is too weak, the socket will send a SMS message “Weak GSM signal” to the master user. The socket should be placed at another place with stronger signal for proper operation.
Chapter 2 Quick start

2.1 Install the SIM card and temperature sensor

- Turn the power switch to “OFF” position.
- Loosen the screw and open the socket’s SIM cover; you will see a SIM card holder.
- Push the metallic cover of the holder to “OPEN” direction and open the SIM card holder.
- Put the SIM card on the card holder, ensuring that the beveled corner is toward the beveled corner of the SIM holder and the golden contact area is facing downwards.
- Cover back the metallic cover and push it to “LOCK” direction. The SIM card will be fixed in the holder.
- Screw the SIM cover back.
- Insert the temperature sensor into the I/O port until it is seized.

2.2 GSM Power on/ off

Power on:
1. Turn the power switch to “On” position (See 7 on Figure1).
2. Plug the TUTA S30 in an AC power socket (See 6 on Figure1).
   The blue light will be flashing slowly for about 20 seconds, then blue light be on constantly and a long “Beep” tone can be heard (if “Beep” warning tone is enabled).
3. Insert the plug of electronic appliance in the TUTA S30 electrical outlet (See 4 on Figure1).
4. **M button** (See 3 on Figure1) can be pressed for about 0.5 second to switch on or off the output of socket. After adding user numbers to the socket, users can send SMS command to control the power supply output. (Refer to Chapter 3.3)

**Power off:**
1. Turn the power switch to “Off” position. The blue light turns off.
2. The socket outlet can work as a normal power socket. TUTA S30 cannot be controlled by SMS commands. M button is disabled.

**Note:**
1. If the GSM indicator light is not constant lights, which imply the SIM card working abnormally, all functions of this socket are invalid.
2. Check GSM network signal of the using place:
   - The GSM network’s signal strength may affect the socket feature. Therefore, before using, the user should ensure that TUTA S30 is used in an area with a strong GSM network signal.
   - For the first time use, the user should perform a test-run by sending SMS to the socket. This allows the user to check the GSM network connection of the socket.

2.3 **Add a Master number to the socket**

The user must edit and send the following SMS to socket via his/her mobile phone (the phone number will be the Master number) in order to:

*Add a Master number to the socket: #00#*

*Successful SMS reply*
  Welcome to use TUTA-S30.
  Your Password is:1234.
2.4 The regulation of time

% Important note

If TUTA S30 is being used for the first time, or it has been reset, the Master user must adjust the socket time according to the current time of SMS center. Otherwise, TUTA S30 will use the original time from 00:00:00, 1st Jan.2004.

Method

The Master user sends following SMS message in order to:

Regulate the socket time: #152#SIMCardNumber# (1)
- The SIMCardNumber should be the SIM card number of TUTA S30.

Successful SMS reply

The socket current time is yyyy/mm/dd hh:mm.

2.5 Socket output switching on/off

Method

Method 1: To press M button 0.5 second (See 3 on Figure1).
Method 2:

The Master user sends following SMS message to socket in order to:

Switch on the socket output: #01#
Switch off the socket output: #02#

Successful SMS reply

Status: ON/OFF
Temp:**
Temp control: function ON/OFF
Schedule control: function ON/OFF
Delay control: function OFF
2.6 External power supply notification

TUTA S30 will notify the user when the external power changes. The “Beep, Beep…” tones will be heard (if enabled), also a SMS notification will be sent if the SIM card is available:

Lost external power supply:
If the plug of TUTA S30 is disconnected from external AC power or lost of the AC power occurs, all operating on TUTA S30 is de-activated, including M button and all SMS commands. TUTA S30 will notify the user “Main electricity supply lost    Temp:***”.

Resume external power supply:
If the AC power of TUTA S30 is available again, the SMS notification will be sent to the user, i.e.” Main electricity supply restore   Status: ON/OFF    Temp:***”
When the external power supply is resumed, the output of TUTA S30 will keep its previous working status. For example, if the output is switched on before the external power supply cut off, the output will be switched on when the external power supply is resumed.
If the power supply is switched on and off frequently, TUTA S30 will send reminding SMS messages.
The SMS notification upon external power supply changing can be disabled. (Refer to Chapter 3.9)
Chapter 3 Advanced settings

3.1 Define the users

3.1.1 User authorization level

All the settings of TUTA S30 can be set or adjusted via a SMS command. There are two mobile phone user controlling levels:

**Master user:**
- Only one Master user has authorization to use all features of TUTA S30.
- In order to enable all the functions on the socket, the Master user must store his/ her mobile number in the socket’s memory. Only one Master’s mobile number (Master number) is allowed for a socket.

