1. Preface

Welcome to the "SLI.Configurator" software.

This software allows for centralized setting, monitoring, and control of multiple inverters. It has the following features:

- Supports various inverter series such as SLANVERT medium voltage and low voltage (e.g., SBH, Hope130, Hope530, Hope800, SB70, SB200).
- Supports communication via serial port or Ethernet. For Ethernet communication, you need to install the TCP transparent transmission module on the inverter.

- Supports 3 types of physical connections.
- Allows one PC to simultaneously monitor multiple inverters of different series.
- Enables viewing and modifying functional parameters of the inverter.
- Provides monitoring of inverter parameters through list or curve display modes.
- Supports monitoring fault parameters.
- Offers control functions like running, stopping, and resetting the inverter.
- Provides intuitive monitoring of status information such as alarms and faults.
- Supports various historical records including monitored variables, alarms, faults, etc.
- Enables online/offline parameter synchronization between inverters within the same series.

2. Getting Started

Divided into 3 steps:

a. Hardware Connection: First, connect the host computer and the device using an RS485 serial port or Ethernet cable.

b. Communication Configuration: Configure the parameters for the serial port or Ethernet communication connection.

c. Device Configuration: Set up the devices that require monitoring.

Once you have completed these steps, you can proceed to set up and monitor your device.

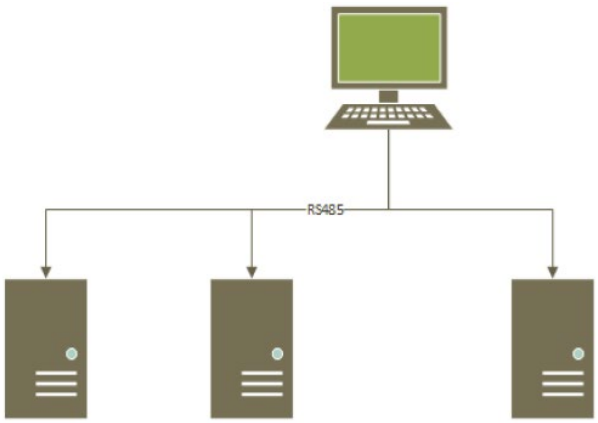
2.1 Hardware Connection

The SLI Configurator can connect to the device using either an RS485 serial port or Ethernet. It supports 3 connection methods:

✧ RS485 Serial Port Connection:

This method allows for simple networking and low cost when connected through an RS485 serial port. The device side needs to configure the serial communication parameters, such as baud rate, parity verification, data bit length, stop bit, etc., and set the slave station number.

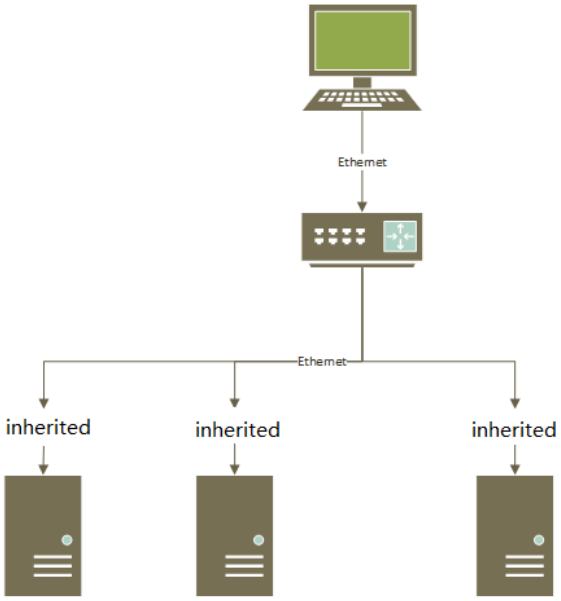
Please refer to the following connection diagram:



✧ Ethernet Connection:

When connected through Ethernet, this method offers high communication efficiency and allows for connecting more devices.

