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**0314 Series
LARGE SCREEN TEMPERATURE AND HUMIDITY METER
OPERATION MANUAL**

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VIDEO OF PRODUCTS.



VIDEO

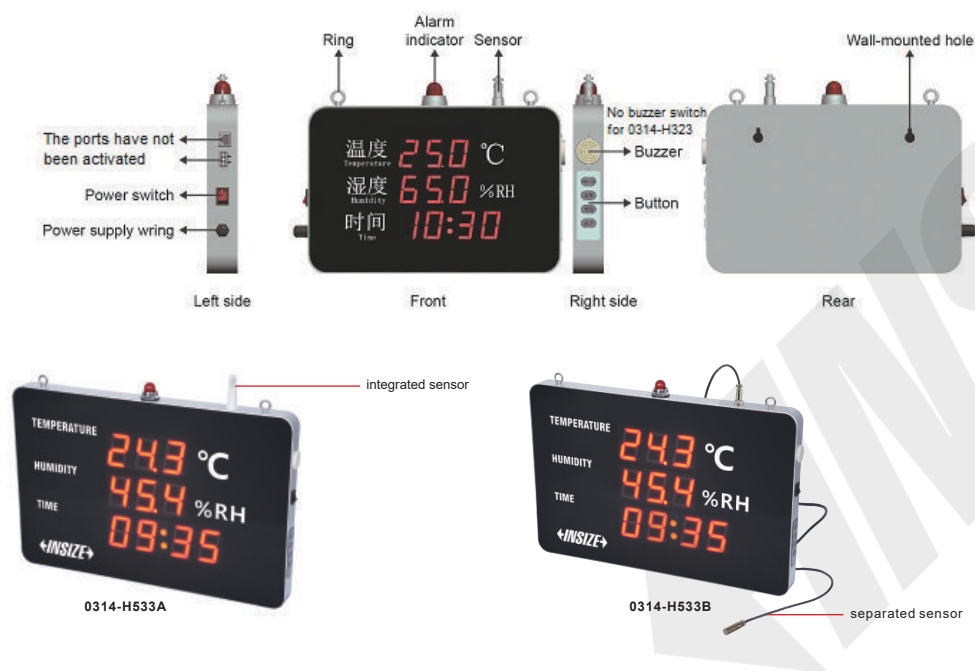


Product Introduction

The 0314 series large screen temperature and humidity meter applies the high precision acquisition circuit and sensor. It is intended for real-time environment temperature and humidity monitoring and alarming. The large screen LED digital tube is used to display the real-time temperature, humidity and time in an obvious and convenient manner.

The product is applicable on several sites, especially on the warehouse, workshops or stock farming, for monitoring the room temperature and humidity.

Instrument Panel and Display Function



1、Display window

- The high-light LED is used as the display window.
- On the parameter settings screen, if no button is operated within 2 min, the instrument backs to the running screen automatically.
- The temperature value, humidity value and time are displayed on the normal running screen.
- The parameter flickers during setting.

2、Operation buttons:

SELECT SET

Enter the next menu

When setting the parameters, press it to confirm the modification and enter the menu.

BACK

Back to the previous button

When setting the parameters, press it to move the cursor back and forth over the modifiable parameters.

