

Temperature & Humidity SMS Alert Controller

Smart Energy Control ...

Energy Saving, Environment & Properties Protection

The image features a world map in the background. Two black SMS Alert Controller units are shown, one in the center and one to the right. A large 'SMS' logo with a white envelope icon is positioned above the central unit. In the lower-left area, there is a thermometer and several blue water droplets with labels: '0.62 GPH', '0.43 GPH', '1.00 GPH', '0.7 GPH', and '1.2 GPH'. Below this is a screenshot of a software interface displaying various data points and graphs. In the bottom-left corner, a man and a woman are shown looking at a computer monitor. A small 'SMS' logo with an envelope icon is also present near the bottom center.

- 2 temperature sensors or
- 1 x temperature & 1 x humidity sensor
- Keep track of temperature & humidity
- Alert user via SMS on high/low temperature or humidity
- Control of other equipments e.g. air ventilation or dehumidifier
- Management Software Handling multi controllers in multi-sites
- Internal Rechargeable Battery backup operation in AC loss
- SMS alert in AC loss



Simple Installation & Setup

- SMS Alert Controller is designed and built for easy user installation.
- All the necessary components are assembled inside the unit
- Signal cables can be wired directly to the connectors

Three simple steps starting the unit:

1. Insert the SIM card
2. Plug in the sensors connectors
3. Connect the AC power cord

- ◆ AC 90~260V Auto Select
- ◆ Internal 2Ah Rechargeable Battery
- ◆ Non-Stop Operation in AC power loss
- ◆ SMS Alert on AC power loss



Wall Mountable



- GSMS-THR-ST * Two temperature Sensors
- GSMS-THR-SX * Temperature & Humidity Sensor
- GSMS-THR-X * Two Analog Channels (water level, pressure sensors)

- Independent alert high or low level for each temperature or humidity channel
- Independent SMS alarm text for each temperature or humidity or analog channel
- User programmable SMS alarm text
- Automatic SMS delivery to users mobile phone on schedule or alarm triggered



*Monitoring
2 temperature points*



*Alert users by SMS when it is too hot or cold
Submersible sensors bundled
Support over 20 meters sensor cable*





Application

Features:

- Alarm Alert Modes—SMS, Phone Dial or Both
- Each alarm is associated with its own alarm SMS text
- Alarm SMS text is programmable by user remotely via SMS or Setup Software
- Independent text message for each alarm
- Independent text message for close or open triggered alarm
- Configuration can be modified by user remotely via SMS or Setup Software
- Arm or Disarm by SMS or Setup Software
- Relay triggered by alarm or SMS command
- Verification of command by return SMS

Temperature & Humidity SMS Alert Controller can be utilized in monitoring the environmental condition for commercial, medical, food , storage, weather station, military, manufacturing industries.

It makes use of SMS to alert users of temperature and humidity conditions via SMS.

By implementing the bundled Server/Client Software and GSM modem, a management system of multi-controllers can be built up to monitor a number of remote sites in one single centre.



Laboratory

Cold Storage

Food Processing

Medical Research

Food Storage

Data Centre

When will the controller sends the data?

- On Schedule in periodic interval programmable by user
- Manual Check by user via SMS command
- Alarm SMS when temperature/humidity is higher than user preset values
- Alarm SMS when temperature/humidity is lower than user preset values
- Alarm SMS when input is triggered
- Alarm SMS when power supply voltage is low



Temperature & Humidity SMS Alert Controller

Electrical Specification

- Programmable high/low temp/humidity values
- 8 x Alarm Inputs (DC8~15V) N/C, N/O, State Change
- 3 x Relay Outputs (Dry Contact) N/C, N/O
- 8 x Mobile Phone Number
- 2 x Central Station phone number
- User Programmable SMS text for each alarm
- 2 x AD Channel: 4 ~ 20mA current type, 12 bit resolution
- Power Input: AC 90~240VA
DC 7~15V
- Power Consumption
Send/Receive SMS: 500mA
Standby Mode: 20mA
Max. Rating: <2A
- Operating Temp: -50 ~ 70°C
- Standby: -55 ~ 85°C

	GSMS-THR-X	GSMS-THR-SX	GSMS-THR-ST
Internal AC/DC Adaptor (90~ 240VAC)	AC or DC power source		
Internal Rechargeable Battery 7.4VDC, 2.0Ah	Max. 14 days operation backup		
Metal Casing	205 x 105 x 42 mm		
Alarm Inputs	8	8	8
Mobile Phone & Centre Number	10	10	10
AC Power Loss Alert	✓	✓	✓
AD Channels	2	—	—
Temperature Channel	—	1	2
Humidity Channel	—	1	—
Internal 5V output for sensors	✓	✓	✓
Temperature/Humidity Alert High/Low	—	✓	✓