**Family users:**
- There are four Family users have authorization to use two commands of switch on or cut off the socket output.
- **The other mobile phone users** have no authorization to use TUTA S30.

3.1.2 About the SMS Command

- **Master user’s SMS command format**: `#code#content#`
- **Family users’ SMS command format**: `#code#content#password#`
- The password must be a four-digit number.
- The original password is 1234.
- The maximum digits that are allows for the phone number is sixteen.
- TUTA S30 will reply to the user after it receives the SMS command.
Note

• The “#” symbol must not be ignored when typing an SMS command.
• No allow any space within the commands.

3.1.3 Add a master number to the socket

Description
If TUTA S30 is being used for the first time, or TUTA S30 has been reset to factory settings, the Master user’s number must be programmed into the socket.

Method
The user must edit and send the following SMS to socket via his/her mobile phone (the phone number will be the Master number) in order to:

Add a master number to the socket: #00# (2)

Successful SMS reply
Welcome to use TUTA-S30.
Your Password is:1234..

Failed SMS reply
If a user tries to add another Master user again, TUTA S30 will send a notification via SMS stating “The master user already exists.”. The Master number should be changed. (Refer to Chapter 3.1.4)

3.1.4 Change the master number

Method
Method 1:
The Master user sends following SMS message in order to:
Change the master user’s number: #14#NewMasterNumber (3)
• NewMasterNumber should be the new Master user’s mobile phone number.
Method 2:
TUTA S30 should be reset to factory settings to remove old Master number before setting the new one. (Refer to Chapter 3.12)

J Successful SMS reply
New master number set successfully.
Successful SMS reply will be sent to the new Master user. Then the old Master user’s number will not be able to control TUTA S30 anymore.

3.1.5 Add a family number

Up to 4 family users’ number can be stored on one socket. Family users have the authority to send SMS command to switch on or cut off the TUTA S30 output, and receive the temperature alarm message as well. The family users should remember and safeguard the socket’s SIM number.

Method
The Master user sends following SMS message in order to:

Add a family number:

#06#FamilyNumber#

Add several family numbers:

#06#FamilyNumber1#...#FamilyNumber4#

• FamilyNumber should be the Family user’s mobile phone number.

J Successful SMS reply

#******# Family numbers set successfully.

3.1.6 Check family user’s number

Refer to Chapter 3.11 Check status.
3.1.7 Delete family number

**Method**
The Master user sends following SMS message in order to:

- Delete a family number:  
  \#113\#FamilyNumber\#  
  (6)

- Delete several family numbers simultaneously:  
  \#113\#FamilyNumber1\#…\#FamilyNumber4\#  
  (7)

- Delete all family numbers:  
  \#113\#  
  (8)

**J** Successful SMS reply  
  \#******\# Family number has been deleted.

**L** Failed SMS reply  
  \#******\# The family number does not exist.

3.2 Change password

**Method**
The Master user sends following SMS message in order to:

- Change the password:  
  \#04\#Oldpassword\#Newpassword\#  
  (9)

  - The **password** is a four digit number.
  - The original **password** is 1234.

**J** Successful SMS reply  
  New password is ****.

3.3 Switching on/off the socket output manually

**Description**

- When the socket output is switching on, TUTA S30 offers power supply for electronic appliance which being connected with it; the red indicator light is lighted constantly. Otherwise, TUTA S30 has no power supply for electronic appliance and the red light is turned off.

  - **Note:** If the socket output status is changed manually (including pressing the **M** button, sending SMS, making phone call), the preset timing, delaying or temperature control of the socket will be invalid automatically and a SMS notification message will be sent to the
Master, but the setting time range and temperature range parameters will be saved until TUTA S30 is reset to factory settings.

