



Remote switching machines with a FREE call from your mobile phone!

Remote inquiry the status with a FREE Call from your mobile phone!

Remote inquiry the Data acquisition Value with a FREE call from your mobile phone!

GSM Remote Switch

GSM SMS Controller Alarm



User Manual

Ver 1.1

RTU5017

Date Issued: 2013-07-12

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This handbook has been designed as a guide to the installation and operation of RTU5017 GSM SMS Controller Alarm.

Statements contained in the handbook are general guidelines only and in no way are designed to supersede the instructions contained with other products.

We recommend that the advice of a registered electrician be sought before any Installation work commences.

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SMS COMMAND	Functions & Actions	Very Important! Please fill the Installation Schedule at last Page before programming it.
AA	To arm the Unit, in this mode, digital inputs triggered will alarm.	
BB	To disarm the Unit, in this mode, digital input triggered will not alarm.	
CC	To switch ON the Relay Output X and Y;	
DD	To switch OFF the Relay Output X and Y	
EE	Inquiry the Unit Status.	

***The commands should plus Password, the format is Password+SMS Command. i.e.: if the password is 1234, then you can send 1234AA to arm, 1234BB to disarm, the AA-EE must be Caps Lock.**



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1. Brief introduction

The GSM SMS Controller RTU5017 is a very simple programmable I/O ports (1AD, 2DIN, 2DOUT) and cost effective GSM RTU which can be used for data acquisition, remote switching machine, temperature monitoring, automation system and other applications.

Just dial from Authorized User number then one of the two relay output or any one of the relay output will be switched on or off. There are no call costs, the GSM SMS Controller Alarm rejects the call from authorized number then carries out the turn ON/OFF action.

The RTU5017 also supports interval time to report the Analog input value, Digital output status to the authorized numbers, and also can report the value of them while the threshold of the ultra-high----high, low ---- ultra-low occurrence.

Moreover, the RTU5017 with 2 digital inputs for digital inputs, when any one of the inputs triggered, will activate one or both of the relay outputs, in the meanwhile, the RTU5017 will send SMS Alert or dial to authorized numbers immediately. This is very useful if you need protect your assets with low cost solution.

In one word, the GSM SMS Controller RTU5017 is the best choice for lots of applications.

2. Safety Directions



Safe Startup

Do not use GSM unit when using GSM equipment is prohibited or might bring disturbance or danger.



Interference

All wireless equipment might interfere network signals of GSM unit and influence its performance.



Avoid Use at Gas Station

Do not use GSM Gate Opener at a gas station. Power off GSM unit when it near fuels or chemicals.



Power it off near Blasting Places

Please follow relevant restrictive regulations. Avoid using the device in blasting places.



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Reasonable Use

Please install the product at suitable places as described in the product documentation.
Avoid signal shielded by covering the mainframe.



Use Qualified Maintenance Service

Maintenance can be carried out only by qualified maintainer.

3. Standard Packing List

Control Unit X1, GSM ANT X1, User Manual X1(CD), Connector X1, AC/DC Adaptor X1.

Optional Accessories: (Wired Sensors)

PIR Motion Sensor, Glass Break Sensor, Magnetic Window Sensor, Temperature Sensor, Infrared Beam Fence, Vibration sensor, Siren, Current Transducer, Humidity Transducer, etc.

4. Mainly Features

- ✓ Can be operated from anywhere, no distance limitation, Android App and iOS App iKeypad for quickly operation;
- ✓ Din Rail 35mm installation;
- ✓ No call charges. the GSM SMS Controller rejects the call from authorized number then carry out the programmable actions on the first 'ring';
- ✓ Multiple applications. (gates, barriers, temperature, humidity, machines, automation systems);
- ✓ Secure - Using caller ID and password for identification, unknown callers are ignored;
- ✓ Programmable by SMS Commands with password protection;
- ✓ External AC Power monitoring, AC On/OFF will send SMS to authorized phone numbers;
- ✓ Timer Report—Can setup every x hours automatically send its status/Value to the authorized numbers;
- ✓ Rechargeable Backup Battery inside can last 18hours;
- ✓ Upto 6 authorized phone numbers, each number can be used to receive call or SMS or both of call and SMS while alarm occurrence;
- ✓ Authorized phone numbers can be used for dial to switch ON/OFF one or both of the relay outputs, inquiry status, armed or disarmed;
- ✓ Two digital outputs (dry contact, NO) with relay rating 10A/240VAC for connecting the switch of the air conditioner or machines, the outputs can setup as always ON, Pulse output, by SMS, authorized phone number dial in, and alarm events;
- ✓ Two Digital inputs (Dry Contact, NC/NO) for door sensor, motion sensors or other sensors, the input activated can active one or both of the relay outputs and send programmable SMS and dial to authorized phone numbers;
- ✓ One Analog input, 0-5V or 0-20mA or 4~20mA, 10bits Direct Current inputs, can setup interval time to alarm, interval value to alarm, ultra-high, high, low, ultra-low alarm, ensure time, when alarm can active one or both of the relay outputs and send programmable SMS to authorized phone numbers;