[GSMS-THR-SX]



Temperature & Humidity Sensors

- Temperature Sensor: DS18B20
 Measuring Range: -55 ~ 125 °C
 Accuracy: +/- 0.5 °C
 Humidity Sensor: CHM-01A
 Measuring Range: 0 ~ 100% RH
 Accuracy: +- 3% RH
 Operating Voltage: 3.5 ~ 5.5VDC
 Enclosure: PVC Housing
 Sensor Cable: 2 meter (max. 100m)

[GSMS-THR-ST]



2 x Temperature Sensors

- Temperature Sensor: DS18B20
 Measuring Range: -55 ~ 125 °C
 Accuracy: +/- 0.5 °C
 Operating Voltage: 3.5 ~ 5.5VDC
 Enclosure: Steel Housing
 Submersible
 Sensor Cable: 2 meter (max. 100m)

Temperature & Humidity SMS Alert Controller

Model Selection

GSMS-THR

- 90~260VAC Auto Select
- Backup Rechargeable Battery
- Metal Casing
- 205 x 105 x 42 mm



GSMS-THC

- Solar Panel Controller
- Internal Rechargeable Battery
- Aluminum IP67 Enclosure
- 280 x 199 x 90 mm



GSMS-THP

- High Capacity Battery
- Aluminum IP67 Enclosure
- 280 x 199 x 90 mm



GSMS-THV

- High Capacity Battery
- IP65 PVC Enclosure
- 180x 100 x 50 mm

	GSMS-THR	GSMS-THV	GSMS-THP	GSMS-THC
AC Power & Rechargeable Battery, 7.4V 2Ah	✓	—	—	—
Metal Casing	✓	—	—	—
PVC Casing [IP65 water proof]	—	✓	—	—
Aluminum Casing [IP67 water proof]	—	—	✓	✓
High Capacity Battery, 7.6V 19Ah (non-rechargeable)	—	✓	✓	—
Solar Panel Controller & 12VDC, 2Ah Rechargeable Battery	—	—	—	✓

Example:

GSMS-THC-SX

- * Solar Panel & Rechargeable Battery
- * Aluminum Casing IP67 water proof
- * 1 x Temperature & 1 x Humidity

Order Part Number

GSMS-TH x - a b

	- X	- SX	- ST
AD Channels [standard 4~20mA input]	2	0	0
Temperature Sensor	0	1	2
Humidity Sensor	0	1	0
Max. Sensor Cable Length [meter]	-	100m	100m

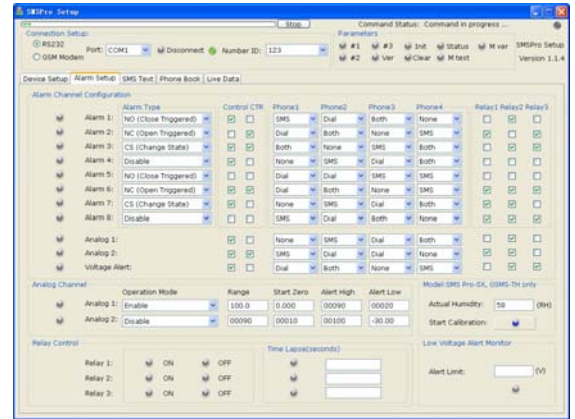


Free Setup Software

Setup software is ready for configuring SMS Alert Controller via SMS or RS232 port.

In addition, mobile phone can be used in sending command or receiving data message.

