Huazheng®

HZ1434
SF6 Gas Purity Analyzer

Huazheng Electric Manufacturing (Baoding) Co., Ltd

Dear user:

Thank you for choosing HZ1434 SF6 Gas Purity Analyzer.

We hope that this instrument can make your work easier and more enjoyable, so that you can get the feeling of office automation in the test and analysis work.

Before using the instrument, please read this manual, and operate and maintain the instrument according to the manual to prolong its service life. "Just a light press, the test will be completed automatically" is the operating characteristics of this instrument.

If you are satisfied with this instrument, please tell your colleagues; if you are not satisfied with this instrument, please call (0312) 6775656 to tell you to serve you at all times-Baoding Huazheng Electric Manufacturing Co., Ltd., our company will definitely make you satisfied !

Contents

I.Overview

HZ1434 SF6 gas purity analyzer is the latest intelligent measuring instrument developed by our company. This product adopts the color highlight LCD touch screen as the man-machine interface, the full Chinese interface is convenient for operation, and all kinds of data are displayed in real time. The full touch screen with high precision and fast response is used as man-machine input, and a variety of functions can be switched freely. Built in high-capacity rechargeable lithium battery pack provides ultra long standby time. The standard USB interface is configured, and the historical data can be exported to the USB flash disk through the interface. The instrument adopts the most advanced micro thermal conductivity sensor with temperature compensation to provide users with a simple on-site detection method of SF6 purity. It is mainly used to measure the purity (percentage content) of SF6 gas in bottled SF6 gas, SF6 switch and other equipment. It can also be used in applications with several background gases (special requirements are required).

II.Technical Features And Paeameters

1. Technical features

- Portable design, lighter instrument, easy to carry and use.
- Long life micro thermal conductivity sensor with temperature compensation is adopted.
- Imported electronic mass flow sensor is installed inside, and the flow test is accurate.
- It adopts large capacity design and can store up to 100 groups of test data.
- The 5-inch color touch screen directly displays data, which is intuitive and easy to use.
- Real time curve tracking, the change trend of purity percentage is clear and intuitive.

■ USB2.0 interface is adopted, and historical data can be exported to USB flash disk through the interface.

■ Built in 4400mAh rechargeable lithium battery, sufficient at one time and can work continuously for 10 hours.

2. Technical parameter

1) Measurement range: 0 ~ 100% (SF6 percentage)

2) Measurement accuracy: ± 0.1 ℃ (within 90% ~ 100% range)

3) Resolution: 0.01%

4) Sampling flow: 0.5 ~ 0.8l/min

5) Response time: 15s (90%)

6) Sampling system: built in pressure stabilizing valve, filter and electronic flowmeter

7) Display mode: color touch screen display, all Chinese interface, with backlight

8) Output interface: USB2.0 specification

9) Power supply: built in rechargeable lithium battery (with charging protection device), which can work continuously for 10 hours

10) Size: 320 (mm) × 270(mm) × 140(mm)

11)Operating temperature: - 40 ℃ ~ + 80 ℃

III.Operating Instructions

When you turn on the power, the instrument will automatically carry out the main operation interface. There are four menu options on the main interface, and the current temperature and humidity, battery power and system time are displayed on the same screen. The main interface is shown in Figure 2;

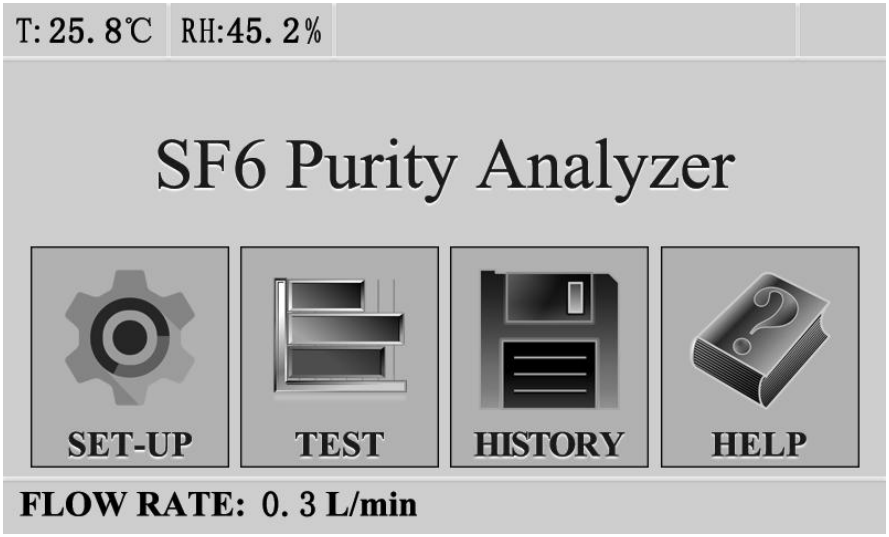


Fig.2 Main Interface

1. Measure

1) In the main interface, click the【**TEST**】menu, and the instrument will enter the measurement state.In the measurement status interface, the instrument displays the measured SF6 purity value (percentage content), gas flow, ambient temperature, ambient humidity and current system time.The interface is shown in Figure 3:

