GSM ANT

GSM SMS Controller Alarm
GSM Remote Controller

GSM-IO-ENV-KC

CE

POWER

ALARM

RELAY

GSM

DC8-24V		Digital Input			Pulse Input		AD Input		Temp Input			Relay Outputs				Inner Temp
+	-	DIN1	GND	DIN2	PIN	GND	AIN	GND	3.3V	TEMP	GND	NO1	NO1	NO2	NO1	

DANBIT

GSM Remote Switch
GSM SMS Controller Alarm
GSM SMS Temperature Alarm

GSM SMS Temperature Alarm
GSM SMS Controller Alarm

Table of Contents

This handbook has been designed as a guide to the installation and operation of GSM-IO-ENV-K GSM SMS Temperature Alarm Controller Unit.

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.

Danbit employees and distributors, accept no liability for any loss or damage including consequential damage due to reliance on any material contained in this handbook.

Danbit employees and distributors, accept no liability for GSM Network upgrading or SIMCard upgrading due to the technology specifications contained in this handbook.

SMS COMMAND	Functions & Actions	Very Important!
AA	To arm the Unit, in this mode, digital inputs triggered will alarm.	Please fill the Installation Schedule at last Page before programming it.
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.

GSM SMS Temperature Alarm
GSM SMS Controller Alarm

1. Brief introduction

The GSM SMS Temperature Alarm Controller GSM-IO-ENV-K is a very simple programmable I/O ports (2DIN, 2DOUT, 1 Temperature) and cost effective GSM RTU which special for monitoring field temperature by SMS text message. Also, it can be used for remote switching machine, automation system and other applications.

It inbuilt one Temperature Sensor already, and external port for external temperature sensor is available. The temperature sensor is DS18B20, 12bits, measures temperatures from –55°C to +125°C (–67°F to +257°F), 0.5°C accuracy from –10°C to +85°C, can setup interval time, interval value, ultra-high, high, low, ultra-low temperature alarm can active one or both of the relay outputs and send programmable SMS and dial to authorized phone numbers;

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 Temperature Alarm Controller rejects the call from authorized number then carries out the turn ON/OFF action.

Moreover, the GSM-IO-ENV-K with 2 digital inputs for digital sensors, when any one of the inputs triggered, will activate one or both of the relay outputs, in the meanwhile, the GSM-IO-ENV-K will send SMS Alert to owners immediately and auto dial users' phone number. This is very useful if you need protect your assets with low cost solution.

In one word, the GSM SMS Temperature Alarm Controller GSM-IO-ENV-K is the best choice for lots temperature related 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.

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 X1. Temperature Sensor X1 (inbuilt)

Optional Accessories: (Wired Sensors)

PIR Motion Sensor, Glass Break Sensor, Magnetic Window Sensor, Temperature Sensor, Infrared Beam Fence, Vibration sensor, Siren, 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, pulse counter, 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;

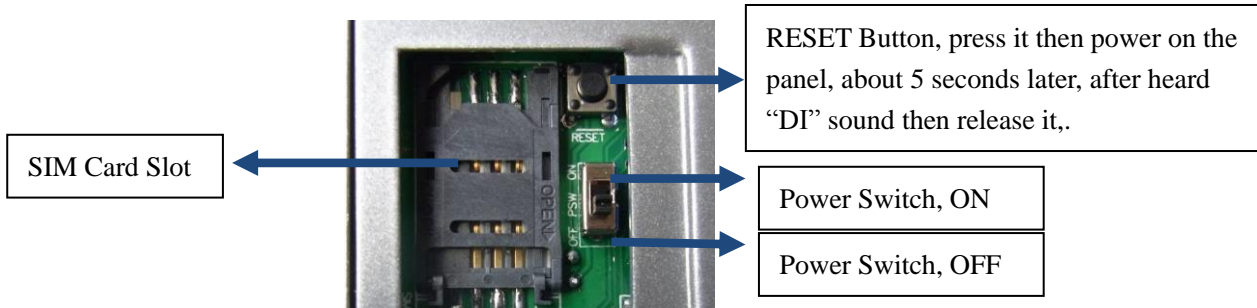√ Two Digital inputs (Dry Contact, NC/NO) for door sensor, motion sensors or other sensors, the input

activated can active one or both of the relay outputs and send programmable SMS and dial to authorized phone numbers;

√ One Temperature Sensor DS18B20 inbuilt, also external input is available, 12bits, measures temperatures from –55°C to +125°C (–67°F to +257°F), 0.5°C accuracy from –10°C to +85°C, can setup interval time, interval value, ultra-high, high, low, ultra-low temperature alarm can active one or both of the relay outputs and send programmable SMS and dial to authorized phone numbers;

√ Based on GSM Network, applied to many applications.