3.3.1 Switching on/off by SMS

**Method**

The Master user sends following SMS message in order to:

Switch on the socket output manually: #01#  
Cut off the socket output manually: #02#

The Family users send following SMS message in order to:

Switch on the socket output manually: #01#Password#  
Cut off the socket output manually: #02#Password#

- **Password** should be 4 digits password number. Default 1234.
- SMS reply will be also sent to Master user when Family users use these two commands to change the socket output successfully.

**Successful SMS reply**

Status: ON/OFF  
Temp:**  
Temp control: function ON/OFF  
Schedule control: function ON/OFF  
Delay control: function ON/OFF

3.3.2 Switching on/off by M button

Keep press M button on the TUTA S30 for half a second. The OUTPUT indicator light will turn on or off to indicate that TUTA S30 output is switching on or off.

The SMS reply is same with Chapter 3.3.1.

3.3.3 Switching on/off by calling

**Description**

If the Master user calls TUTA S30, the socket output will be switched on or cut off automatically when the user hears the ring tone in the phone. The calling will be hung up automatically if the
user doesn’t hang up the call.

Method

The Master user sends following SMS message in order to:

Enable switching on/off the output by calling:

#18#1#  \(\text{(14)}\)

Disable switching on/off the output by calling (Default):

#18#0#  \(\text{(15)}\)

Successful SMS reply

Control the socket power output status by calling activated /de-activated.

3.4 Delayed-switch on/off the socket output

Description

• The output of TUTA S30 can be set to delay switch on or off for a period with SMS commands.
• When the “delayed-switch on/off the socket” function is applied, the preset “timed switch on the output” function will be invalid at once.
• When the “delayed switch on the socket” command is received and if the socket output is switched on, the socket output will be switched off immediately and be switch on again as the setting delayed time is reaching. Contrarily, if the socket output is switched off, the output will remain switching off until the setting delayed time is reaching. After switching on the output, the following SMS reply will be sent:
  Status: ON
  Delay control: function OFF
• When the “delayed switch off the socket” command is received and if the socket output is switched on, the socket output will remain the switch on state and be switched off as the setting delayed time is reaching. If the socket output is switched off, it will be switched on immediately and be switch off again when reaching the setting delayed time. After switching off the socket output, the following
SMS reply will be sent:
  Status: OFF
  Delay control: function OFF

Method

The Master user sends following SMS message in order to:

Delay switching on the output after a certain minutes:
  #138#1#Minutes#

(16)

Delay switching off the output after a certain minutes:
  #138#0#Minutes#

(17)

- Minutes are time parameters, its range is 0-720,
- When Minutes is 0, the “delayed switch on/off the socket” function will be invalid, but the current output status won’t be changed.

Successful SMS reply

Status: ON/OFF
Output will switch off/on after * minutes.

3.5 Timed switching on the socket output

3.5.1 Enable timing switching on the output

Description

- The output of TUTA S30 can be set to switch on for a duration and then be switch off after the duration.
- If the socket output status is changed manually (including pressing M button, sending SMS and making phone call), the preset timing, delaying or temperature control of the socket will be invalid automatically, but the setting time range parameters will be saved until TUTA S30 is reset to factory settings. If these functions need to be restarted, the following SMS commands must be set: Timing #128#1#, Temperature control #159#1#, “delayed switch on/off the socket” commands need to be reset.

Method

The Master user sends following SMS message in order to:
Enable timing switch on the output: \#128\#1# (18)

**J Successful SMS reply**

Schedule control: function ON

*WorkDay, StartTime-EndTime*

If the value of the “*WorkDay, StartTime, EndTime*” on the SMS reply are all 0, it means the time duration has not been set. (Refer to 3.5.2)

Then TUTA S30 will keep switching on or off the output automatically according to the schedule settings.

### 3.5.2 Set time period to switch on the output

**& Description**

After successful setting of time duration to switch on the socket output, the schedule parameter will be saved on the socket until TUTA S30 is reset to factory settings.

But the “timed switch on the output” feature is applied only when command 17 be set.

**ã Method**

The **Master** user sends following SMS message in order to:

**Set time period to switch on the output:**

\#129\#*WorkDay*#*StartTime*#*EndTime*#*StartTime*#*EndTime*#\# (19)

- **WorkDay**: one digit, the values lie in the range of “0” to “9”.