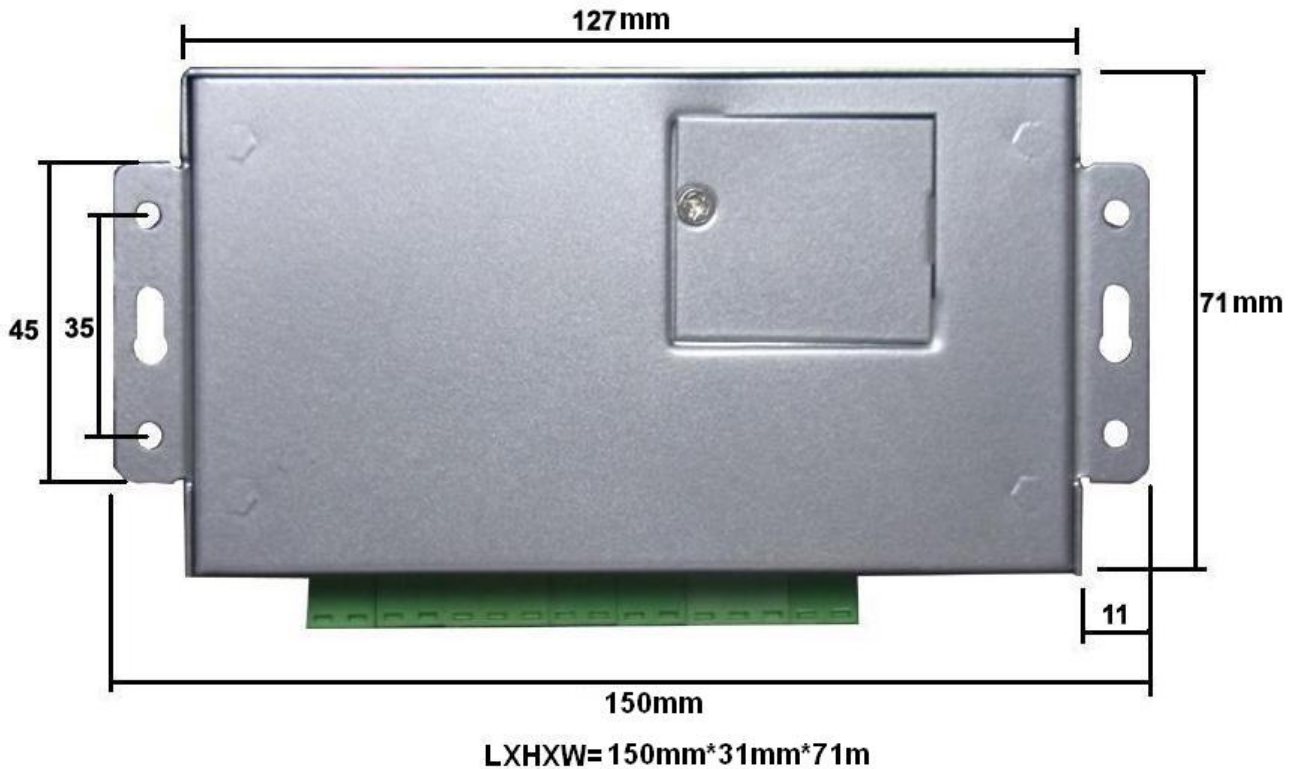


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✓ Based on GSM Network, applied to many applications.

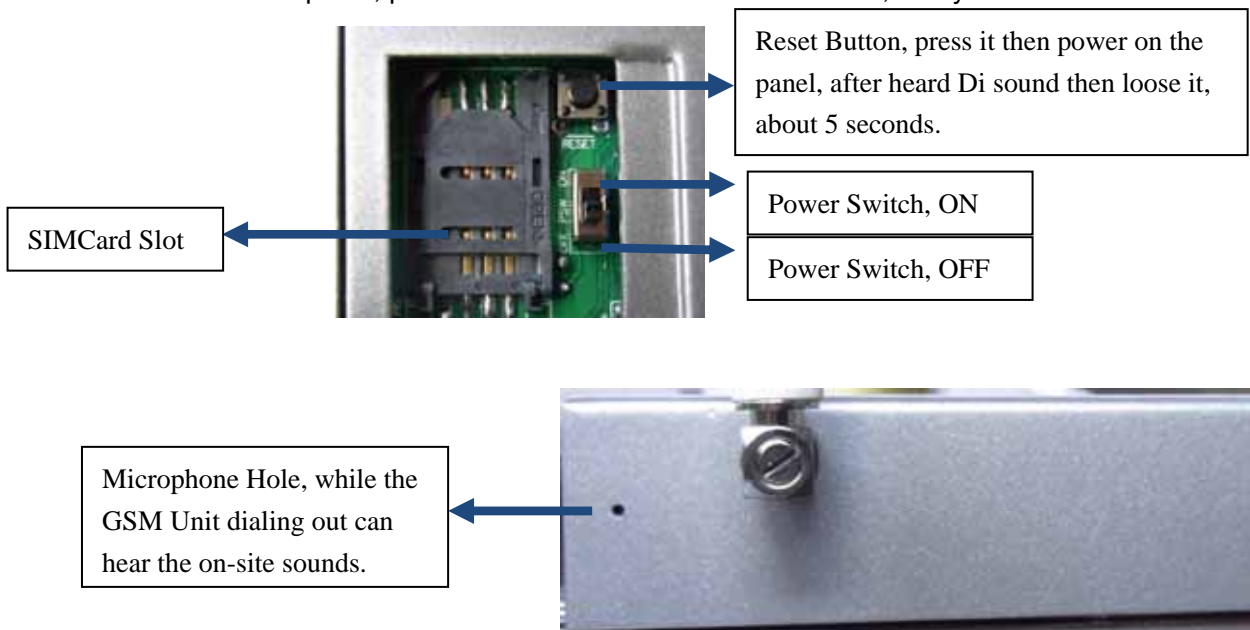
5. Physical Layout and Installation Diagram