5. Installation Diagram

5.1 Interface Instructions for installation

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

RESET Button, press it then power on the panel, about 5 seconds later, after heard "DI" sound then release it,.

SIM Card Slot

Power Switch, ON

Power Switch, OFF

Microphone Hole, while the GSM Unit dialing out can hear the on-site sounds.

DC Power In   Digital Inputs   Temperature   Relay Outputs   Inner Temp.
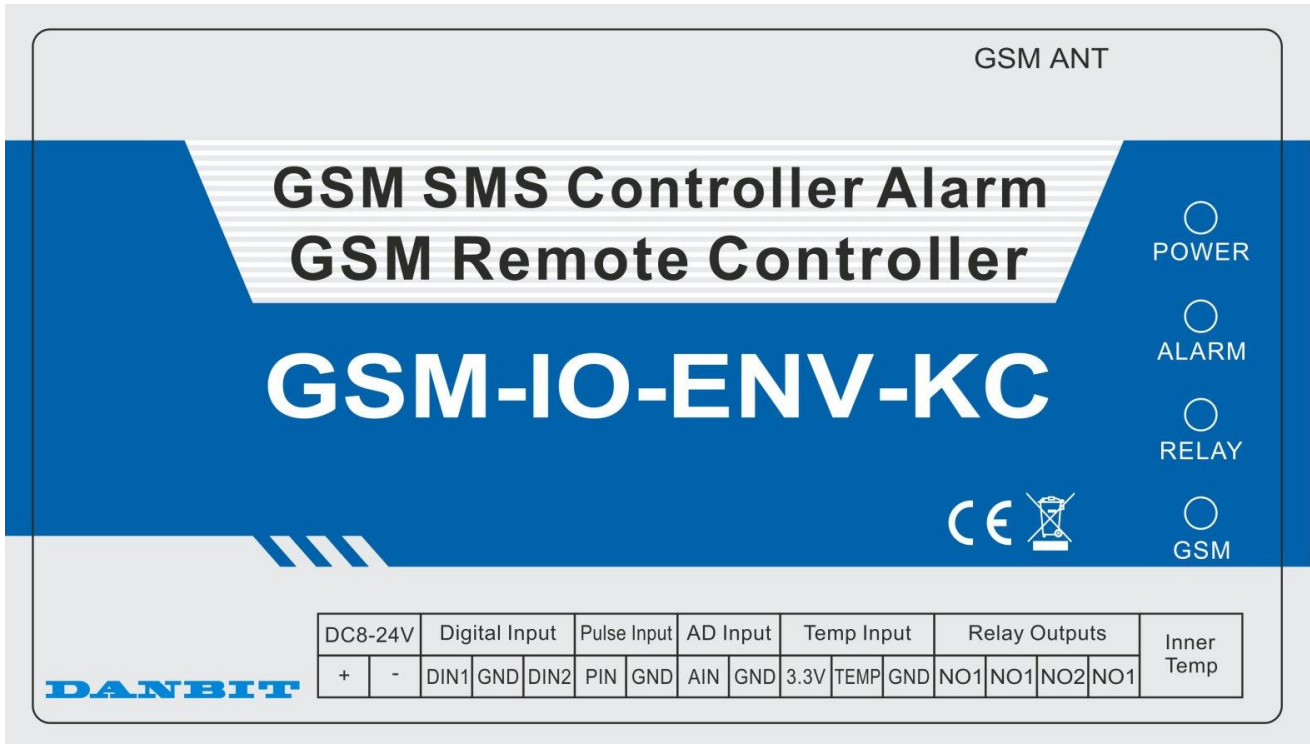
Interface Instruction

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(600ms per flicks). 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.
Digital Input	DIN1	Digital Input 1 Positive, Dry Contact, NC/NO
	GND	Digital input GND
	DIN2	Digital Input 2 Positive, Dry Contact, NC/NO
Temp. Input	3.3V	3.3V Direct Current Output Positive, for 3.3V Temperature Sensor.
	Temp.	Temperature Sensor input, DS18B20 sensor only.
	GND	Temperature Sensor input 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 senor 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 SIM Card or SIM card 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 SIM Card.*

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. And the* <u>SMS commands are without "+"</u>, *for example, the SMS command* **pwd+A+#** *on this user manual means you need to send is* **1234A#** *only.*

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. *Some GSM operators use different SMS parameter; the units may can't return SMS confirmation, but can performance the functions correctly. therefore, you can try to add the* **country code** *before the number, refer to the below settings:*

> *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 SIM card 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 command is incorrect, the controller unit 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 any 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 up to 6 authorized phone number, each number can be setup as different authorization 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 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+#

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

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+#+Serial number+# +X+ close time+#+Y+ close time+#+input type+#

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.

