

AMB300 Infrared Temperature Measurement Management System Touch Screen

Installation instruction V1.2

Declaration

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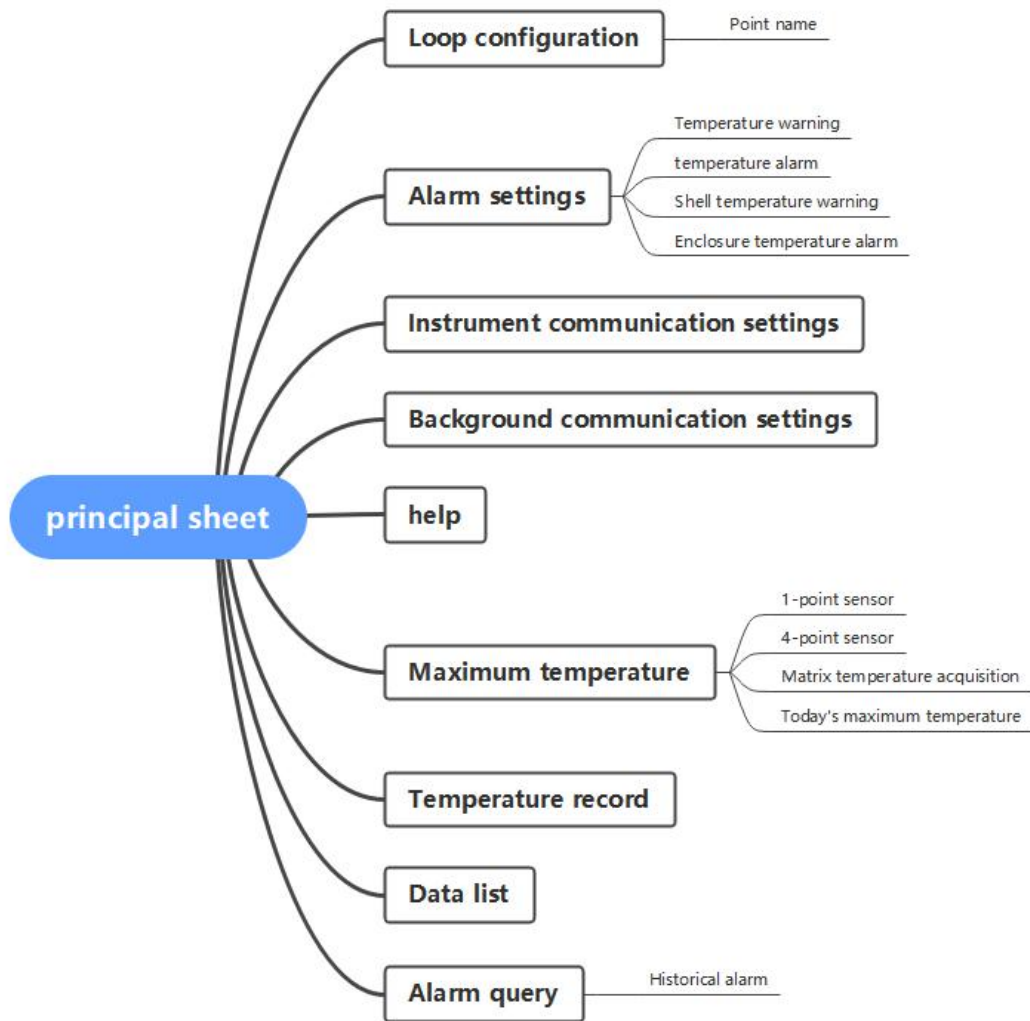
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The company reserves the right to modify the product specifications described in this manual without prior notice. Please contact your local agent for new specifications before ordering.