The following table contains the descriptions of each value:

<table>
<thead>
<tr>
<th>Value</th>
<th>Corresponding day</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Everyday</td>
</tr>
<tr>
<td>1</td>
<td>Monday</td>
</tr>
<tr>
<td>2</td>
<td>Tuesday</td>
</tr>
<tr>
<td>3</td>
<td>Wednesday</td>
</tr>
<tr>
<td>4</td>
<td>Thursday</td>
</tr>
<tr>
<td>5</td>
<td>Friday</td>
</tr>
</tbody>
</table>
6 Saturday
7 Sunday
8 Monday to Friday
9 Saturday to Sunday

• **StartTime** and **EndTime**: Be consists of 4 digits (hh:mm) and works on a 24 hour clock. The **StartTime** and **EndTime** should be in the same day, and the **EndTime** must be later than **StartTime**. Up to 3 periods of time can be set at a day.

• The socket output will switch on at the **StartTime** and cut off at the **EndTime**.

• For example: #129#1#0000#2130#, 0000 means time 00:00(hh:mm)AM, 2130 means time 9:30PM.

**Successful SMS reply**
Schedule control: function ON/OFF
*WorkDay, StartTime-EndTime*

### 3.5.3 Disable timing switching on the output

**Method**
The Master user sends following SMS message in order to:

**Disable timing switch on the output:**  #128#0# (20)

**Successful SMS reply**
Schedule control: function OFF
*WorkDay, StartTime-EndTime.*

### 3.6 Auto-control the socket output by temperature

#### 3.6.1 Enable auto-controlled by temperature

**Description**
- The external temperature sensor must be inserted into the I/O port of TUTA S30. The output status of the socket can be controlled by the environmental temperature automatically.
• If users don’t open the “timed switch on the socket” or “delayed switch on/off the socket” functions, the socket will control to switch on or cut off the output according to temperature setting.

• If users open the “timed switch on the socket” or “delayed switch on/off the socket” functions, the temperature control function will only be valid when power output is switch on (including timed switch on or delayed switch on time period).

• For example: TUTA S30 is used for the power control of the heating apparatus. If users set the socket output on when indoor temperature is below 20 degrees and off when indoor temperature is above 28 degrees. Meanwhile, users set the TUTA S30 output is on from 9am to 5pm. In this case, the socket will control to switch on or off the output according to indoor temperature automatically from 9am to 5pm duration.

Method

The Master user sends following SMS message in order to:

Enable auto-control the output by temperature:  #159#1#  (21)

Successful SMS reply

Status: ON/OFF
Temp control: function ON
Temp: **
Mode: Heating/Cooling
Range: LowTemp ~ HighTemp

Then TUTA S30 can switch on or off the output automatically according to the temperature range setting.

3.6.2 Set temperature range to switch on/off the output

Description

After successful setting of temperature range, the temperature parameter will be saved on the socket until TUTA S30 is reset to factory settings.
But the “Auto-controlled by temperature” feature is applied only when command 20 be set.

**Method**

The **Master** user sends following SMS message in order to:

**Set temperature range to switch on/off the output:**

#159#*Mode*#LowTemp#HighTemp#  

- **Mode** is the control selection:
  - For coldness, mode=1. For warmness, mode=0.
- **LowTemp** and **HighTemp** means temperature value, the range is -10 to 50 centigrade degree, if **LowTemp** equals to **HighTemp**, constant temperature control will be activated.
- Temperature unit is degree Celsius.
- Example 1: set commands: #159#0#10#20#, if the environmental temperature is 5 degrees (bellow the limitation of 10 degrees in the command), the socket output will be switched on to power heating apparatus; and if the environmental temperature is 24 degrees (above the limitation of 20 degrees in the command), the socket output will be switched off and the heating apparatus stops working;
- Example 2: set commands: #159#1#10#20#, if the environmental temperature is 26 degrees (above the limitation of 20 degrees in the command), the socket output will be switched on to power cooling apparatus; and when the environmental temperature is 7 degrees (bellow the limitation of 10 degrees in the command), the socket output will be off, cooling apparatus stops working.