UP

Move up to view the parameter

Used for increasing the value during parameter setting

DOWN

Move down to view the parameter

Used for decreasing the value during parameter setting

Technical Parameter

Code	0314-H323A	0314-H323B	0314-H423A	0314-H423B	0314-H533A	0314-H533B	0314-H643A	0314-H643B
Dimension	300×200×36mm		400×265×36mm		500×300×36mm		600×400×36mm	
Sensor type	integrated	separated	integrated	separated	integrated	separated	integrated	separated
Power consumption	5W		5W		9W		10W	
Weight	1.3Kg		2Kg		3Kg		4Kg	
Sensor	integrated: plastic probe case (not dustproof, not waterproof) separated: metal probe case (dustproof, waterproof), cable length 1m (can be customized, within 20m)							
Temperature range	integrated: -20°C~60°C separated: -40°C~85°C							
Temperature resolution	integrated: 0.1°C (at 0°C~60°C), other range 1°C separated: 0.1°C (at 0°C~85°C), other range 1°C							
Temperature accuracy	integrated: ±0.5°C (at 0°C~60°C), other range ±2°C separated: ±0.5°C (at 0°C~85°C), other range ±2°C							
Humidity range	5%RH~95%RH							
Humidity resolution	0.1%RH							
Humidity accuracy	±3%RH (@25°C)							
Long-term stability	temperature≤0.1°C/year humidity≤1%RH/year							
Repeatability	temperature≤0.1°C humidity≤0.5%RH							
Sampling speed	1s							
Response time	3 minutes to reach 90% of the final value							
Time accuracy	±15s/month (@25°C±2°C)							
Power supply	AC100~240V (50/60Hz)							
Power cable length	2m							
Operation condition	temperature: -20°C~60°C humidity: 5%~95% (non-condensing)							

Instrument Operation Description

1、Parameter settings screen description

Normal running screen

Upper temperature limit alarm value settings

Press the “BACK” button to change the input bit, and press the “UP” and “DOWN” buttons to change the input value. Press the “SELECT/SET” button to confirm the input. The prompt “YES” is displayed, and then press the “SELECT/SET” button to back to the normal running screen.

Lower temperature limit alarm value settings

Press the “BACK” button to change the input bit, and press the “UP” and “DOWN” buttons to change the input value. Press the “SELECT/SET” button to confirm the input. The prompt “YES” is displayed, and then press the “SELECT/SET” button to back to the normal running screen.

Upper humidity limit alarm value settings

Press the “BACK” button to change the input bit, and press the “UP” and “DOWN” buttons to change the input value. Press the “SELECT/SET” button to confirm the input. The prompt “YES” is displayed, and then press the “SELECT/SET” button to back to the normal running screen.

Lower limit alarm value settings

Press the “BACK” button to change the input bit, and press the “UP” and “DOWN” buttons to change the input value. Press the “SELECT/SET” button to confirm the input. The prompt “YES” is displayed, and then press the “SELECT/SET” button to back to the normal running screen.

Date settings

Press the “BACK” button to change the input bit, and press the “UP” and “DOWN” buttons to change the input value. Press the “SELECT/SET” button to confirm the input. The prompt “YES” is displayed, and then press the “SELECT/SET” button to back to the normal running screen.

Time settings

Press the “BACK” button to change the input bit, and press the “UP” and “DOWN” buttons to change the input value. Press the “SELECT/SET” button to confirm the input. The prompt “YES” is displayed, and then press the “SELECT/SET” button to back to the normal running screen.

Record interval settings

Press the “UP” or “DOWN” button to select “h:m (: on)” or “min: sec (: off)”. Press the “BACK” button to change the input bit, and press the “UP” and “DOWN” buttons to change the input value. Press the “SELECT/SET” button to confirm the input. The prompt “YES” is displayed, and then press the “SELECT/SET” button to back to the normal running screen.

Serial port baud rate settings

Press the “UP” and “DOWN” buttons to select the input value. Press the “SELECT/SET” button to confirm the the input. The prompt “YES” is displayed, and then press the “SELECT/SET” button to back to the normal running screen. Baud rate range: 1200, 2400, 4800, 9600, 19200bps

Serial port address settings

Press the “BACK” button to change the input bit, and press the “UP” and “DOWN” buttons to change the input value. Press the “SELECT/SET” button to confirm the input. The prompt “YES” is displayed, and then press the “SELECT/SET” button to back to the normal running screen.

Note: The functions of record interval setting, serial port baud rate setting and serial port address Setting are not yet available.

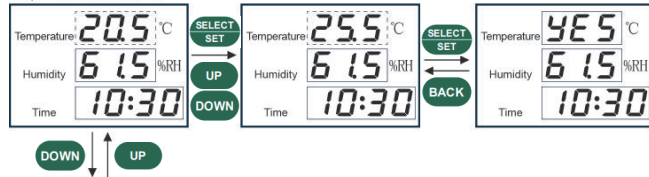
2、Calibration Screen Description

Normal running screen

On the normal running screen, press the “UP”, “DOWN”, “BACK” and “SELECT/SET” buttons successively to enter the temperature calibration screen settings. Press the “UP” and “DOWN” buttons to switch among all screens.