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1 Interface structure



2 Network description

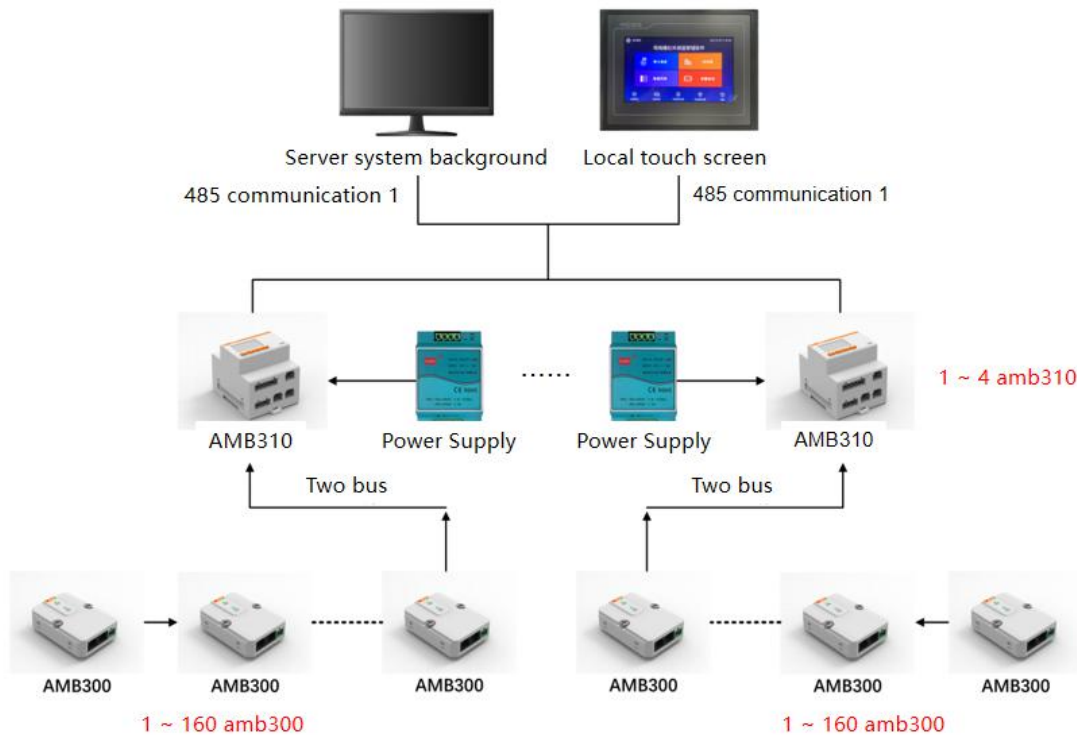
A touch screen can centrally collect data from four collectors, each theoretically having access to 160 temperature acquisition points.

(Note: Each collection port shall not exceed 80 temperature points, the total length of the line shall not exceed 250 meters, and over five types of network wire connection shall be used)

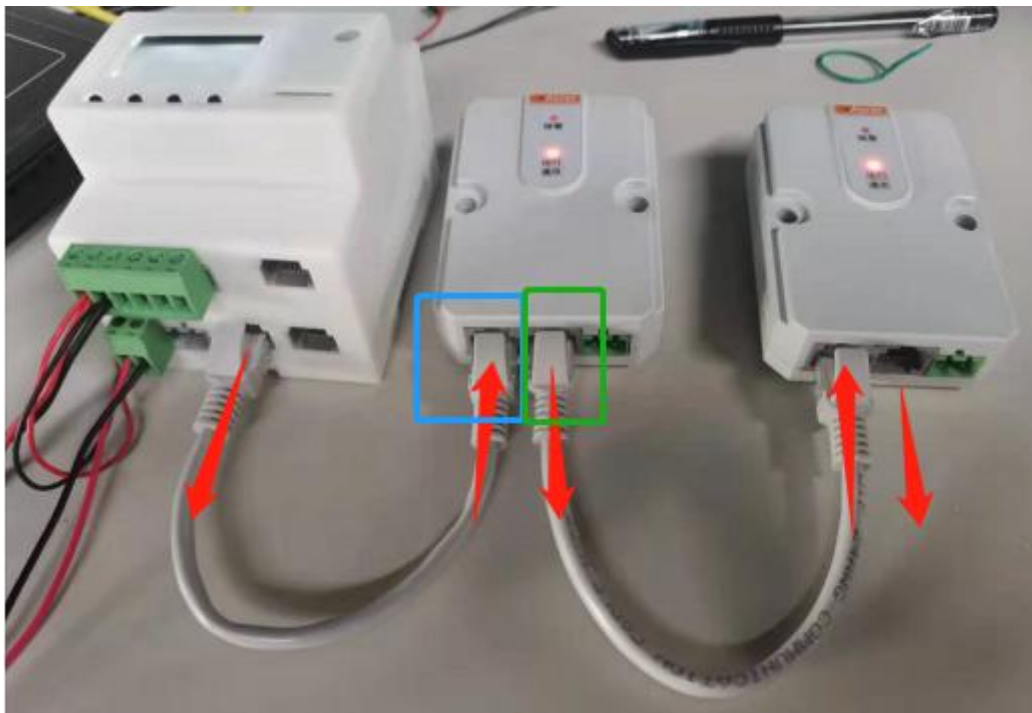
The collector and sensors communicate and supply power via the secondary bus, the touch screen and collector via RS485, while the collector also has an RS485 port to upload data to the background.