**Successful SMS reply**

Status: ON/OFF  
Temp control: function ON/OFF  
Temp: **  
Mode: Heating/Cooling  
Range: **LowTemp** ~ **HighTemp**

**3.6.3 Disable auto-controlled by temperature**

**Method**
The **Master** user sends following SMS message in order to:

**Disable auto-control the output by temperature:** #159#0# (23)

**Successful SMS reply**

Status: ON/OFF
Temp control: function OFF
Temp: **
Mode: Heating/Cooling
Range: LowTemp ~ HighTemp

### 3.7 Temperature alarm

#### 3.7.1 Over-temperature alarm

- **Description**

  A range of temperature can be pre-set onto the socket. In this case, if the surroundings temperature is detected out of or back within the pre-set temperature range, the TUTA S30 will auto-send the SMS alarm message to users’ mobile phone. Such as:

  Current temperature is (above/below/back within) the preset range:

  The current temperature

  This feature depends on the temperature sensor.

- **Method**

  The **Master** user sends following SMS message in order to:

  **Enable over-temperature alarm:** #170#1# (24)

  **Set limits of temperature:** #170#MinTemp#MaxTemp# (25)

  - **MinTemp** and **MaxTemp**: The values are whole numbers, can be set within the range of -10 to 50 centigrade degree. The difference of MinTemp and MaxTemp values should not be 0

    Default MinTemp is 20 and MaxTemp is 30 centigrade degree.

  **Disable the alarm upon going beyond limits temperature:** #170#0# (26)

  **Successful SMS reply**

  Temperature alert: function ON/OFF
Min Temp.: **
Max Temp.: **.

3.7.2 Temperature rapid-changing alarm

& Description
A time period value and temperature changing value can be pre-set onto the socket. In this case, if the surroundings temperature change to the pre-set value within the pre-set time period, a SMS alarm message will be auto-sent to master’s mobile phone. This feature depends on the temperature sensor.

& Method
The Master user sends following SMS message in order to:

Enable the temperature rapid changing alarm:  #160#1#  (27)
Set time period and temperature changing value:
    #160#Temp#Time#  (28)
- Temp: The values lie in the range of 1 to 50 centigrade degree.
- Time: The values lie in the range of 1 to 300 minutes.
- Default Temp is 2 degree and Time is 1 minute.

Disable the temperature rapid changing alarm:  #160#0#  (29)

J Successful SMS reply
Fast temperature changing.: function ON/OFF
Delta:**
Time:* minutes

3.8 SMS notification upon the socket output changing

& Description
TUTA S30 will default notify the user when the state of the socket output is changed with a SMS notification. The Master user can enable/disable this SMS notification.

& Method
The Master user sends following SMS message in order to:

SMS notification upon the socket output changing (Default):
No SMS notification upon the socket output changing: #11#0# (31)

J Successful SMS reply
Set no SMS notification when socket output changed.
Set SMS notification once socket output changed.

3.9 SMS notification upon external power supply changing

Description
TUTA S30 will default notify the user when the state of the external power supply is changed with a SMS notification. For example:

Main electricity supply lost
Temp:**

or

Main electricity supply restore
Status: ON
Temp:**

The Master user can enable/disable this SMS notification.

Method
The Master user sends following SMS message in order to set:

SMS notification upon the power supply changing (Default): #12#1# (32)

No SMS notification upon the power supply changing: #12#0# (33)

J Successful SMS reply
(No) SMS notification upon main electricity supply changing.

3.10 “Beep” warning tone

Description
A “Beep” warning tone will be sounded if the work state of TUTA S30 is changed. The “Beep” warning tone is default turning off. The
Master user can enable it by sending SMS command.

Method

The Master user sends following SMS message in order to:

Enable the “Beep” warning tone:   #19#1#   (34)
Disable the “Beep” warning tone (Default):  #19#0#  (35)

Successful SMS reply

Beep alarm activated/de-activated.

3.11 Check status

Method

The Master user sends following SMS message in order to:

Check socket operating status:   #07#  (36)
After receiving the SMS commands, TUTA S30 will reply one SMS message of socket status checking:

Number:***********,**********
Status: ON/OFF
TEMP:**
Temp control: function ON/OFF
Schedule control: function ON/OFF
Delay control: function ON/OFF

Check socket output status:   #000#  (37)
After receiving the SMS commands, TUTA S30 will reply one SMS message of socket output status:

Status: ON
Temp:23.