Instrument Operation Description

Temperature calibration screen



Enter the temperature calibration screen and the temperature value flickers. Press the "SELECT/SET" button and then press the "UP" or "DOWN" button to modify the temperature value. Press the "SELECT/SET" button to confirm the modification, and the prompt "YES" is displayed. Press the "BACK" button, an the temperature value flickers again. Then, press the "BACK" button again to back to the normal running screen.

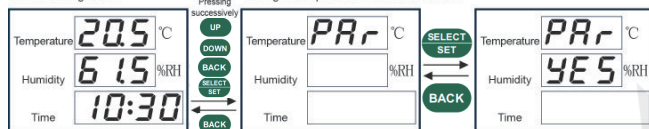
Temperature calibration screen



Enter the temperature calibration screen and the temperature value flickers. Press the "SELECT/SET" button and then press the "UP" or "DOWN" button to modify the temperature value. Press the "SELECT/SET" button to confirm the modification, and the prompt "YES" is displayed. Press the "BACK" button, an the temperature value flickers again. Then, press the "BACK" button again to back to the normal running screen.

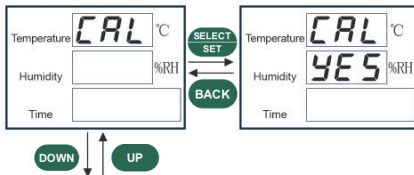
3. Initialization Screen Description

Normal running screen



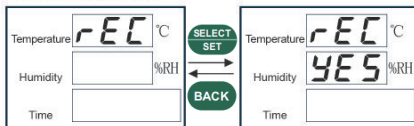
On the normal running screen, press the "UP", "DOWN", "BACK" and "SELECT/SET" buttons successively to enter the temperature calibration screen settings. Press the "UP" and "DOWN" buttons to confirm the configuration parameter initialization and the prompt "YES" is displayed. Then press the "SELECT/SET" button to back to the normal running screen.

Calibration value initialization screen



Press the "SELECT/SET" button to confirm the calibration value initialization and the prompt "YES" is displayed. Then press the "SELECT/SET" button to back to the normal running screen.

Record data initialization screen



Press the "SELECT/SET" button to confirm the calibration value initialization and the prompt "YES" is displayed. Then press the "SELECT/SET" button to back to the normal running screen.

4. Alarm Screen Description

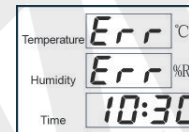


When the temperature reaches to the set upper alarm limit or lower alarm limit, the temperature value and alarm indicator flicker and the buzzer buzzes continuously. Press any button to stop the buzzing and flickering.



When the humidity reaches to the set upper alarm limit or lower alarm limit, the humidity value and alarm indicator flicker and the buzzer buzzes continuously. Press any button to stop the buzzing and flickering.

5. Instrument Abnormal Screen Description



Temperature and humidity sensor abnormality screen. The temperature and humidity are displayed as Errr, and flickers.

Instrument Installation and Using Precautions

1. Read the manual carefully before use. Ensure that the operations are correct.
2. The instrument can be installed by using the ring or gourd hole. The installation is easy and firm.
3. Do not install the instrument in the area where heat transfer is easy and temperature difference between the measurement area and the installation area to be measured will be directly caused. Otherwise, the temperature and humidity measurement will be inaccurate.
4. The environment of the installation site should be relatively stable. Avoid direct sunlight. Keep the instrument far away from the window, air conditioner and heating. Do not face the instrument directly to the window or door.
5. Keep the instrument far away from the interference devices of high-power, such as the frequency converter, motor, etc., to avoid inaccurate measurement.
6. Prevent chemical reagents, oil, dust and other direct damage to the sensor. Do not use for a long time in the environment of condensation or limit temperature. Do not perform cold or hot shock on the instrument.
7. The instrument is with the high-light LED display to directly observe the display correctness.
8. Deviation may occur after long time use of the instrument. To ensure the measurement accuracy, calibrate the instrument once per year.
9. If the metal shield of sensor is used, detach the shield two or three months later, and clean the filter to ensure that the ventilation of the measurement environment is normal.