5.1 Control Unit physical layout



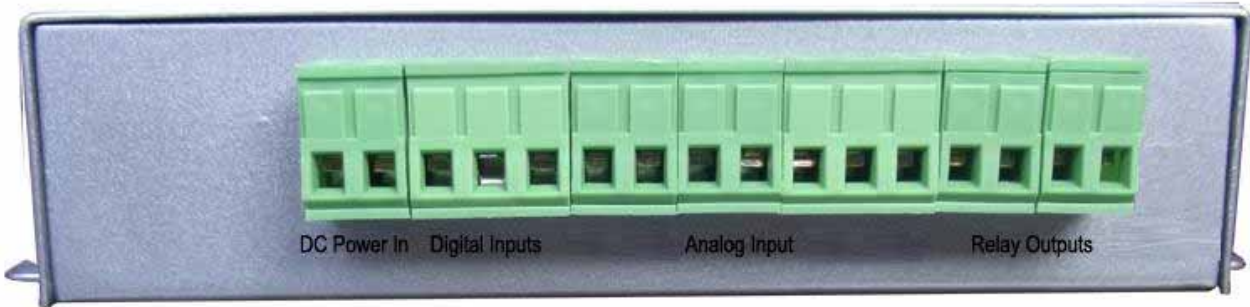
5.2 Interface Instructions for installation

At the backside of the panel, please use the tool to remove the screw, and you can see the below:





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Interface Instruction

GSM ATN	GSM ATN, for contacting the external GSM Antenna, 50MOhm, SMA Male.	
POWER	External DC Power status LED indicator	
ALARM	When alarm occurrence will On, otherwise is OFF.	
RELAY	Any One or both of the two relay outputs close will ON, otherwise will OFF.	
GSM	GSM Module Status indicator, registering GSM Network flicks quickly, registered successful flicks slow. No GSM Signal will be off.	
Connector Interface		
DC8~24V	+	DC8~24V positive input, 2A, for power on the GSM Unit.
	-	DC8~24V negative input, 2A, for power on the GSM Unit.



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Digital Input	DIN1	Digital Input 1 Positive, Dry Contact, NC/NO
	GND	Digital GND
	DIN2	Digital Input 2 Positive, Dry Contact, NC/NO
AD Input	AIN	Analog Input, direct current 0~5V or 0~20mA or 4~20mA
	GND	Analog GND
Relay Outputs	X +	Relay Output X, Positive, Dry Contact, NO Type, 10A/240VAC
	X -	Relay Output X, Negative, Dry Contact, NO Type, 10A/240VAC
	Y +	Relay Output Y, Positive, Dry Contact, NO Type, 10A/240VAC
	Y -	Relay Output Y, Negative, Dry Contact, NO Type, 10A/240VAC
Inner Temp.	Inner Temperature Sensor, will be invalid after contacted external temperature sensor at the Temp. input.	

6. Programming and Operation

Notice:

1. The default Password is **1234**.
2. After power on the unit, the buzzer will alert by 1 long Di sound to alert, if the MCU can not communicate to the GSM Module or not find out the SIMCard or Simcard installed failure or no gsm signal more than 5 minutes, the buzzer will alert twice short Di Di (0.5 second) to alert. After 1 minute the event still exist, then will alert again. If the alarm occurrence, the buzzer will sound 1 minute (Sound 20 seconds then stop 1 second, then continue to sound 20 seconds, total is 1 minute) to warn the users.
3. All the settings are through SMS commands, please edit the below SMS commands in your cell phone, then send to the GSM unit. The unit cannot support PIN Code Protected SIMCard.
4. You can program the GSM unit with SMS commands using your phone. It is safe to do so because in addition to the fact that other people may not know the number of the SIM inserted in it, we also use a Password that makes it impossible for anybody, who doesn't know it, to access the system by chance.
5. Remember that commands must be **CAPITAL LETTERS**. It is PWD not pwd, CAP not Cap etc. Don't add spaces or any other character.
6. The **pwd** in the commands is means the password, when you use it, please in stand of it by the digital number; the capital letters **PWD** is the command letter, use PWD directly.
7. In some GSM operators they use different SMS parameter; the units can't return the SMS confirmation in some gsm operators, but it can performance the functions correctly. Also, you can try to add the country code before the number, see the below settings:



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For example:

E.g.: the country code is **0086**, or **+86**.

