

T20  
User's manual

# Contents

FEATURE .....	3
STANDARD PACKAGE.....	4
SYSTEM OVERVIEW .....	5
Install .....	5
SETUP BY PC SOFTWARE .....	8
Connect PC software .....	8
Setup data logger .....	9
Setup temperature and humidity alarm.....	9
Setup digital input alarm .....	11
Setup SMS.....	11
Setup GPRS parameters.....	12

### Display

- OLED temperature humidity display
- Touch key switch data display

### Data logger

- An Inside temperature and humidity sensor
- An external temperature probe
- 4000 temperature record-set (auto rollback)
- Flexible data logging interval (1 minute up to 24 hours)
- PC software export records

### Alarm

- Configurable temperature&humidity low and high level to alarm
- HIGH-BRIGHTNESS RED LED LIGHT on panel
- Built-in alarm buzzer
- Power failure/recover alarm
- Support 2 wired inputs for alarm

### Communications

#### SMS

- Preset 10 authorized phone numbers
- Configurable alarm/recover SMS
- Query current value by SMS
- Control relay by SMS
- Remote setting by SMS

## GPRS

- TCP/IP connect 4 internet servers (IP or domain)
- Http post, Cwt\_IO protocol, modbus tcp
- Realtime/logging upload data

## Wi-Fi

- Realtime/logging upload data
- View data on APP
- Control relay on APP

## Thermostat

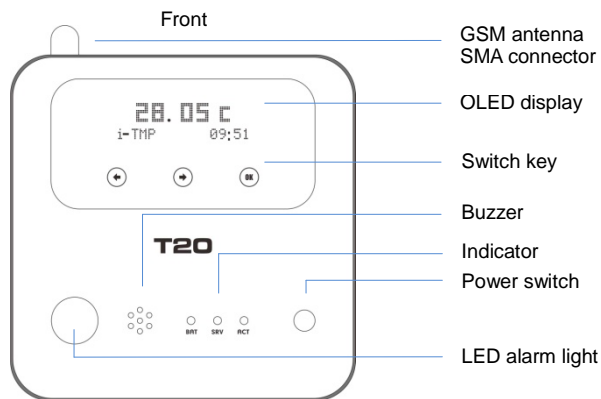
- Inside 3 relays
- Temp and humi alarm/ultra high/low interlock
- Programmable timer relay action

## **Standard package**

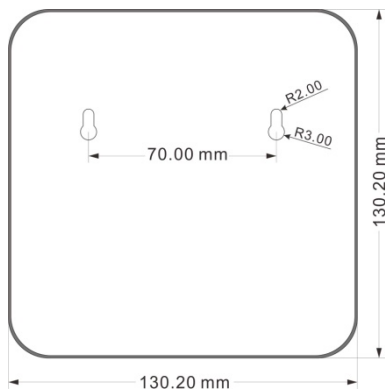
T20 X1/ temperature probe X1 / AC/DC AdaptorX1

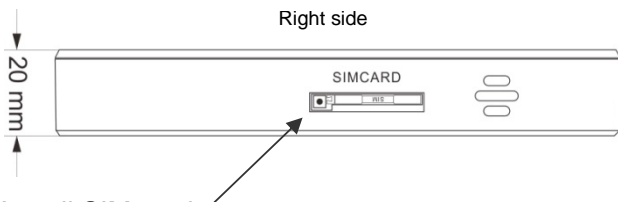
# System Overview

## Install



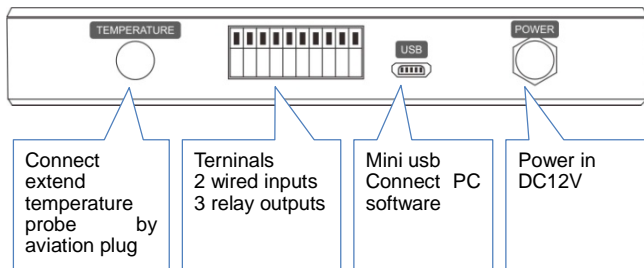
## Back



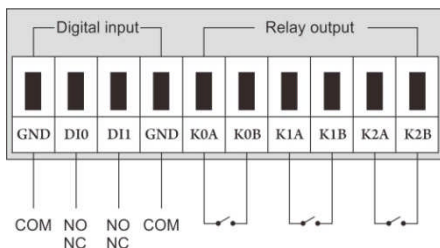


## Install SIM card

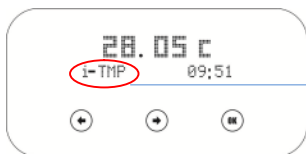
Press the small yellow dot, the SIM card drawer will spring out automatically. Take out the drawer, put the SIM card in it on the slot direction and plug back the drawer.