On the device side, you need to configure the Ethernet communication parameters including IP address and port number in the transparent transmission module. Please see the following connection diagram:

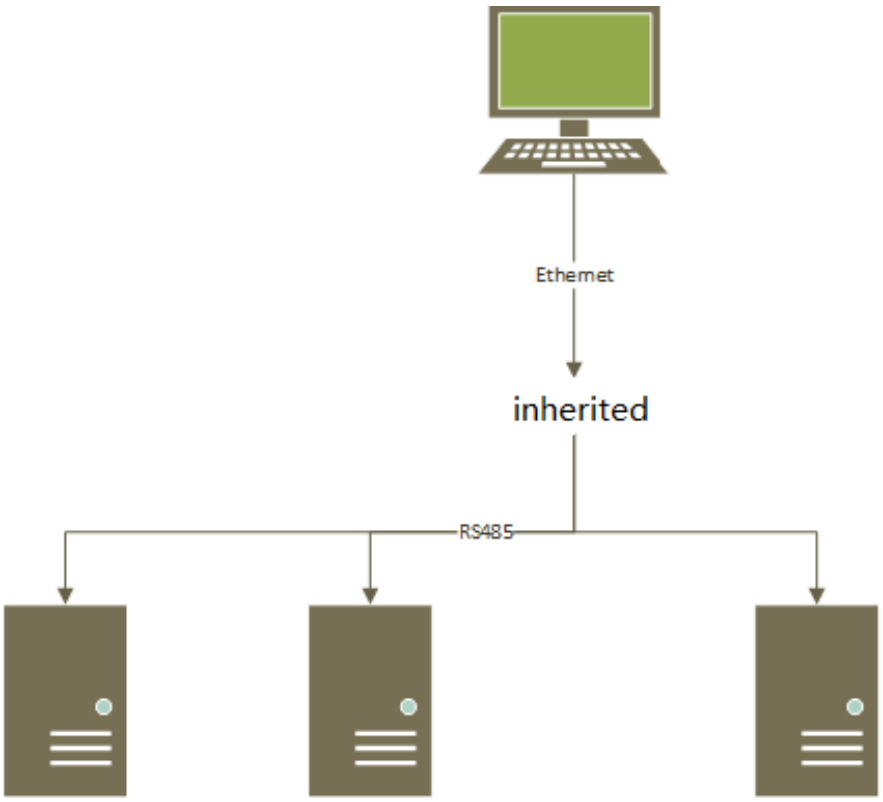


✧ Ethernet-RS485 Connection:

By utilizing Ethernet-RS485 connection, you can achieve long transmission distances and easily change networking modes. Similar to RS485 serial port connection, you need to configure serial communication parameters on the device side (baud rate, verification method, data bit length, stop bit), as well as set up a slave station number.

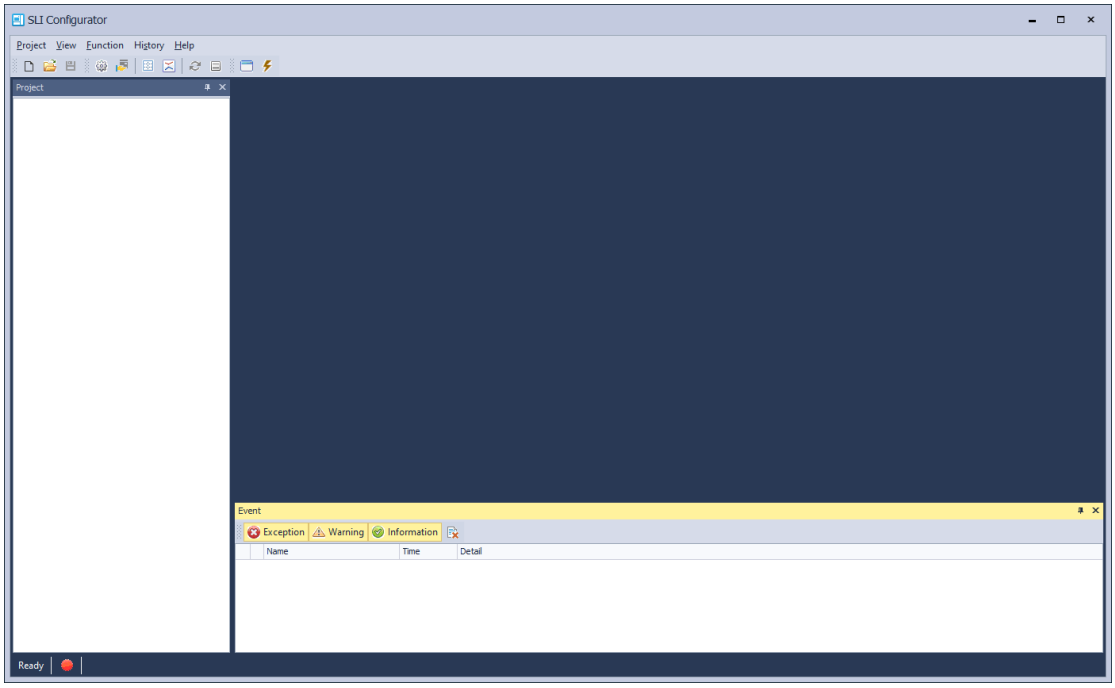
Additionally,the transparent transmission module requires configuration of Ethernet communication parameters like IP address and port number.