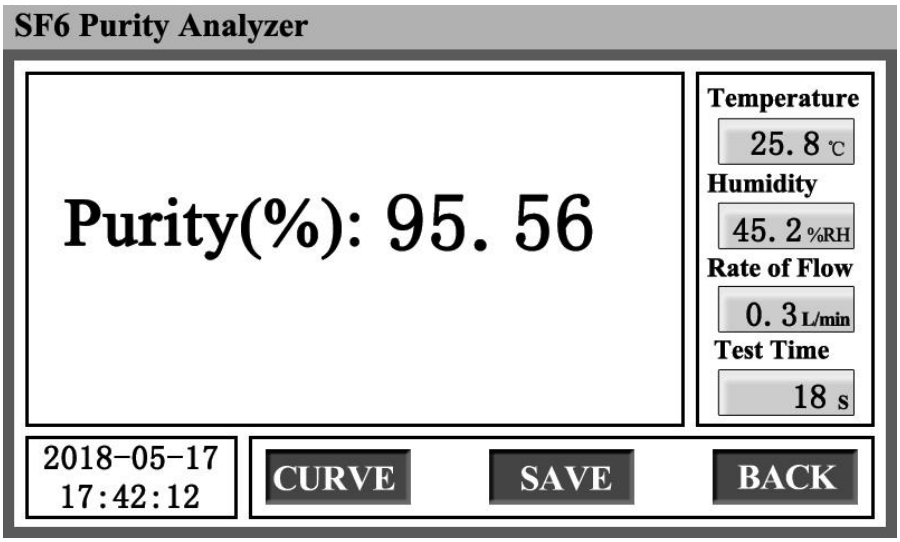
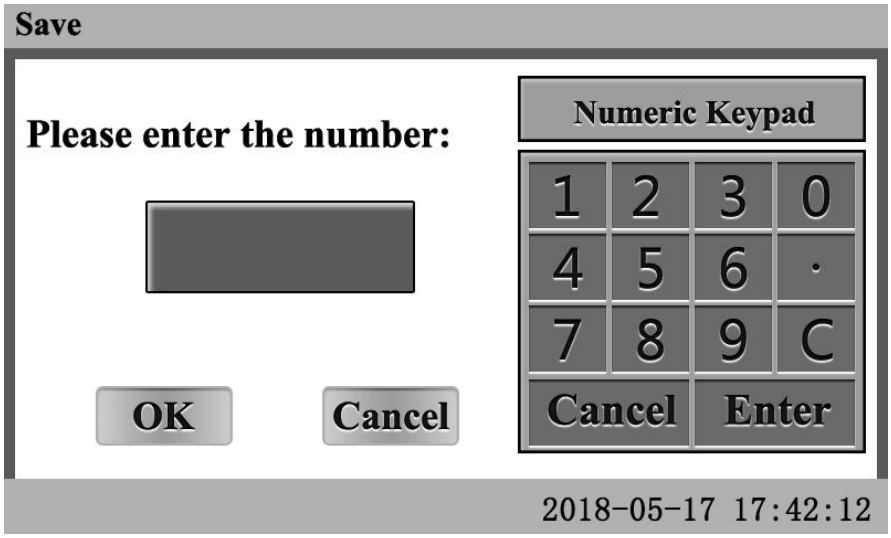


Fig.3 Measure Interface

2) In the measurement interface, press the【**CURVE**】key to enter the curve tracking display interface; Press the【**SAVE**】key to enter the data saving interface, and the test data can be saved according to the instrument