## Terminals descriptions



Press switch key to view every channel's value



Inside-temperature value



Inside-humidity value



Extend-temperature value

## LED indicator description

Indicator	Status	Indication description
BAT	on	during interior battery is charging
SRV	Light on during handling	It will be light on when the system sends short messages and light off when the handling is over
ACT	Flicker	It will flicker periodically when the system is under operation, and the interval time is 6 sec

## Setup by PC software

### Connect PC software

**Step1:** Run the Driver of pl2303; follow the application wizard to finish the installation. Then restart the computer to ensure the driver run.

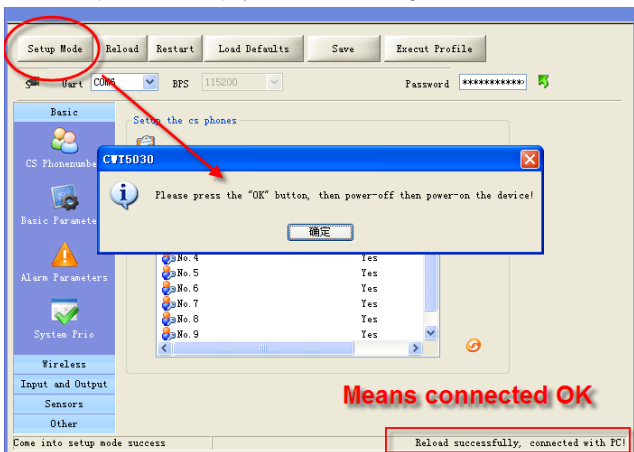


**Step2:** Connect T20 to computer by USB cable, and run the software



**Step3:** access setup mode

Click "Setup Mode", and pay attention to the right bottom of software.





## Definition: Working mode and setup mode

In setup mode, all functions are disabled, only to setup parameters. And T20 must be restart to enter working mode, all functions is enabled, the T20 can alarm and be control.

## Setup data logger

---

Extend wired temperature sensor DS18B20

No.	Value	High	Low	Adjus...	Log	Alarm...	Re-Al...	Alarm...	24Hours	Sound...	En
0											
1											

uart export temperature timer (sec)