1. Setting up the controller configuration
2. Receiving the live data from controller

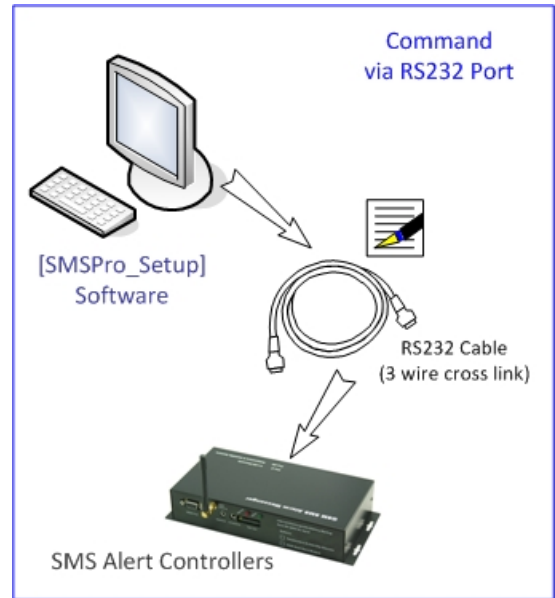


Sending Command

- ▶▶ Remote setup via SMS by mobile phone

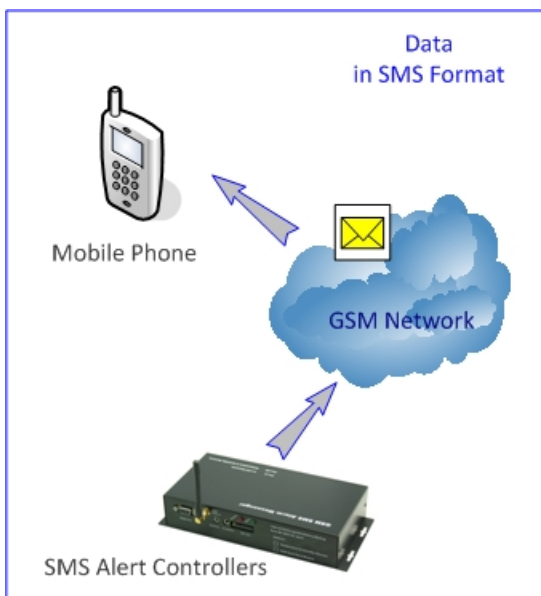


- ▶▶ Local setup via RS232

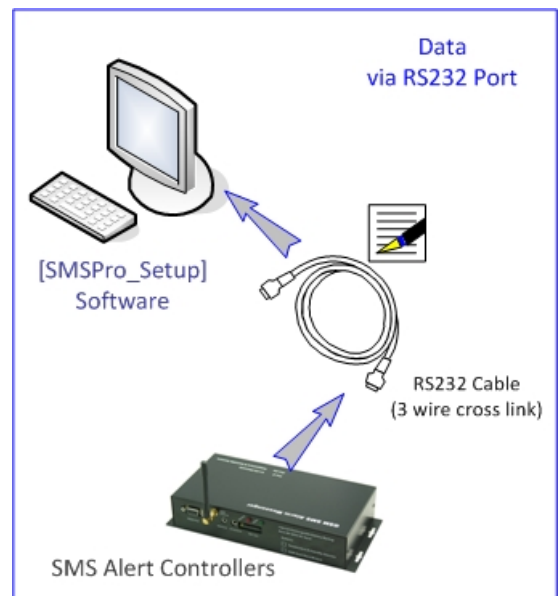


Receiving Data

- ▶▶ Receiving data via SMS by mobile phone



- ▶▶ Local receiving data via RS232





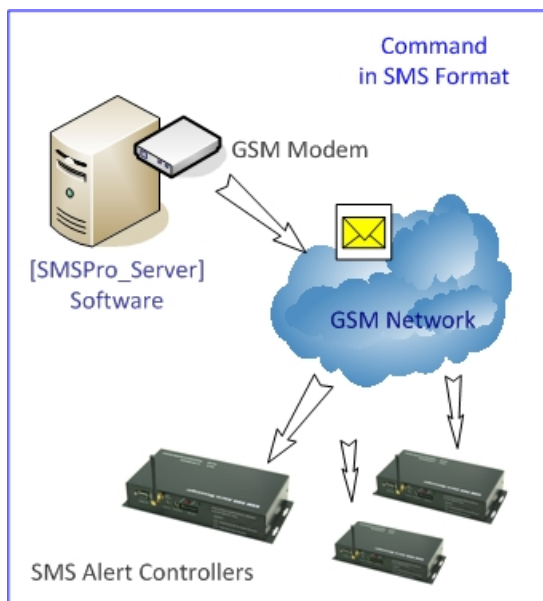
SMS Server Software

It provides the data and command management in handling a number of SMS Alert Controllers simultaneously.

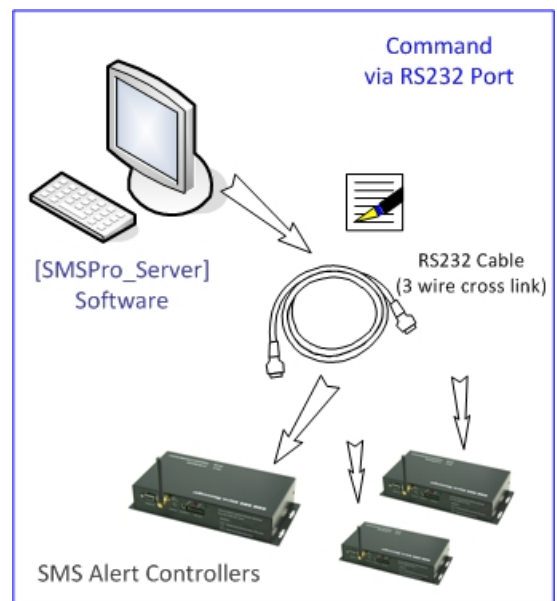
1. Configure multi-controllers locally and remotely
2. Receiving the live data from multi-controllers locally and remotely
3. Maintaining database in XML/SQL/MySQL/Oracle format
4. Allowing a number of client computers to access the data over the network