The AMB300 infrared sensor is communicated via two bus and connected to the AMB collector. An AMB collector has access to up to 160 AMB300 sensors.

The AMB collector uploads the data to the background system or the touch screen through two RS485 ports, respectively (the default device address is 1, and the baud rate is 57,600). A touch screen can centrally monitor the data from the four A M B collectors, that is, to monitor the 640 AMB300 temperature measurement point data.



AMB300 wiring attention point

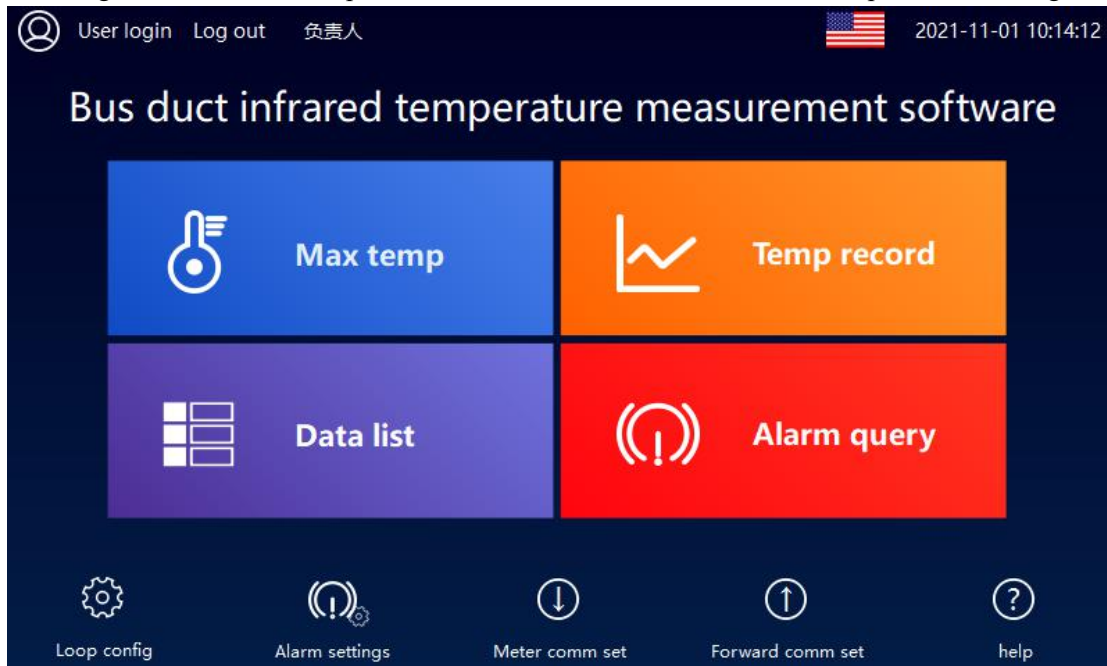


The red arrow in the above figure represents the direction of 24V signal output, the RJ45 interface in the blue box above is the signal incoming port, and the RJ45 port in the green box above is the signal outgoing port to connect the incoming port of the next module.