The user cell phone number is **13600000000** and has been assigned as a SMS Alert number, the simcard number in the panel is **13512345678**.

When you setup the number as the authorized number, please setup as 008613600000000 or +86136000000000. Not 13600000000.

8. If the password is correct but the the command is incorrect, the RTU5019 will return: **SMS Format Error, Please check Caps Lock in Command!** So please check the Command, or add the country code before the telephone number or check the input is in ENGLISH INPUT METHOD and CAPS LOCK. If password incorrect then will not any response SMS.
9. Once the GSM Unit received the SMS Command, will return SMS to confirmation, if no SMS return, please check your command or resend again.
10. The SMS commands that you will certainly use in the GSM units are the following:

6.1 Setup New Password

pwd+P+newpassword

pwd is the GSM Unit password, default is 1234.

P is the identification character of this command.

if successful, the unit will return: **new password, This is the New Password, please remember it carefully.** The password is 4digits.

For example, the original password is 1234, you want change it to 6666, then you can send the command below: **1234P6666**

6.2 Setup Authorized number

The GSM Unit supports upto 6 authorized phone number, each number can be setup as different rights to receive alarm message and access the GSM unit.

pwd+##+Serial Number+A+Function 1 Code+##+Function 2 code+##+Telephone Number+##

Serial Number = 1~6.

A is the identification character of this command.

Function 1 Code =1,2,3. It is for alarm receiving attribute setting.

=1 stands for when alarm occurrence, the GSM unit will dial as well as send SMS to this number.(The SMS Number Format must be the Same as the Dial Number Format, include or not includes Country code.)

=2 stands for when alarm occurrence, the GSM unit only send alarm SMS to this number, doesn't dial.

=3 stands for when alarm occurrence, the GSM unit only dial this number, doesn't sends SMS.

Function 2 Code =0,1,2,3,4. It is for accessing GSM unit attribute setting.

=0 stands for when this number dial to the GSM unit, will be rejected after the first ring, meanwhile, the



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GSM unit will be changed to Armed Mode and return SMS. This is very useful when the user want to change the GSM Unit to Armed mode with a FREE call from its mobile phone! When the user dial the GSM unit again, the GSM unit will be changed to Disarmed mode and return SMS to ensure the operation is successful.

=1 stands for when this number dial to the GSM unit, will be rejected after the first ring, meanwhile, the GSM unit will report the GSM Unit's status.(The return SMS is the same as command pwd+EE)

=2 stands for when this number dial in the GSM unit, will be rejected by the first ring, and both of the Relay output X and Y will close and last the programmable time, till timeout or dial in again, the relays will open and return SMS to confirmation. (The programmable time please see 6.5 about **Setup Timeout for authorized number dialing in**)

=3 stands for when this number dial in the GSM unit, will be rejected by the first ring, and the Relay output X will close and last the programmable time, till timeout or dial in again, the relays will open and return SMS to confirmation.. (The programmable time please see 6.5 about **Setup Timeout for authorized number dialing in**)

=4 stands for when this number dial in the GSM unit, will be rejected by the first ring, and the Relay output Y will close and last the programmable time, till timeout or dial in again, the relays will open and return SMS to confirmation.(The programmable time please see 6.5 about **Setup Timeout for authorized number dialing in**)

Telephone Number: authorized number, max. 18 characters,

E.g.: if you want to setup 13512345678 as the third authorized number, and the password is 1234, country code is 0086, when alarm occurrence this number can receive both SMS and incoming from the GSM Unit, when dial to the GSM Unit from this number, can change the GSM Unit to Disarmed or Armed mode. Then you can send **1234#3A1#0#008613512345678#** to the GSM Unit. Will return:

Tel1: Empty

Tel2: Empty

Tel3: 008613512345678-1-0 stands for function 1 code =1 and function 2 code =0 value.

Tel4: Empty

Tel5: Empty

Tel6: Empty

Inquiry the Authorized number

pwd+A+#

After received this command,the GSM Unit will return the SMS as abovementioned.

E.g.: If you want to know the authorized number list, and the password is 1234, then you can send **1234A#** to check it.

Remove the Authorized Number

pwd+#+Serialnumber+A+#



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Please overwrite it with another new number or removed it by this SMS Command.

Tips: Only digital input in armed mode alarm occurrence then will send SMS text and dial to the authorized numbers, the other alarm occurrence only send SMS alerts to the authorized numbers.