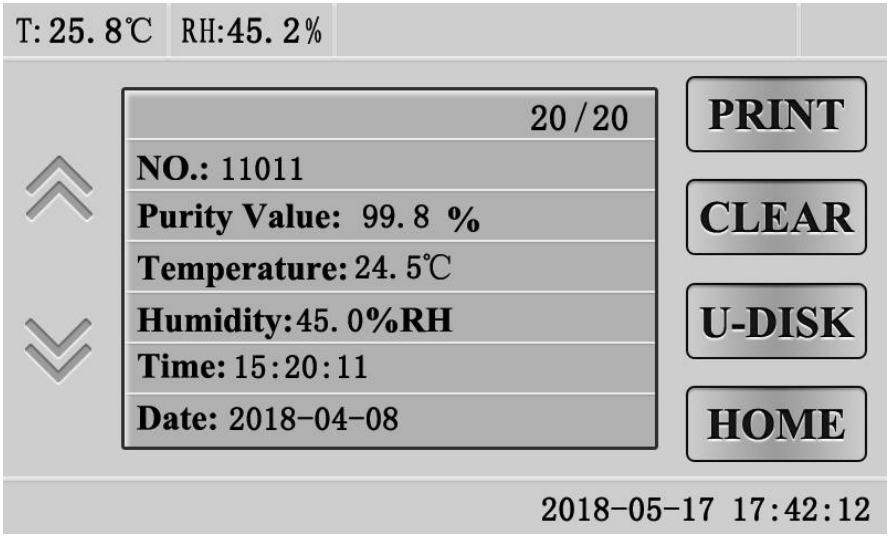
prompt; Press the【**BACK**】key to exit the measurement state and return to the main operation interface.

3) In the data saving interface, click the blank space of the edit box on the right side of the equipment number. After the cursor is displayed, press the numeric keypad on the right, enter the equipment number, press【**OK**】to save the test data and enter the data query interface; Press【**CANCEL**】to exit the data saving interface and return to the measurement status. As shown in Figure 4:



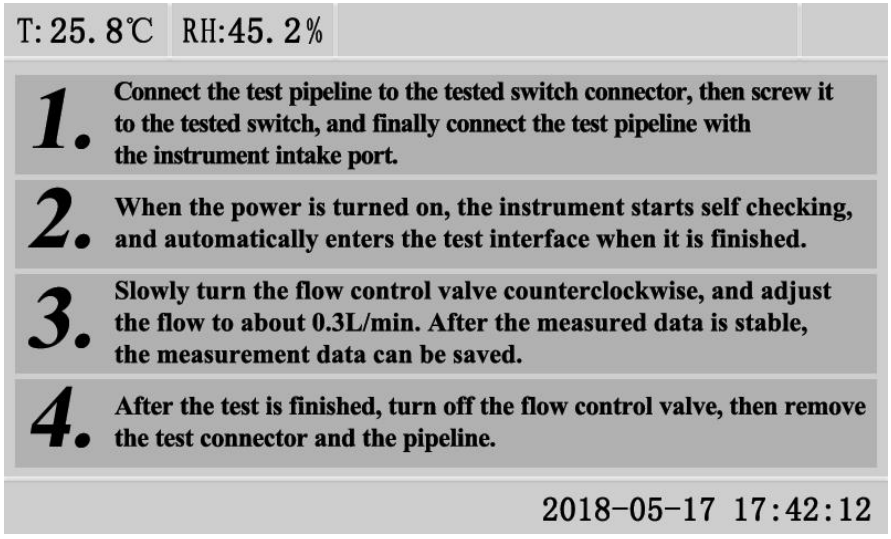
2. Historical data query

In the main interface, tap the [historical data] menu to enter the historical data query interface. In this interface, the instrument displays the measured and saved data of the instrument. Press the up and down double arrows on the left side of the interface to view each record, press the [data print] key to print the data displayed on the current page, press the [format] key to clear all data stored in the instrument (please operate carefully), press the [USB flash disk storage] key to import all stored data into the USB flash disk, and press the [exit interface] key to return to the main operation interface. The interface is shown in Figure 5:



3. Instrument help

In the main interface, press the [instrument help] menu to open the help interface, where some operation precautions are displayed. As shown in Figure 6:



Click anywhere on this interface to exit the interface and return to the main operation interface.