3 Interface description

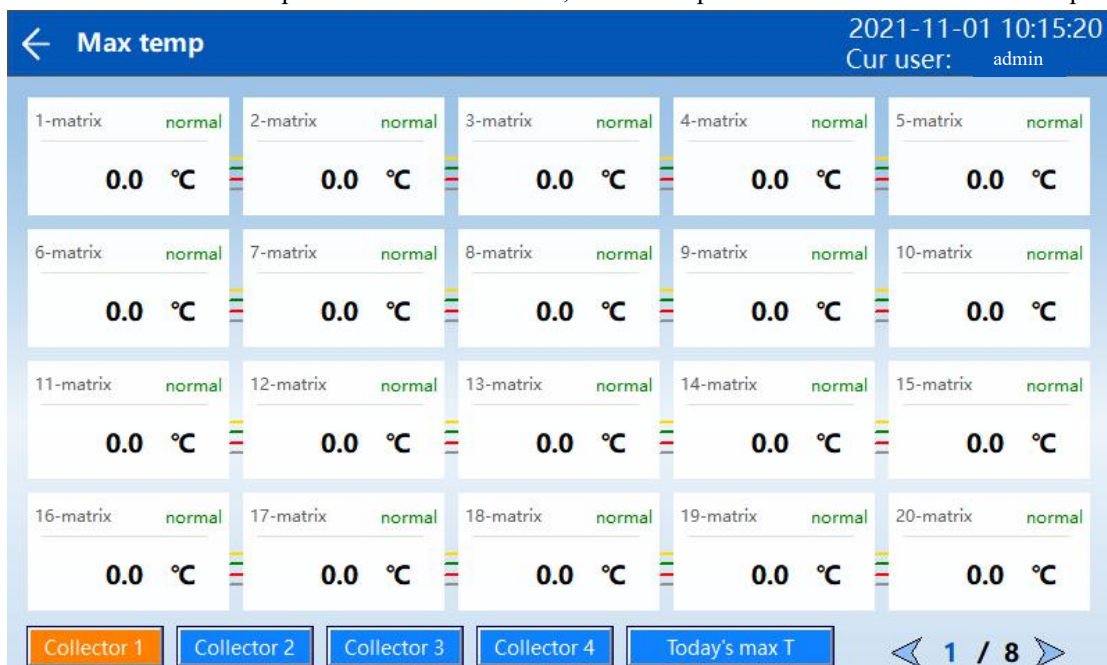
3.1 Principal sheet

For user management, enter various parameters to view the data, and enter various parameter setting interfaces.



3.2 Maximum temperature

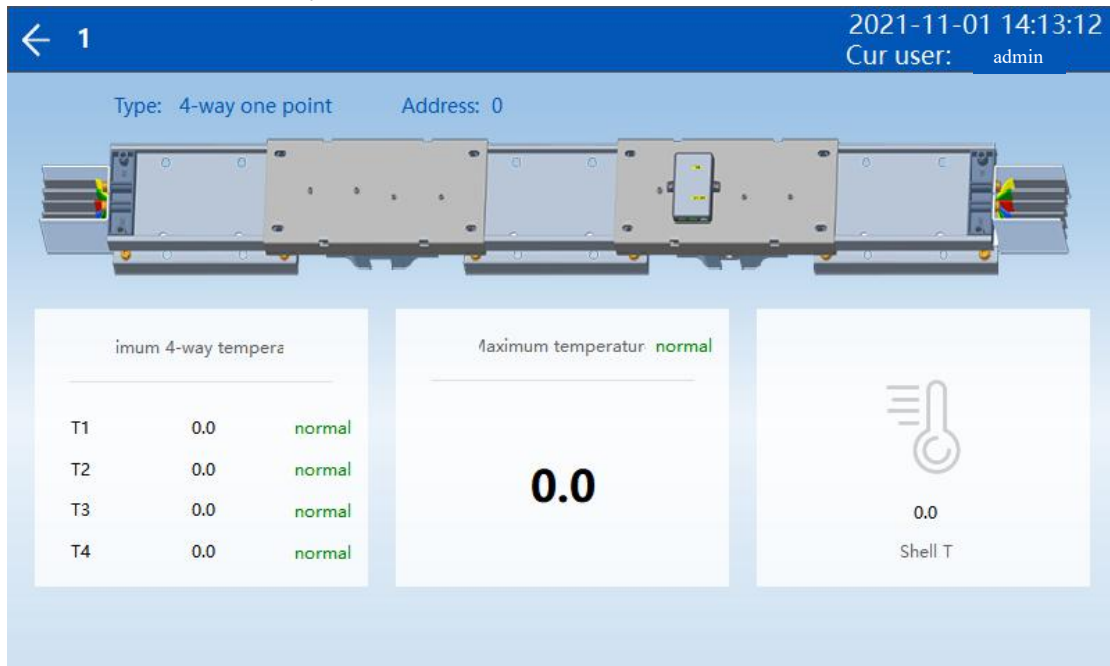
Use to view the maximum temperature and alarm status; click each point to view detailed data at the point.