6.3 Setup Digital Input Attributes

The GSM Unit supports 2 dry contact digital inputs, the NC/NO can be modified, and also can setup while the digital input active how does the relay outputs active.

The digital inputs only alarm in Armed mode, in disarmed mode, the digital input active will not cause any alarm. When the digital input active in Armed, will send the programmable text message to the authorized numbers to alert the user firstly, then automatically dial the authorized numbers one by one till any one answer the call or 3 times in cycles.

The SMS Command is

```
pwd+#+Serialnumber+# +X+ close time+#+Y+close time+#+inputtype+#
```

Serial Number = 1,2, stands for digital input 1 or digital input 2;

X/Y: stands for relay output X and Y;

Close time=0000~9999, unit is Second, Stands for while Digital input active, how many seconds does the Relay Output X and Y should close and last. When =0000 then stands for the relay will always close, must open it by SMS Commands. When =9999, then stands for this relay will not carry out any action. The default is 9999 for both of the X and Y.

Inputtype=NC,NO, stands for the digital input type. NC is normally close, when open will active, NO is normally open, when close will active. The default is NO. If the sensor which you used with this unit is NC, then you should set the unit as NC type. if the sensor is NO, then you should set the unit as NO type. when you set the digital inputs as NC, if you don't use the input, please connect the digital inputs by a wire to short it. Otherwise, it will alarm.

E.g.: the password is 1234, and setup while digital input 2 active, the relay output X close 100S, the relay output Y always close, the digital input type is NC. Then send the SMS `1234#2#X0100#Y0000#NC` to the

GSM Unit. After the GSM Unit received, will return: `X0100#Y0000#NC#Alarmtextmessage#`

Modify Digital Input Alarm SMS Text Message

The user can modify the digital inputs alarm SMS message by the following command; the SMS Alert message should less than 30 letters.

```
pwd+#+Serialnumber+M+#Alarmtextmessage#
```

Serial Number = 1,2, stands for digital input 1 or digital input 2;

M is the identification character of this command.

Alarmtextmessage: stands for the alarm SMS message, max.30characters. the default is: `DIN1 Alarm!`



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for the digital input 1 and **DIN2 Alarm!** for the digital input 2.

Inquiry Digital Input Attributes

pwd+F+Serialnumber+#

Serial Number = 1,2, stands for digital input 1 or digital input 2;

F is the identification character of this command.

After received this command, the GSM Unit will return: **X****#Y****#NC#AlarmTextMessage#**

6.4 Setup Analog input Attributes

The GSM Unit accepts one direct current 0~5V or 0~20mA analog input, the user can setup interval time to alarm, interval value to alarm, ultra-high, high, low, ultra-low alarm, ensure time, when alarm occurrence can active one or both of the relay outputs and send programmable SMS and dial to authorized phone numbers.

The GSM Unit will automatically calculate measured current/voltage convert to engineering value by formula, the formula is: Engineering Value = Measured Value * Scale Value + Base Value

Please see below to setup the temperature attributes:

The SMS command is:

pwd#B#X**#Y****#STP**#TM***#LL***#L***#H***#HH***#SC***#BS****#SP***#ENS***#**

X/Y: stands for relay output X and Y;

X**/Y******: the Relay Output Close time=0000~9999, unit is Second, Stands for while ultra-high value or ultra-low value active, how many seconds does the Relay Output X and Y should close and last. When =0000 then stands for the relay will always close, must open it by SMS Commands. When =9999, then stands for this relay will not carry out any action. The default is 9999 for both of the X and Y.

STP**: STP is the identification character of this command. Stands for the Step value. **=00~9999. =9999 stands for disable this function. Can be setup as decimal. when the input range changed exceed this value, will send SMS to alter the user. Will not affect the relay outputs. The SMS Content is:

TM***: TM is the identification character of this command. Stands for the interval time to alert the user, ***=000~9999, =9999 stands for disable this function. unit is minute. Will not affect the relay outputs. The SMS Content is:

LL***: LL is the identification character of this command. Stands for the ultra-low value, ***=-999~9999, =9999 stands for disable this function. Can be setup as decimal. when the engineering value lower than this value, will send SMS to the users and also affect the relay outputs. The SMS Content is:

Ultra-Low Value Alarm!
Current is xxx;
Relay X is ON/OFF;
Relay Y is ON/OFF;
AC Power is ON/OFF.

All return values are the engineering value, actual value, like 55degree. Not current or voltage value.



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L*:** L is the identification character of this command. Stands for the low value, ***=-999~9999, =9999 stands for disable this function. Can be setup as decimal. when the engineering value lower than this value, will send SMS to the users, but will not affect the relay outputs. The SMS Content is:

Low Value Alarm!
Current is xxx;
Relay X is ON/OFF;
Relay Y is ON/OFF;
AC Power is ON/OFF.