Check “delayed switch on/off the socket” parameters: #138#  (38)
After receiving the SMS commands, TUTA S30 will reply one SMS message of “Delayed switch on/off the socket” parameters checking:

Status: ON/OFF
Output will switch off/on after ** minutes.

Check “Timing switch on the socket” parameters: #128#  (39)
After receiving the SMS commands, TUTA S30 will reply one SMS
message of “Timing switch on the socket” parameters:
  Schedule control: function ON/OFF

Check “Temperature control” parameters: #159# (40)
After receiving the SMS commands, TUTA S30 will reply one SMS message of temperature parameters checking:
  Status: ON/OFF
  Temp control: function ON/OFF
  Temp: **
  Mode: Heating/Cooling
  Range: LowTemp ~ HighTemp

If “No temperature sensor connected” be received, it means TUTA S30 cannot detect the temperature sensor. User needs to check if the temperature sensor is inserted to the I/O port.

Check “temperature rapid changing alarm” parameters: #160# (41)
After receiving the SMS commands, TUTA S30 will reply one SMS message of parameters. It means SMS alarm message will be sent upon the surrounding temperature changes “Delta” centigrade degree within * minutes:
  Fast temperature changing.: function ON/OFF
  Delta: *
  Time: * minutes

Check “over-temperature alarm limits” parameters: #170# (42)
After receiving the SMS commands, TUTA S30 will reply one SMS message of parameters. It means SMS alarm message will be sent upon temperature reaches MinTemp or MaxTemp centigrade degree:
  Temperature alert: function OFF
  Min Temp.: **
  Max Temp.: **

3.12 Resetting the socket

& Description
• This function resets all programmed settings to their original values, including cleaning all user number, timing parameter and temperature parameter.
• If the setting status is wrong or the malfunctions can’t be corrected, users can restore the socket to its original status to make it work normally.

Note
This function needs to be used carefully as it also erases all setting values.

Method
Method 1: Press the side M button of the device for 5 seconds.
Method 2: The Master user sends following SMS message to TUTA S30 in order to:
Reset the socket: #08#

Successful SMS reply
Reset the socket to factory setting successfully.
A long “Beep” tone (if enabled) will be heard and it means resetting the socket successfully.
Chapter 4 Maintenance

- If TUTA S30 does not in use for long time, it should be powered off.

- Store and use the remote socket in suitable temperature. Too high or too low temperature will likely to damage the socket.

- Try to keep the TUTA S30 and all its accessories dry. Do not store and use it in the bathroom, or other place with high humidity. Do not allow pour water or other liquids into the socket, otherwise, it might cause malfunctions.

- Do not store and use the socket in dusty.

- Do not use alcohol, acetone and other similar solvents to clean it. Wipe it with soft-wet cloth.

- Do not attempt to open it except as instructed. If the socket does not work normally, try to resolve it as the guide of the "general troubleshooting", if to the problem can not be solved, contact with the dealer immediately.
## Chapter 5 General Troubleshooting

<table>
<thead>
<tr>
<th>No.</th>
<th>General Trouble</th>
<th>Possible Reason</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power indicator light turns off</td>
<td>No power input.</td>
<td>Check TUTA S30’s external AC power is available.</td>
</tr>
<tr>
<td>2</td>
<td>GSM indicator light turns off</td>
<td>Can’t find or identify the SIM card. The power switch is OFF.</td>
<td>SIM card no install properly: Power off the socket and check it again. Power on the socket.</td>
</tr>
<tr>
<td>3</td>
<td>Socket output cannot be changed by M button.</td>
<td>No power input. The power switch is OFF.</td>
<td>Check TUTA S30's external AC power is available. Power on the socket.</td>
</tr>
<tr>
<td>4</td>
<td>All functions disable (Indicator is working)</td>
<td>Caller ID presentation do not active, insufficient fee of the SIM card.</td>
<td>Contact network provider to active SIM card function. Pay for the card.</td>
</tr>
<tr>
<td>5</td>
<td>Socket didn’t response of any operation.</td>
<td>TUTA S30 work abnormally.</td>
<td>Switch off the power, check SIM card, or reset factory setting.</td>
</tr>
<tr>
<td>6</td>
<td>After power on the socket, GSM indicator keeps flashing.</td>
<td>Network signal weak or network busy.</td>
<td>If mobile phone’s signal is weak too, place the socket at other place with strong signal and try again.</td>
</tr>
<tr>
<td>No.</td>
<td>General Trouble</td>
<td>Possible Reason</td>
<td>Solution</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>SIM card PIN code actives.</td>
<td>SIM card PIN code actives.</td>
<td>Close the PIN code.</td>
</tr>
<tr>
<td></td>
<td>SIM card invalid.</td>
<td>SIM card invalid.</td>
<td>Contact with local operator to check of it.</td>
</tr>
<tr>
<td>7</td>
<td>The master number already exists.</td>
<td>Other master is already set in the socket.</td>
<td>Change Master number or recover to factory default setting.</td>
</tr>
<tr>
<td>8</td>
<td>Invalid format. Please check and try again.</td>
<td>Invalid command.</td>
<td>Refer to the user manual.</td>
</tr>
<tr>
<td>9</td>
<td>No authorization user</td>
<td></td>
<td>Use the Master mobile phone to try the command again.</td>
</tr>
</tbody>
</table>