4. Parameter setting

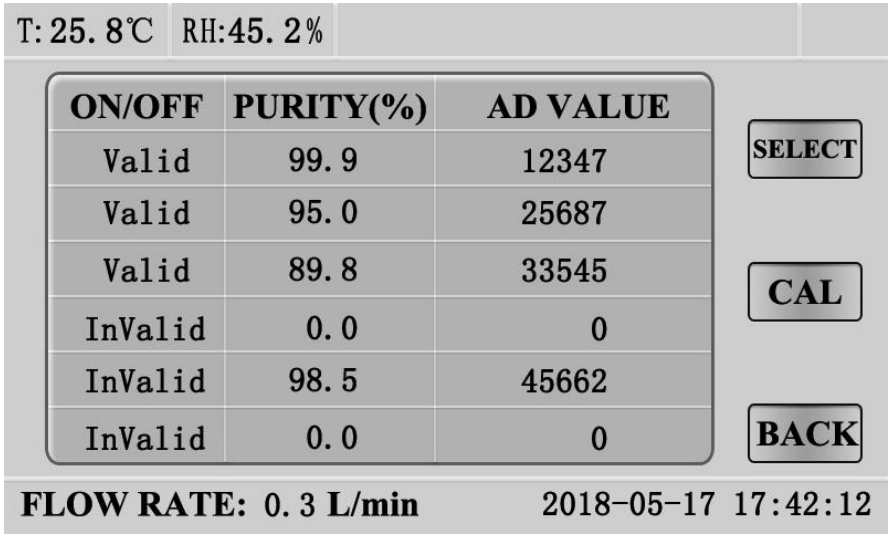
In the main menu interface, press the【**SET-UP**】key to enter the instrument parameter setting interface, including three submenus: time and date setting, instrument calibration and main interface.

a) Time-Set

Tap the 【**Time-Set**】button to enter the time and date setting interface, where you can modify the current system time and date. Press【**SELECT**】to move the cursor, press【 ◀ and【 ▶ to increase or decrease numbers, and press 【**BACK**】 to save the settings and return to the parameter setting interface.

b) Instrument calibration

When clicking the【**Calibration**】menu, enter the password and press the 【**Enter**】key to enter the instrument calibration interface. This function must be carried out when the instrument needs calibration, and it needs to be returned to the manufacturer for professional operation.

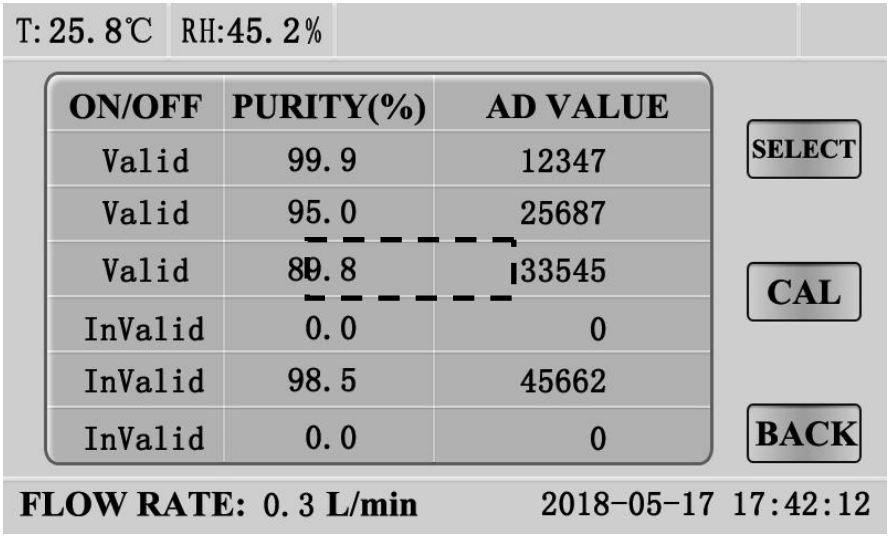


Note：

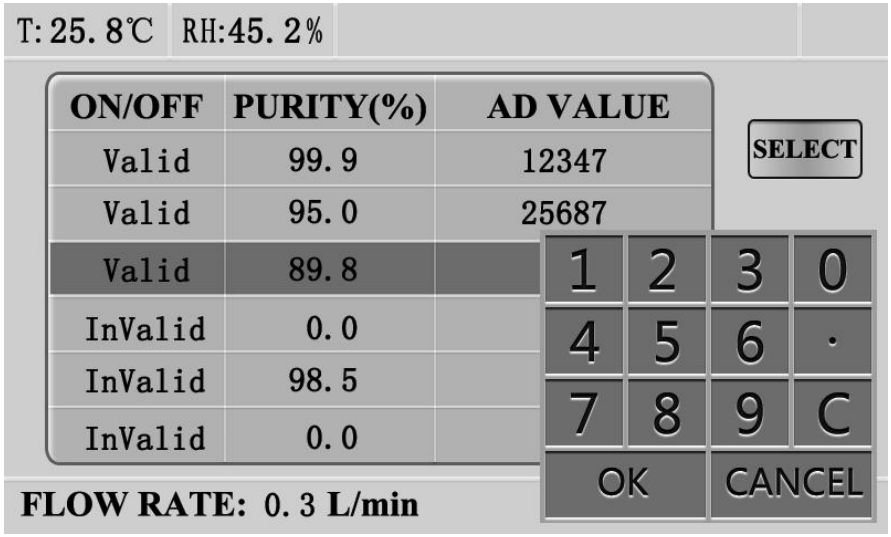
"Valid" means that the data in this row is valid, "NoValid" means that the data in this row is invalid and does not participate in the calculation. Even if it is modified, it has no effect on the calculation.