Input type=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!** 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 Temperature Sensor input Attributes

The GSM Unit inbuilt a temperature sensor already, 12bits, measures temperatures from –55°C to +125°C (–67°F to +257°F), 0.5°C accuracy from –10°C to +85°C, but the temperature accuracy will be effected by the GSM Unit, if the user want to extend it to other place or want to get accurate temperature, the user can

plus an additional DS18B20 Sensor to the temperature inputs. The GSM Unit reserved 3.3V power for this DS18B20 Temperature to save the wiring cost. Once contact the external temperature sensor, the inbuilt temperature sensor will automatically invalid.

The user can setup threshold temperature for ultra-high, high, low, and ultra-low temperature value, and also can setup temperature changed range, interval time and when the temperature alarm, what actions does the relay outputs should carry out, etc.

Please see below to setup the temperature attributes:

If the temperature unit is Celsius, the command is:

> **pwd#C#X****#Y****#STP**#TM***#LL***#L***#H***#HH***#SP***#ENS***#**

If the temperature unit is Fahrenheit, the command is:

> **pwd#F#X****#Y****#STP**#TM***#LL***#L***#H***#HH***#SP***#ENS***#**

X**/Y****:** the Relay Output Close time=0000~9999, unit is Second, Stands for while ultra-high temperature or ultra-low temperature 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. **=01~9999. =9999 stands for disabled this function. when the temperature range changed exceed this value, will send SMS to alter the user. Will not affect the relay outputs. The SMS Content is:

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.

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:

Current is xxx;
Relay X is ON/OFF;
Relay Y is ON/OFF;
AC Power is ON/OFF.

LL*:** LL is the identification character of this command. Stands for the ultra-low temperature value, ***=-999~9999, = 9999 stands for disable this function, unit is C or F. when the temperature lower than this value, will send SMS to the users and also affect the relay outputs. The SMS Content is:

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

L***: L is the identification character of this command. Stands for the low temperature value, ***=-999~9999, =9999 stands for disable this function, unit is C or F. when the temperature lower than this value, will send SMS to the users, but will not affect the relay outputs. The SMS Content is:

Low Temp Alarm!
Current is xxx;
Standard 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 temperature value, ***=-999~9999, =9999 stands for disable this function, can be setup as decimal, unit is C or F. when the temperature higher than this value, will send SMS to the users, but will not affect the relay outputs. The SMS Content is:

HighTemp Alarm!
Current is xxx;
Standard 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 temperature value, ***=-999~9999, =9999 stands for disable this function, can be setup as decimal, unit is C or F. when the temperature higher than this value, will send SMS to the users and also affect the relay outputs. The SMS Content is:

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

SP***: SP is the identification character of this command. Stands for how many seconds after last alarm event then process new alarm event, ***=0000~9999, =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 temperature exceed the pre-set value, means when temperature exceed the value and last for how many seconds then consider is an alarm event. ***=000~999, default is 10 seconds, unit is seconds, this parameter is in order to avoid false alarm.

Tips: The temperature value can accept minus symbol and decimal , like -20 degree then please input -20, for temperature value >0, then no need input +, e.g. 20 degree then please input 20, not +20. Also can setup as decimal, e.g.: 19.50

※Inquiry Temperature Sensor Input Attributes

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

pwd+T+#

After the GSM Unit Received this command, will return:

X****#Y****#STP**#TM***#LL***#L***#H***#HH***#SP***#ENS***#.

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 ON the Relay X:

pwd+CX

Will return: Relay X is ON.

※Switch ON the Relay Y:

pwd+CY

Will return: Relay Y is ON

Switch OFF the relay X and Y:

pwd+DD

Will return: Relay X+Y OFF;

Switch OFF the Relay X:

pwd+DX

Will return: Relay X is OFF.

Switch OFF the Relay Y:

pwd+DY

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.

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: The Disarmed Command is:

pwd+AA   **pwd+BB**

Will return: Armed   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:

> Temp: xxx;
> DIN: 0/1;0/1   (0 stands for open, 1 stands for closed)
> 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:

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 exteranal 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)

Temperature Sensor Inputs: 1(inbuilt one DS18B20, can extend to external,12bits,   –55°C to +125°C
(–67°F to +257°F), 0.5°C accuracy from –10°C to +85°C,)

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 writes 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								
SIM Card Number in the GSM Unit: _____								
Installation Address: _____ _____								
			Authorized Type					
			Alert Method			Access the GSM Unit		
Serial Number	User Name	Phone Number	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.