**Note:** If the problem can’t be solved with above guidelines, contact to your local distributor or after service center.
Chapter 6 Main Technical Parameters

| Input power socket                        | 110~250V/50HZ,  
|                                         | CEE 7/7 hybrid Schuko/French plug |
| Output power socket                      | 110~ 250V/50HZ, 250V/30A(30s), |
|                                         | 16A long-duration,  
|                                         | CEE7/4 German “Schuko”          |
| Operating temperature                    | -10℃~+50℃                 |
| Store temperature                        | -20℃~+60℃                 |
| Relative humidity                        | 10-90%, without condensation |
| Communication protocols                  | GSM PHASE 2/2+ (including data operation) |
| Data interface                           | GSM SIM 1.8V/3.0V socket   |
| External temperature sensor              | -10℃~50℃                  |
| GSM working band                         | EGSM900, DCS1800            |

Appendix: SMS commands list

<table>
<thead>
<tr>
<th>Category</th>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Regulate the socket time</td>
<td>(1) #152#SIMCardNumber#</td>
</tr>
</tbody>
</table>
### Define the users

<table>
<thead>
<tr>
<th>Category</th>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Add a master number to the socket</td>
<td>(2) #00#</td>
</tr>
<tr>
<td></td>
<td>Change the master user’s number</td>
<td>(3) #14# <em>NewMasterNumber</em>#</td>
</tr>
<tr>
<td></td>
<td>Add a family number</td>
<td>(4) #06# <em>FamilyNumber</em>#</td>
</tr>
<tr>
<td></td>
<td>Add several family numbers</td>
<td>(5) #06# <em>FamilyNumber1</em># …#<em>FamilyNumber4</em>#</td>
</tr>
<tr>
<td></td>
<td>Delete a family number</td>
<td>(6) #113# <em>FamilyNumber</em>#</td>
</tr>
<tr>
<td></td>
<td>Delete several family numbers simultaneously</td>
<td>(7) #113# <em>FamilyNumber1</em>#…#<em>FamilyNumber4</em>#</td>
</tr>
<tr>
<td></td>
<td>Delete all family numbers</td>
<td>(8) #113#</td>
</tr>
<tr>
<td></td>
<td>Change the password</td>
<td>(9) #04# <em>Oldpassword</em># <em>Newpassword</em>#</td>
</tr>
</tbody>
</table>