Detailed data interface of the matrix sensor



Detailed data interface for the 4-point sensor

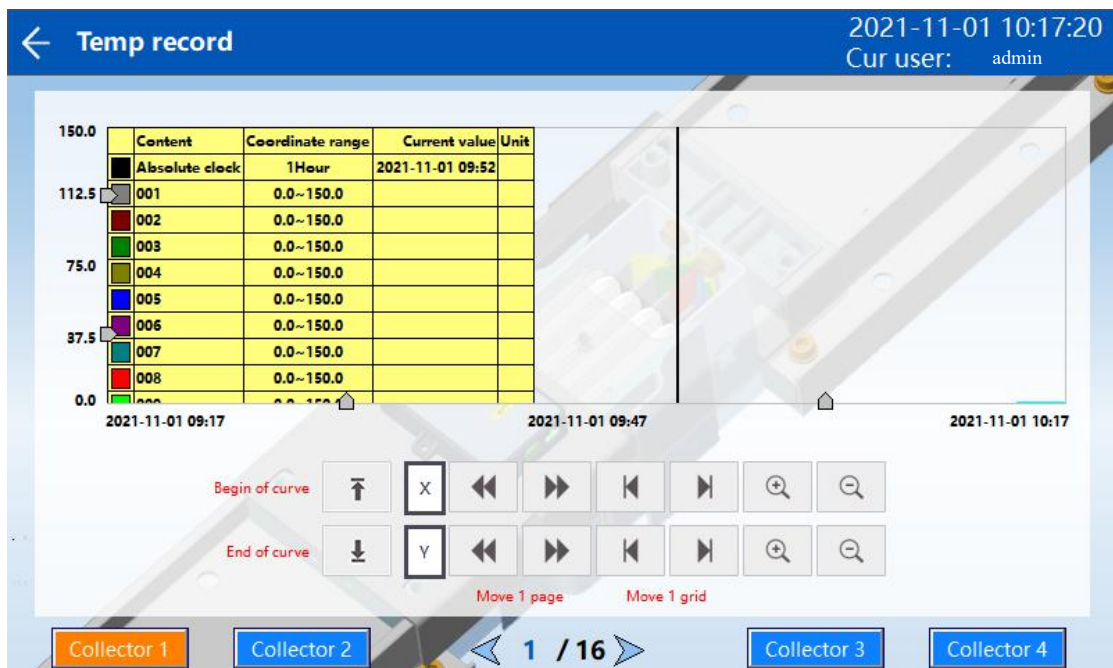


Detailed data interface for the 1-point sensor



3.3 Tendency chart

Temperature trend diagram



3.4 data list

Display the corresponding number and name of each sensor, and all the detection data.

← Data list 2021-11-01 10:17:33
Cur user: admin

		Max temp	Temp 1	Temp 2	Temp 3	Temp 4	Shell T	Inner T	Humidity	Inner V
1	1-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
2	2-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
3	3-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
4	4-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
5	5-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
6	6-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
7	7-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
8	8-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
9	9-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
10	10-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
11	11-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0
12	12-matrix	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	999.0

Collector 1 Collector 2 1 / 14 Collector 3 Collector 4

3.5 Alarm inquiry

Current alarm: display the current alarm, click the alarm silence to pause the buzzer on the touch screen.