H*:** H is the identification character of this command. Stands for the high value, ***=-999~9999, =9999 stands for disable this function. Can be setup as decimal. when the engineering value higher than this value, will send SMS to the users, but will not affect the relay outputs. The SMS Content is:

High Value Alarm!
Current is xxx;
Relay X is ON/OFF;
Relay Y is ON/OFF;
AC Power is ON/OFF.

HH*:** HH is the identification character of this command. Stands for the ultra-high value, ***=-999~9999, =9999 stands for disable this function. Can be setup as decimal. when the engineering value higher than this value, will send SMS to the users and also affect the relay outputs. The SMS Content is:

Ultra-High Value Alarm!
Current is xxx;
Relay X is ON/OFF;
Relay Y is ON/OFF;
AC Power is ON/OFF.

SC*:** SC is the identification character of this command, ***=000~999, default is 1, can be decimal, is the Scale Value. Means each mA or Voltage equal to how many A or Voltage or others. SC=Input Range/ Output Range. See examples. e.g.: 2.3 or 1.9.

BS**:** BS is the identification character of this command, ****=-999~9999, default is 0, can be decimal or minus value, is the base value. See below example, E.g.: 2.500 or -5.30.

SP*:** SP is the identification character of this command. Stands for the min. time between two alarm, means how many seconds after last alarm event then process new alarm event, ***=000~9999, =9999 stands for disable this function. unit is seconds, this parameter is in order to avoid repeat alarm too quickly.

ENS*:** ENS is the identification character of this command. Stands for the ensure time of actual value exceed the pre-set value, means when actual value exceed the value and last for how many seconds then consider is an alarm event. ***=000~999, default is 10, unit is seconds, this parameter is in order to avoid false alarm.



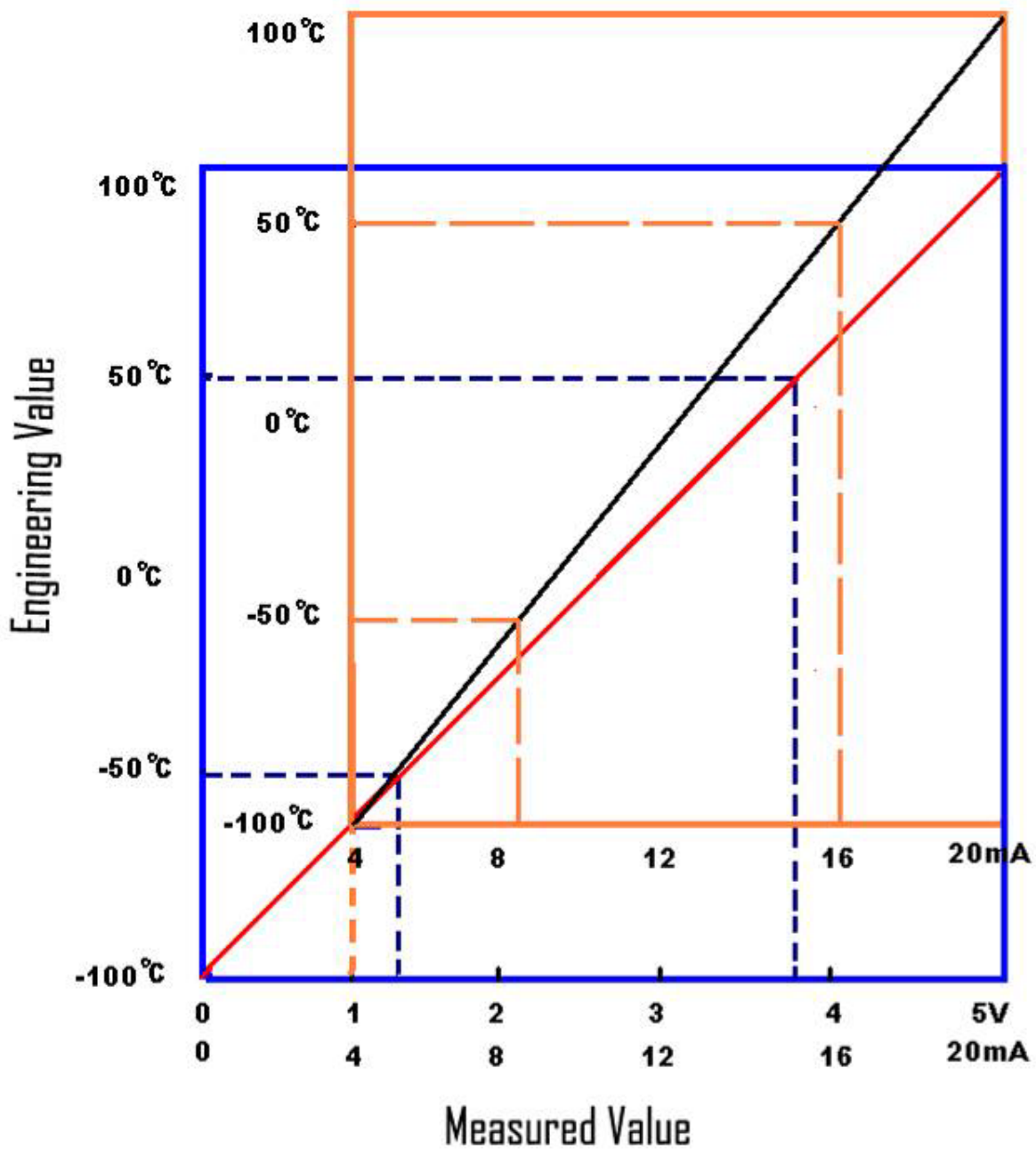
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Tips:

