HG-803 Test Tools

Temperature & Humidity Transmitter

Install / Test / User Guide (English)

Version: 2025.4.16 (CN/EN bilingual package)

Package: HG-803-Test-Tools-2025.4.16-CN-EN

Languages: Chinese / English (switch in-app)

Contents: Install · Language · UI · Test steps · FAQ

Extract the ZIP fully before running.

Do not launch files from inside the archive window.

1. Overview

HG-803 Test Tools is a serial-port utility for configuring and testing HG-803 temperature and humidity transmitters. This bilingual package keeps the original functions, layout, and test logic. Only the UI language can be switched between Chinese and English.

Main features

• Read serial number, address, device type, baud rate, and related parameters
• Set address, device type, temperature analog output range, and baud rate
• Read real-time temperature, humidity, and dew-point temperature
• Message log with optional save-to-file

2. Installation

Step 1

Extract HG-803-Test-Tools-2025.4.16-CN-EN.zip to a local folder (for example D:\Tools\HG803).

Step 2

Open the extracted folder. You should see HG803Start.exe (recommended launcher) and HG-803 Test Tools.exe (main program).

Step 3

Always run the software from the extracted folder. Do not run files from inside the ZIP window, and do not copy only a single EXE without the other files.



Figure 1. Package overview (key files)

Important

You must extract the archive completely before running. Launching from inside the ZIP may fail.

Start the software with HG803Start.exe so the fixed top language bar is available.

3. Language Switch

Double-click HG803Start.exe. The program opens in a host window with a fixed language bar at the top (not a floating popup).

Click □□ for Chinese UI, or English for English UI. The embedded tool reloads with the selected language; the outer window stays in place to reduce flicker.

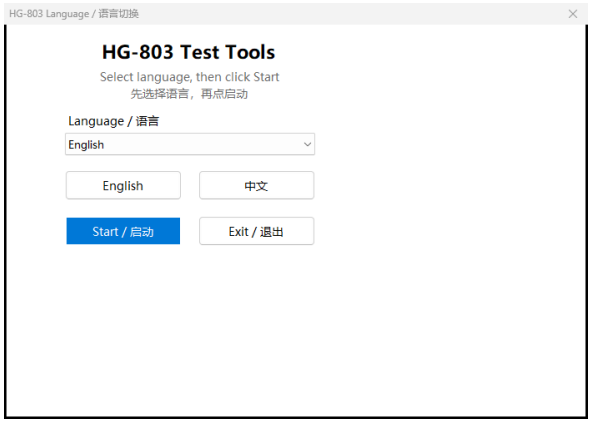


Figure 2. Language controls (top bar / switch UI)

Your last choice is saved in language.ini. Active translation file: Qm\Chinese.qm (copied from zh_CN.qm or en_US.qm).