Setup multi-controllers

▶▶ Remote setup via SMS

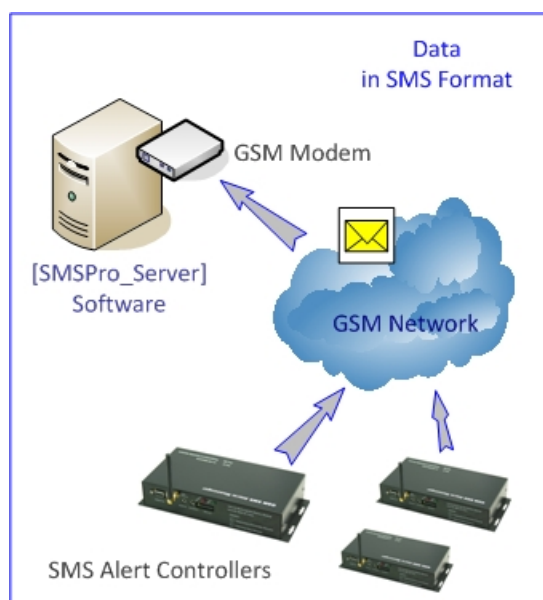


▶▶ Local setup via RS232

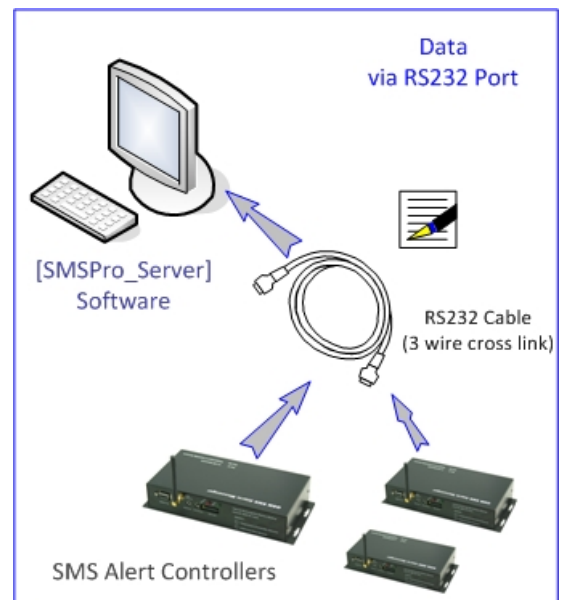


Receiving Data from multi-controllers

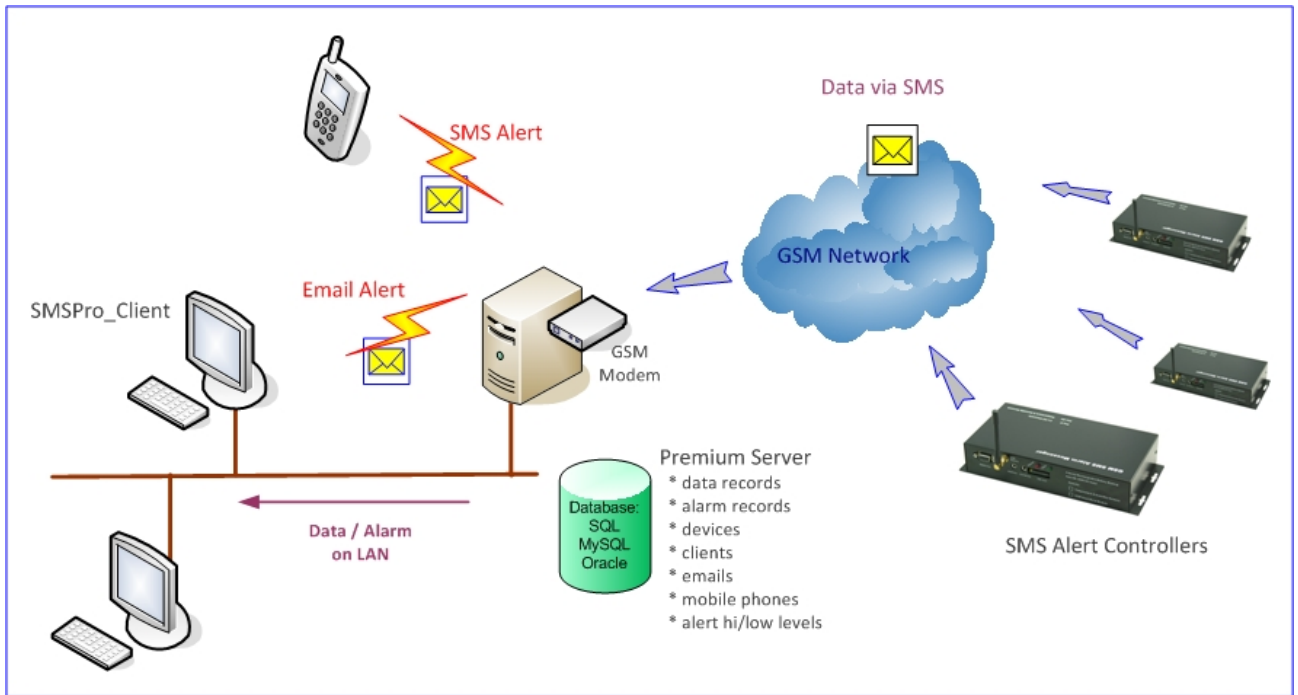
▶▶ Remote receiving data via SMS



▶▶ Local receiving data via RS232



Server Client

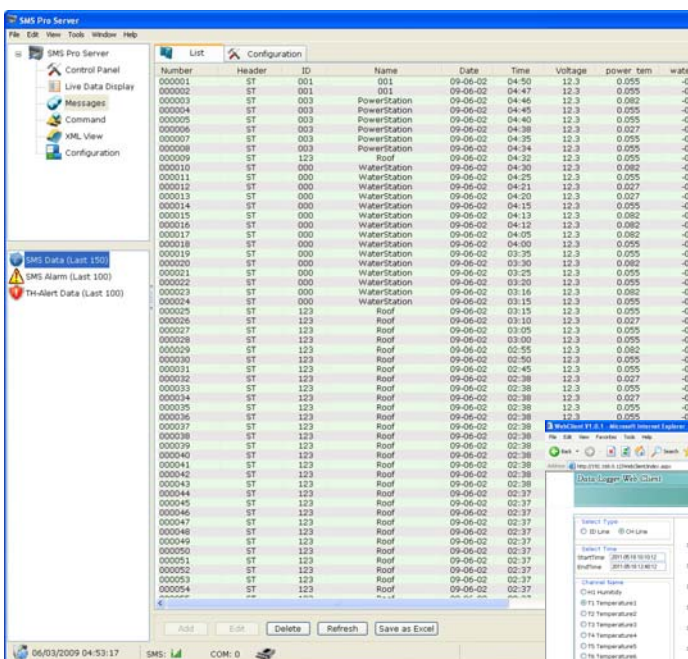


Server software

- Keep receiving the SMS from controllers
- Maintain the historical records in database
- Manage clients in accessing the data
- Alert clients in alarm SMS/email/TCP

Client software

- Keep tracking of temperature/humidity from the server
- Alert user on alarm temperature or humidity
- Manage live data from multi-controllers
- Manage controllers in multi-sites



Server Software



Client Software



Web based client



Software Feature

Edition	SMS SERVER
[A] Management Software	
Receive Data via SMS	Yes
Receive Data via RS232 Port	Yes
Live Data Display	Yes
Database	Access/ MySQL / SQL Server / Oracle
XML	Yes
Data Export to Excel	Yes
Remote Command via SMS	Yes
Schedule Command	Yes
Batch Command	Yes
Temperature & Humidity Alert	Yes
Send Alarm Alert via TCP network	Yes
Send Alarm Alert via email	Yes
Send Alarm Alert via SMS	Yes
Alert Users Grouping	Yes
Alert Emails Grouping	Yes
Multi-users and Multi-devices support	Yes
Client Software support	Yes
Max. SMS Alert Controllers simultaneous support	99999
SMS Devices Management	Yes
User Authentication & Management	Yes
Network Client Authentication & Management	Yes
Web Client support	Yes
SDK for user development	Yes
[B] Client Software	Bundled
Live Data Display	Yes
Alarm Alert	Yes
Graphic Display of Temperature & Humidity	Yes
Temperature & Humidity Hi/Low Alert	Yes
Historical Data Access	Yes
Web Client Support	
GS300 GSM Modem bundled	1