### Switching on/off output manually

<table>
<thead>
<tr>
<th>Category</th>
<th>Function</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Master user switches on the socket output</td>
<td>(10) #01#</td>
</tr>
<tr>
<td></td>
<td>Master user cuts off the socket output manually</td>
<td>(11)#02#</td>
</tr>
<tr>
<td></td>
<td>Family user switches on the socket output</td>
<td>(12) #01# <em>Password</em>#</td>
</tr>
<tr>
<td>Category</td>
<td>Function</td>
<td>Command</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td>Family user cuts off the socket output manually</td>
<td>(13) #02#Password#</td>
</tr>
<tr>
<td></td>
<td>Enable switching on/off the output by calling</td>
<td>(14) #18#1#</td>
</tr>
<tr>
<td></td>
<td>Disable switching on/off the output by calling (Default)</td>
<td>(15) #18#0#</td>
</tr>
<tr>
<td>Delay control</td>
<td>Delay switching on the output after a certain minutes</td>
<td>(16) #138#1#Minutes#</td>
</tr>
<tr>
<td></td>
<td>Delay switching off the output after a certain minutes</td>
<td>(17) #138#0#Minutes#</td>
</tr>
<tr>
<td>Timing control</td>
<td>Enable timing switch on the output</td>
<td>(18) #128#1#</td>
</tr>
<tr>
<td></td>
<td>Set time period to switch on the output</td>
<td>(19) #129#WorkDay# \StartTime#\EndTime# \StartTime#\EndTime# \StartTime#\EndTime#</td>
</tr>
<tr>
<td></td>
<td>Disable timing switch on the output</td>
<td>(20) #128#0#</td>
</tr>
<tr>
<td>Temperature control</td>
<td>Enable auto-control the output by temperature</td>
<td>(21) #159#1#</td>
</tr>
<tr>
<td></td>
<td>Set temperature range to switch on/off the output</td>
<td>(22) #159#Mode#LowTemp#HighTemp#</td>
</tr>
<tr>
<td></td>
<td>Disable auto-control the output by temperature</td>
<td>(23) #159#0#</td>
</tr>
<tr>
<td>Over-temperature</td>
<td>Enable the over-temperature alarm</td>
<td>(24) #170#1#</td>
</tr>
<tr>
<td>Category</td>
<td>Function</td>
<td>Command</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>e alarm</td>
<td>Set limits of temperature</td>
<td>(25) #170#MinTemp#MaxTemp#</td>
</tr>
<tr>
<td></td>
<td>Disable the over-temperature alarm</td>
<td>(26) #170#0#</td>
</tr>
<tr>
<td>Temperatur e rapid-changing alarm</td>
<td>Enable the temperature rapid-changing alarm</td>
<td>(27) #160#1#</td>
</tr>
<tr>
<td></td>
<td>Set time period and temperature changing value</td>
<td>(28) #160#Temp#Time#</td>
</tr>
<tr>
<td></td>
<td>Disable the temperature rapid-changing alarm</td>
<td>(29) #160#0#</td>
</tr>
<tr>
<td>SMS notification</td>
<td>SMS notification upon the socket output changing (Default)</td>
<td>(30) #11#1#</td>
</tr>
<tr>
<td></td>
<td>No SMS notification upon the socket output changing</td>
<td>(31) #11#0#</td>
</tr>
<tr>
<td></td>
<td>SMS notification upon the power supply changing (Default)</td>
<td>(32) #12#1#</td>
</tr>
<tr>
<td></td>
<td>No SMS notification upon the power supply changing</td>
<td>(33) #12#0#</td>
</tr>
<tr>
<td>“Beep” warning tone</td>
<td>Enable the “Beep” warning tone</td>
<td>(34) #19#1#</td>
</tr>
<tr>
<td></td>
<td>Disable the “Beep” warning tone (Default)</td>
<td>(35) #19#0#</td>
</tr>
<tr>
<td>Check status</td>
<td>Check socket operating status</td>
<td>(36) #07#</td>
</tr>
<tr>
<td>Category</td>
<td>Function</td>
<td>Command</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Check Socket output status</td>
<td>(37) #000#</td>
</tr>
<tr>
<td></td>
<td>Check “Delayed switch on/off the socket” parameters</td>
<td>(38) #138#</td>
</tr>
<tr>
<td></td>
<td>Check “Timed switch on the socket” parameters</td>
<td>(39) #128#</td>
</tr>
<tr>
<td></td>
<td>Check “Temperature control” parameters</td>
<td>(40) #159#</td>
</tr>
<tr>
<td></td>
<td>Check “temperature rapid-changing alarm” parameters</td>
<td>(41) #160#</td>
</tr>
<tr>
<td></td>
<td>Check “over-temperature alarm” parameters</td>
<td>(42) #170#</td>
</tr>
<tr>
<td>Reset to factory settings</td>
<td>Reset the socket</td>
<td>(43) #08#</td>
</tr>
</tbody>
</table>