GPS upload temperature timer (sec)   GPS upload hour range

Upload when changed

Upload data when change detected

Saving log when change detected

See notify when disconnected

Save record timer (sec)   Enable log saving

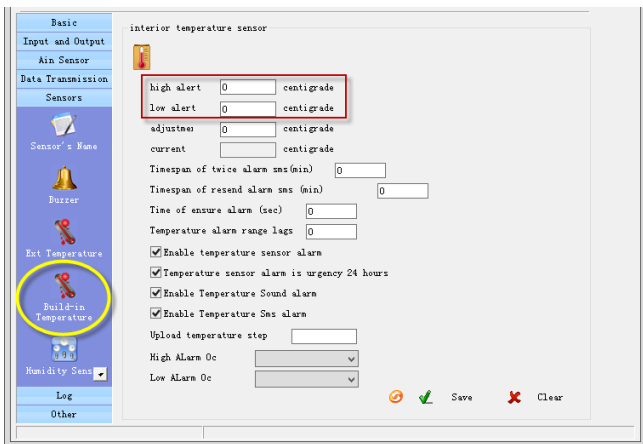
Temperature Unit

Save

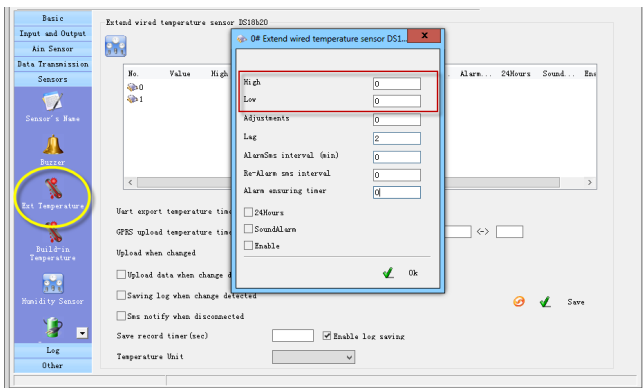
## Setup temperature and humidity alarm

---

1. Setup interior high and lower point

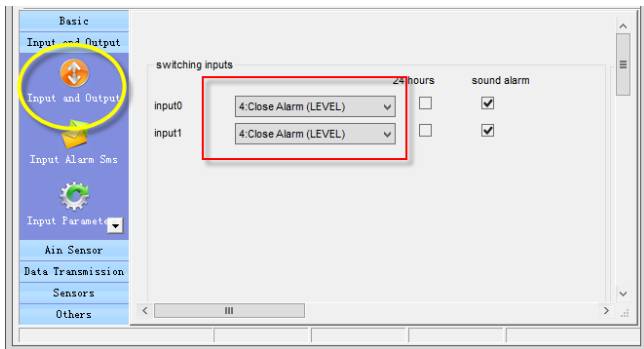


## 2. Setup extend high and lower point

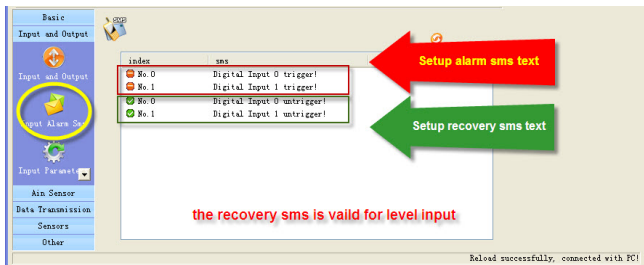


# Setup digital input alarm

## 1. Setup digital input type



## 2. Setup digital inputs sms text

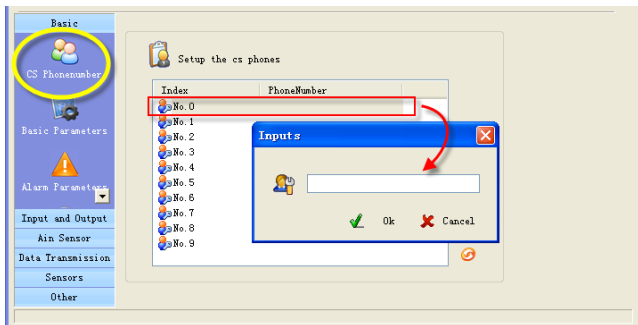


# Setup SMS

## 1. setup cs numbers

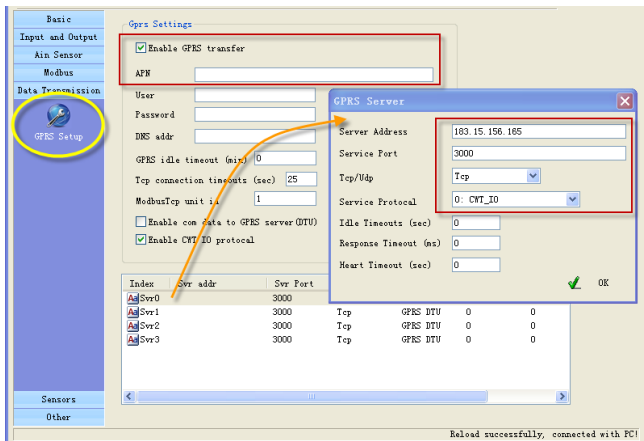
The "CS number" can receive sms (alarm sms, report sms etc) and send

sms commands to control T20. User can set 10 CS numbers, CS0-CS9



## Setup GPRS parameters

### 1. Setup GPRS parameters



T20 transmits data to server, so must setup target server's IP address, port and protocol.

NOTE: server IP must be a public fixed IP address or a domain.

If your PC only has an internal network IP, probably something likes 192.168.1.XXX. You must do port Forwarding in your router.

## 2. Setup timer to upload data

For example, set upload extend temperature every 5 min