4. User Interface

4.1 English UI

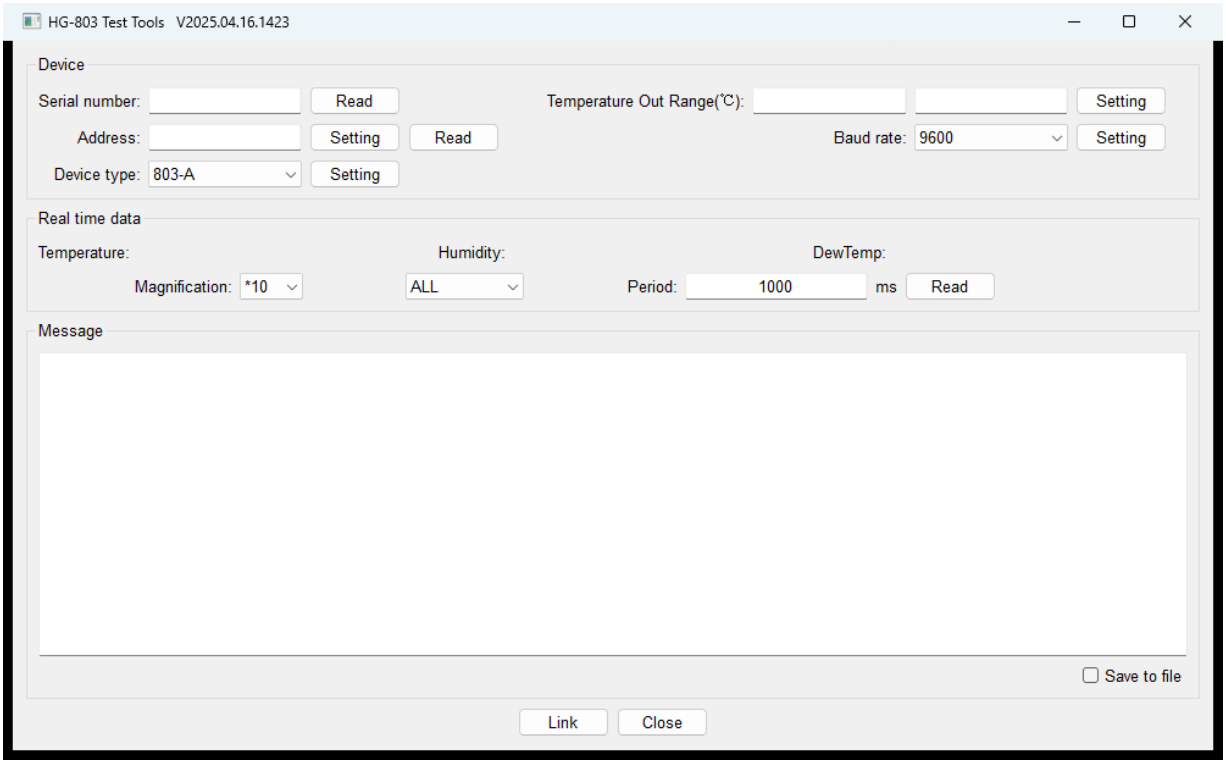


Figure 3. English main interface

4.2 Chinese UI



Figure 4. Chinese main interface

4.3 Common labels (CN / EN)

Chinese	English	Notes
□□	Device	Device parameter area
□□□	Serial number	Read device SN
□□	Address	Modbus address 1-247
□□□□	Device type	e.g. 803-A
□□□□□□□□	Temperature Out Range	Analog output range
□□□	Baud rate	Serial baud rate
□□ / □□	Read / Setting	Read / write parameters
□□□□	Real time data	Live readings
□□ / □□ / □□□□	Temperature / Humidity / DewTemp	Measured values
□□ / □□	Magnification / Period	Scale & refresh (ms)
□□	Message	Log / prompts
□□□□□	Save to file	Save message log
□□ / □□	Link / Close	Connect / exit

5. Test Procedure

The steps below use English button names. Chinese names are equivalent.

5.1 Hardware preparation

• Power the HG-803 transmitter correctly.
• Connect the PC with a USB-RS485 (or matching serial cable).
• Confirm a COM port appears in Windows Device Manager.

5.2 Start the software

• Run HG803Start.exe.
• Select Chinese or English on the top bar if needed.

5.3 Connect (Link)

• Click Link at the bottom.
• In the serial-port dialog, select the correct Port Name (COM), Baud Rate (often 9600), Data Bits, Parity, and Stop Bits.
• Click OK. If you see Communication error, check wiring, COM port, baud rate, and address.

5.4 Read basic information

• Click Read next to Serial number.
• Click Read next to Address (must be 1-247).
• Confirm Device type and Baud rate match the device.

5.5 Real-time data test

• Check Temperature, Humidity, and DewTemp in Real time data.
• Period defaults to 1000 ms; adjust if needed, then Read.
• Change the environment slightly and verify readings update.

5.6 Parameter setting (careful)

• Change Address / Device type / Temperature Out Range / Baud rate, then click the matching Setting.
• Read again to verify. After changing baud rate or address, Link again with the new settings if communication drops.

5.7 Message log

• Use the Message area for operation results and errors.
• Check Save to file to keep a log file.

5.8 Finish

• Click Close (or close the host window) to exit.
• Disconnect the cable after the software has closed.

6. Troubleshooting

Q: No language bar / only Chinese when opening the main EXE?

A: Use HG803Start.exe. Opening HG-803 Test Tools.exe alone does not show the top language bar.

Q: Application error 0xc000007b?

A: Install Microsoft Visual C++ 2015-2022 Redistributable (x86), or use the runtime DLLs included in this package.

Q: Communication error?

A: Check USB-serial driver, COM number, baud rate, A/B wiring, power, and device address.

Q: Address errors?

A: Address cannot be empty and must be between 1 and 247.

Q: Where are language files?

A: Qm\zh_CN.qm (Chinese), Qm\en_US.qm (English), Qm\Chinese.qm (active file used by the program).

7. File list

File	Purpose
HG803Start.exe	Recommended launcher with fixed top language bar
HG-803 Test Tools.exe	Main test program
Qm\zh_CN.qm / en_US.qm	Chinese / English UI packs
Qm\Chinese.qm	Active language file
language.ini	Remembers last language
ReadMe.txt	Short start note
HG-803-Test-Tools-User-Guide-EN.pdf	This English guide

Package: HG-803-Test-Tools-2025.4.16-CN-EN. Functions and test logic are unchanged from the original; only bilingual UI switching was added.