← Current alarm 2021-11-01 10:19:03
Cur user: admin

Date	Time	Alarm description	Response time
2021/11/01	10:16:01	Collector 4 Comm failure	
2021/11/01	10:15:58	Collector 3 Comm failure	
2021/11/01	10:15:55	Collector 2 Comm failure	
2021/11/01	10:14:39	Collector 1 Comm failure	

Inner message Historical alarm Alarm silence

Historical alarm: displays the historical occurrence and the current alarm information.

Historical alarm				2021-11-01 10:19:12
				Cur user: admin
Date	Time	Alarm description	Response time	
2021/11/01	10:16:01	Collector 4 Comm failure		
2021/11/01	10:15:58	Collector 3 Comm failure		
2021/11/01	10:15:55	Collector 2 Comm failure		
2021/11/01	10:14:39	Collector 1 Comm failure		

Inner message Current alarm Clear alarm

3.6 Loop configuration

Entering the configuration or setting page requires the user to log in person, password 1.

User login
✕

User login

- admin
- advanced user

User password:

Logout way: Online timeout Idle timeout

Online time: Minutes

User description:

USB login
Login
Cancel

Circuit Configuration page function:

Set the total number of access sensors for the centralized collectors 1 and 2.

Point name: Set the name of each sensor to facilitate data viewing on site. The default is 001-400.



3.7 The alarm setting

Temperature warning value: used for infrared detection temperature warning

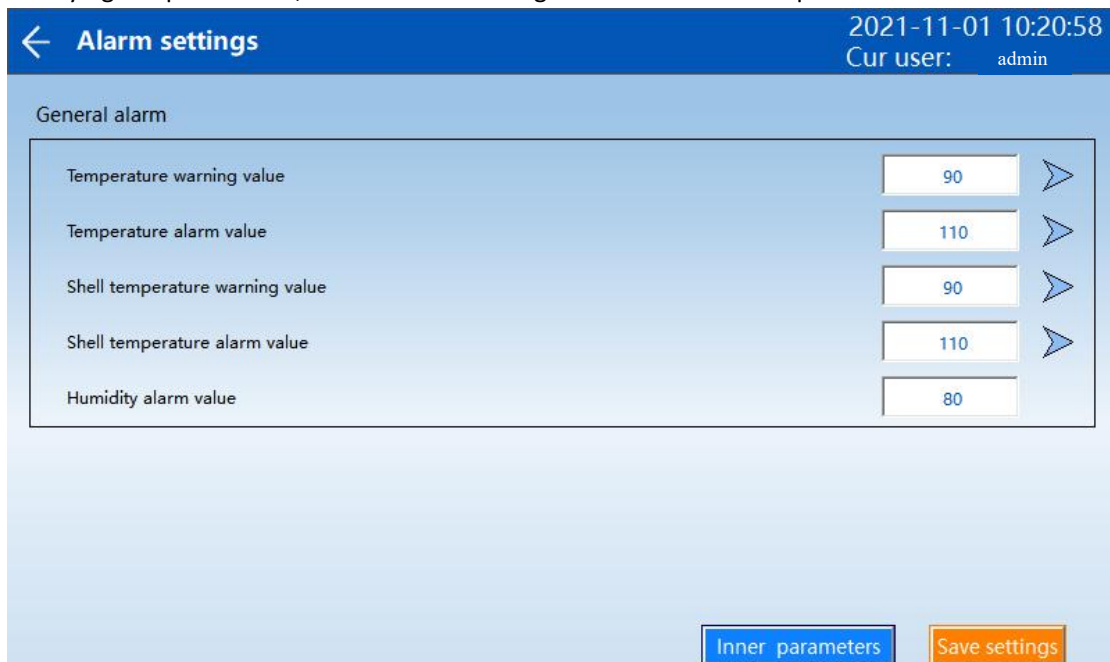
Temperature alarm value: used for infrared detection temperature alarm

Housing temperature warning value: used for external detection of temperature warning

Housing temperature alarm value: used for external detection of temperature alarm