Click "NoValid" or "Valid" to switch between valid and invalid flags.

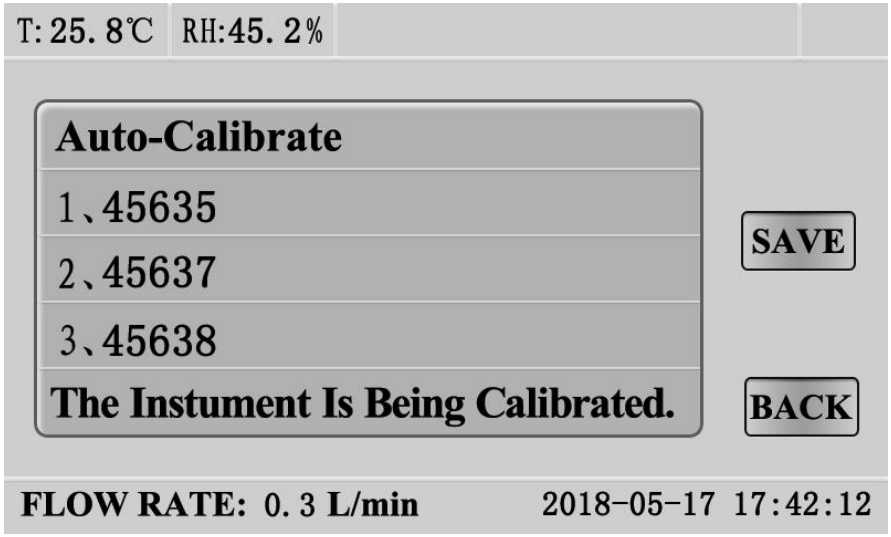
Click【**SELECT**】to switch the six rows of data and highlight a row, as shown in the figure.



Click the dotted box area, the interface will pop up the numeric keyboard, click the corresponding button, and you can enter the purity percentage of the standard gas, as shown below:



Click【**CAL**】to enter the automatic calibration interface, as shown below:



The screen displays the AD value corresponding to the current standard gas transformed by the sensor.

"The instrument is being calibrated" is displayed at the bottom of the screen. At this time, press the【**BACK**】key to exit automatic calibration without saving the current data.

When the difference between each two of the three data on the screen is within the error range specified by the system, the instrument will automatically exit the calibration interface and save the current data.

During calibration, you can directly click【**SAVE**】to exit the calibration interface and save the current data.

IV.Operation steps

1. Start up and warm up for ten minutes. This process can eliminate the influence of ambient temperature on the test results.
2. Connecting SF6 equipment

a) Connect the threaded end of the measuring pipe with the switch connector and tighten it with a wrench;

b) Then insert one end of the quick connector on the test pipe into the sampling port on the purity instrument - < gas inlet >;

c) Connect the exhaust pipe to the air outlet - < gas outlet >.

3. Check the power

When using DC power, please check the battery power displayed in the upper right corner. If the power is less than about 20%, please turn off and continue to use after charging.

4. Start measurement

First, open the meter to measure the needle valve on the pipe, then adjust the flow valve on the panel of the purity tester, adjust the flow to about 0.5L/M, and start measuring the purity value of the SF6 gas.

5. Store data

After the equipment measurement is completed, the data can be saved in the instrument, and press the "data query" key to call out the operation menu.

6. Measuring other equipment

After one equipment is measured, close the needle valve on the measuring pipeline and the regulating valve on the purity instrument. Remove the adapter from the SF6 Electrical equipment. If it is necessary to continue to measure other equipment, continue to measure the next equipment according to the above steps.

7. End of measurement

After the measurement of all equipment, turn off the power supply of the purity instrument.

V.Matters Needing Attention

1. The instrument shall be placed in a safe position to prevent damage. Avoid violent vibration.

2. Do not detect corrosive gases.

3. When adjusting the gas flow, the flow valve shall be opened slowly to make the flow indication within the range of 0.5 ~ 0.8 L / min.

4. The instrument shall be charged in time before use. When charging, just insert the power adapter of the instrument into the charging port

without turning on the power switch of the instrument. The instrument will charge automatically. The charging time generally takes more than 5 hours.

VI.Packing List

No.	Item	Qty
1	Powei adapter	1
2	Air Inlet tube	1
3	Air outlet tube	1
4	printer paper	1