- 1) The value for STP***, LL***, L***, H***, HH*** are engineering value, not measured value. And is Linear Transformation with Equal-slope Calculation Simulator.
- 2) the GSM SMS Controller use the linear transformation with the equal-slope calculation formula inside and based on 0-5V, the value at the Start must be voltage value according to the Linear Transformation with Equal-slope Calculation Simulator.

Linear Transformation with Equal-slope Calculation Simulator





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---Examples---

1. The Current transducer is 4-20mA (See above photo mentioned, start value 4mA equal to 1V, 20mA equal to 5V.), and the measured range is 0~1Amp. Then the

$$SC=(1-0)/(5-1)=0.25, \quad BS=0-1*0.25=-0.25$$

2. The Current transducer is 0-20mA (See above photo mentioned, start value 0mA equal to 0V, 20mA equal to 5V.), and the measured range is 0~10Amp, then the

$$SC=(10-0)/(5-0)=2 \quad BS=0$$

3. The Current transducer is 0-5V, and the measured range is 0-15Amp. Then the

$$SC=(15-0)/(5-0)=3 \quad BS=0$$

4. The analog measure range is 0-18Amps, the output current is 4-20mA. When 5Amp is low, and 3Amp is ultra-low, 8Amp is High, and 10Amp is ultra-high, when Ultra-low and Ultra-high alarm, required relay X to close 60 seconds, relay Y not close, when the current changed more than 1A then alert the user, every 5 hours(=300 minutes) alert the user once, the min. time between two alarm is 380 seconds, the time to ensure the current is 60seconds. Password is 1234.

So:

$$pwd=1234; \quad X^{****}=X0060; \quad Y^{****}=Y9999; \quad STP^{**}=1.5; \quad TM^{***}=300; \quad LL=3; \quad L=5; \quad H=8; \quad HH=10;$$

$$SC=(18-0)/(5-1)=4.5; \quad BS=0-1*4.5=-4.5, \quad SP^{***}=380, \quad ENS^{***}=60$$

The SMS Command should be:

1234#B#X60#Y9999#STP1#TM300#LL3#L5#H8#HH10#SC4.5#BS-4.5#SP380#ENS60#

Inquiry Analog Input Attributes

The user can send SMS Command to inquiry the settings, the command is:

pwd+B+#

6.5 Setup Digital Output Attributes

The GSM Unit inbuilt two Dry Contact digital output relays, the rated is 10A/240VAC, it can be used for connecting the switch of the air conditioner or machines, the outputs can setup as always ON, Timeout OFF, Pulse output, by SMS, authorized phone number dial in, and alarm events.

The SMS Commands for setting and operating them are below:

Switch ON the Relay X and Y:

pwd+CC

Will return: **Relay X+Y ON.**

Switch OFF the relay X and Y:

pwd+DD

Will return: **Relay X+Y OFF.**

Switch ON the Relay X:

pwd+CX

Will return: **Relay X is ON.**

Switch OFF the Relay X:

pwd+DX

Will return: **Relay X is OFF.**

Switch ON the Relay Y:

pwd+CY

Switch OFF the Relay Y:

pwd+DY



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Will return: **Relay Y is ON**

Will return: **Relay Y is OFF**

Setup Timeout for authorized number dialing in

When dial in to Switch on the relay, the relay close time can be setup, and the relay will automatically switch off till re-call in or timeout.

For Relay Output X, the command is:

pwd+XC****

**** =0000~9999, unit is Second, Stands how many seconds does the Relay Output X should close and last. When =0000 then stands for the relay will always close, must open it by SMS Commands. When =9999, then stands for this relay will not carry out any action. The default is 9999.

Will return: **Relay X ON** to the call in number. When call in again or timeout, the relay will automatically open, and send SMS alert to the user: **Relay X OFF**.

For Relay Output Y, the command is:

pwd+YC****

**** =0000~9999, unit is Second, Stands how many seconds does the Relay Output Y should close and last. When =0000 then stands for the relay will always close, must open it by SMS Commands. When =9999, then stands for this relay will not carry out any action. The default is 9999.

Will return: **Relay Y ON** to the call in number. When call in again or timeout, the relay will automatically open, and send SMS alert to the user: **Relay Y OFF**.

Tips: if both of the relay X and relay Y were setup the timeout, then when the authorized number call in, both of them will be switched on, and return SMS: **Relay X + Y ON**. Re-call or timeout then will return each relay's status.