Humidity alarm value: used for air humidity alarm

After modifying the parameters, click the Save Settings " button to save the parameters to the touch screen

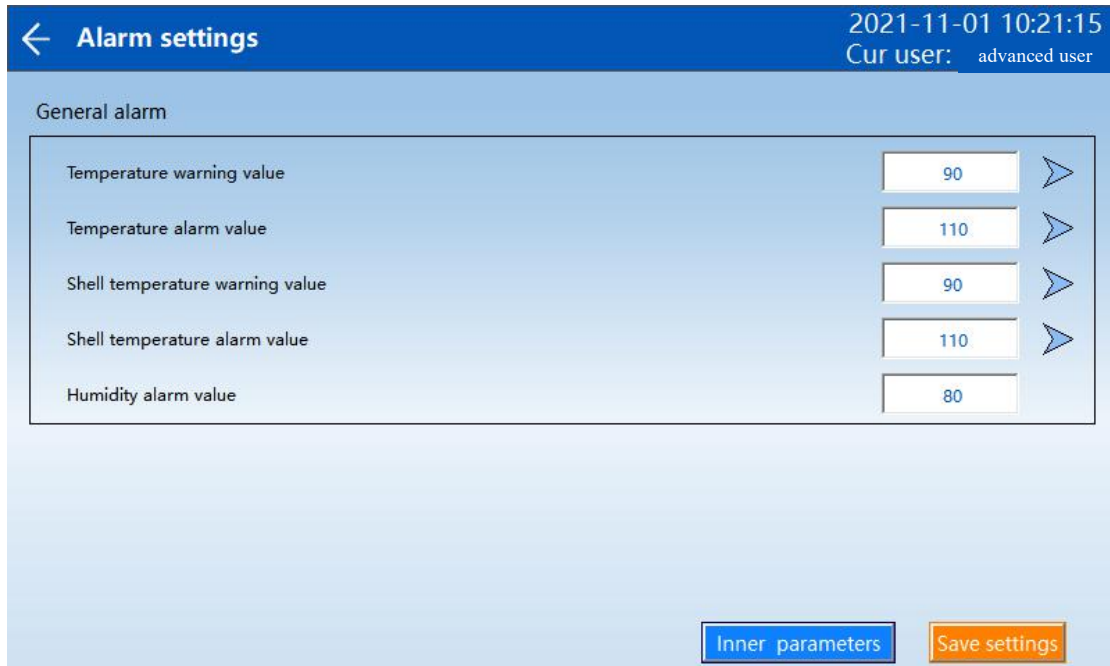


Internal parameters require the user to log in to the advanced user, password 8

Internal temperature alarm value: used for the internal temperature of the sensor module

Module voltage alarm value: used to prompt the upper limit of centralized collector access sensors

Click the "Issue Settings" button to send the alarm parameters set on the touch screen to the instrument