Pulse Output SMS Commands:

The user can send SMS to switch on/off the relays once or more times to make it output pulse type.the Command is below:

pwd+nP*L***T****

n: =X or Y, Stands for relay Output X or Y;

P***: P is the identification character of this command. ***=000~999, unit is second, stands for how long the relay X will keep for close then open.

L***: L is the identification character of this command. ***=000~999, unit is second, stands for interval open time.

T**: T is the identification character of this command, **=00~99, stands for the relay should close how many times.

After the GSM Unit received this command, will return: **Executed** to confirmation.



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6.6 Armed/Disarmed the GSM Unit

The user can Armed or Disarmed the GSM Unit by SMS Commands or authorized number dial in. In Armed Mode, the digital input active will alarm, in disarmed mode, the digital input active will not alarm. When alarm occurrence, will send programmed SMS text message and automatically dial the authorized numbers one by one, till answer the call or timeout in 3 cycles.

Tips: *The other inputs(Pulse input, temperature sensor, analog input)active, no matter in armed or disarmed mode will occurrence alarm immediately.*

The Armed Command is:

pwd+AA

Will return: **Armed**

The Disarmed Command is:

pwd+BB

Will return: **Disarmed**

6.7 Inquiry the GSM Unit current status

The user can inquiry the GSM Unit current status by SMS command or authorized number dial in. The SMS Command is:

pwd+EE

Will return:

DIN: 0/1;0/1 (0 stands for open, 1 stands for closed)
AIN: xxx;
Relay X: ON/OFF;
Relay Y: ON/OFF;
Armed/Disarmed;
GSM Signal is xx;
AC Power is ON/OFF.

6.8 Setup Automatically report attributes

The user can setup interval time to report the GSM Unit current status to the specified number. The SMS command is:

pwd+D*+#+specified number+#**

D*:D** is the identification character of this command. ***=000~999, unit is hour, stands for how many hours does the GSM Unit should report its current status to the specified number.

specified number: a mobile phone that the GSM Unit will send the SMS to it. Usually is administrator number or monitoring center number.

Inquiry Automatically report Attributes Setting

The user can send SMS Command to inquiry the settings, the command is:



GSM Remote Switch GSM SMS Controller Alarm

pwd+D+#

6.9 Inquiry the IMEI Code and firmware version

The user can inquiry the IMEI Code and the firmware version by SMS command, the SMS Command is:

pwd+E+#

6.10 External AC Power Status Monitoring

The GSM Unit will automatically monitoring the external AC power, while AC power goes off, will send **AC Power Goes OFF** to the authorized number immediately, and while the external AC power goes on, will send **AC Power Goes ON** to the authorized number immediately.

7. iOS App and Android Apps Instructions

The user can operate the GSM Unit by Android Apps and iOS. Both of them are free charge. For Android Apps, please download from our official website, and download the iKeyPad from Apple Store. The interface of these tools please see below.



8. Technical specifications

Rated Voltage: 8~24V 2A DC

Standby Consumption: 30~35mA (Not charging battery)

Working Consumption: 400mA

Working temperature: -10 ~ +60

Storage temperature: -20 ~ +60

Relative humidity: 10-90%, No condensation

GSM frequency: 900/1800MHz(Default) or 850/1900Mhz (Optional)

SIM Card: Supporting 3V SIM Card

GSM Antenna: 50 Ω SMA Antenna interface

Communication protocol: GSM PHASE 2/2+ (include data service)

Digital Inputs: 2 (Dry Contact, NC or NO)

Digital outputs: 2 (Dry Contact, NO, 10A/240VAC)



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Analog Input: 1(Direct Current 0~5V or 0~20mA or 4~20mA, 10bits.)

Backup Rechargeable Battery: 3.7V@900mAH lithium batteries

External Size: 150mm*71mm*30.30mm

Installation Type: 35mm DIN Rail.

Net Weight: 0.60Kg

9. Warranty

- 1) This system is warranted to be free of defects in material and workmanship for one year.
- 2) This warranty does not extend to any defect, malfunction or failure caused by abuse or misuse by the Operating Instructions. In no event shall the manufacturer be liable for any alarm system altered by purchasers.

10. Affix Table

Before setup the GSM Unit please write down the installation plan firstly, it is very useful for saving your test and installation time. After installed successful, then tear off this Schedule for review in further.

Installation Schedule								
SIMCard Number in the GSM Unit: _____								
Installation Address: _____								
Serial Number	User Name	Phone Number	Authorized Type					
			Alert Method			Access the GSM Unit		
			SMS&Call	SMS	Call	Arm/Disarm	Switch ON/OFF Relay XY	Inquiry
1								
2								
3								
4								
5								
6								

Notice: Please mark V if for enable and X for disable.

The End!

Any questions please help to contact us feel free.

[Http://www.GSM-M2M.com](http://www.GSM-M2M.com)