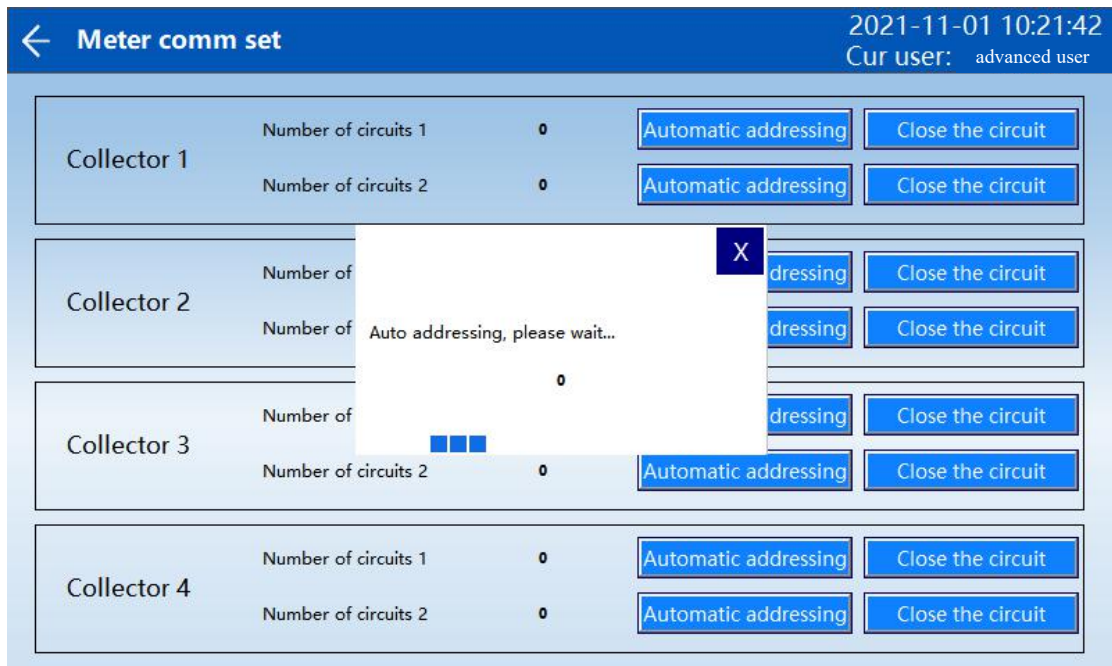


3.8 Instrument communication settings

Click the automatic address, when the collector starts to find the sensors linked below, and when the search ends, return the number of sensors found.

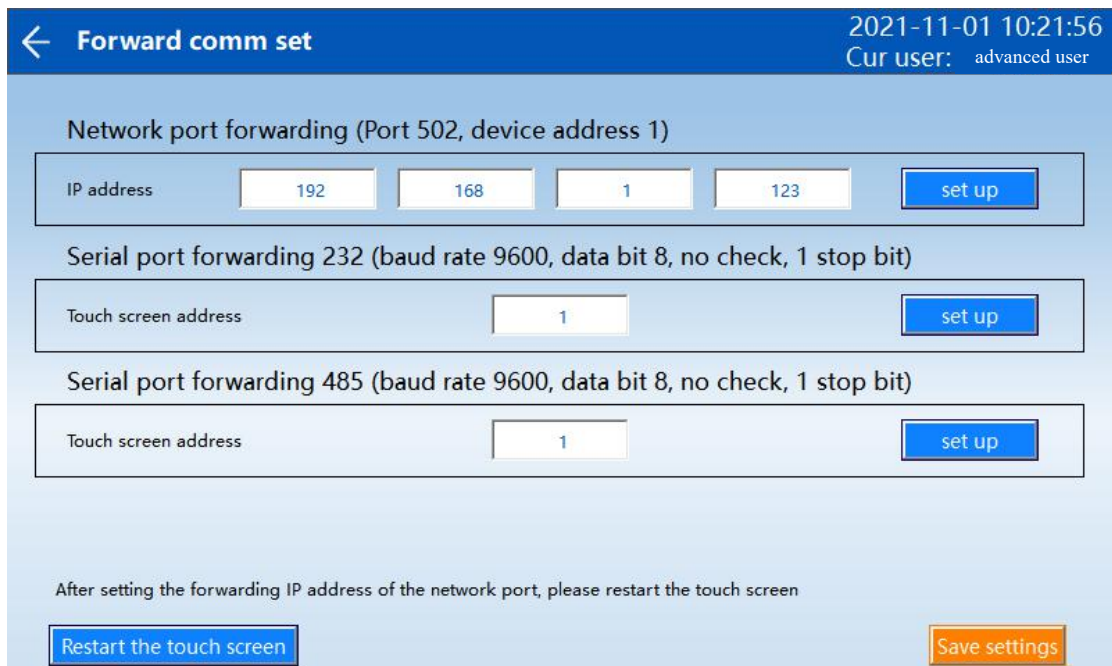


After clicking on the automatic preparation address, jump out of the prompt box and display the current time count (seconds). When the search is over, prompt: the automatic preparation has been completed.



3.9 Background communication Settings

Network port forwarding: set the touch screen network card IP address (the port number is 502, the device address is 1), set the IP geology needs to save the settings, and restart the touch screen.



4 Data forwarding

Use the protocol for the MODBUS-TCP, attachment is the register address table.



Amb300
temperature det

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