Please refer to the following connection diagram:



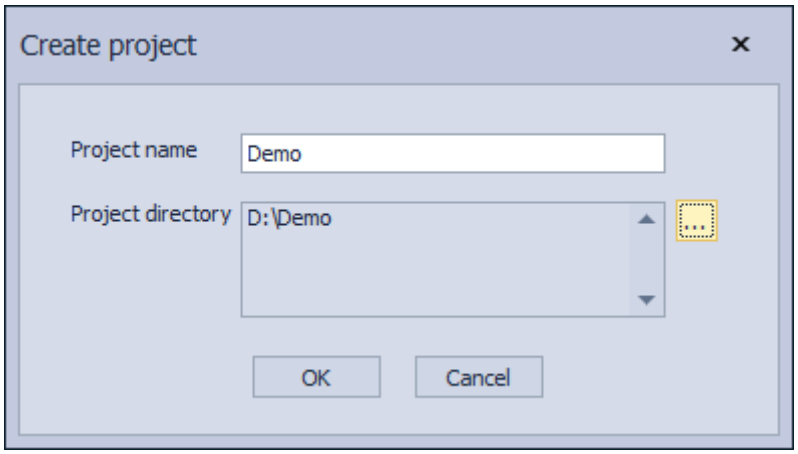
2.2 Software configuration

Double-click SLI.Configurator.exe to start the software. The interface after startup is as follows:



✧ **Create new project**

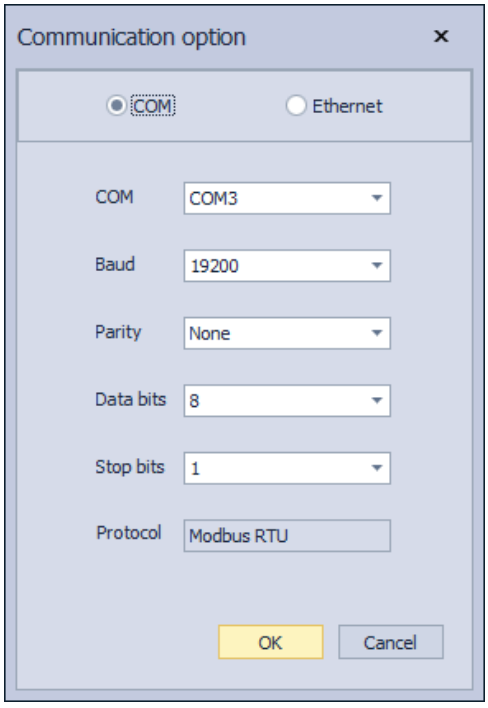
Click the New Project button  to pop up the New Project dialog box, as shown in the figure below:



Enter the project name and select project path, click OK, and the new project is completed. The next step is communication configuration.

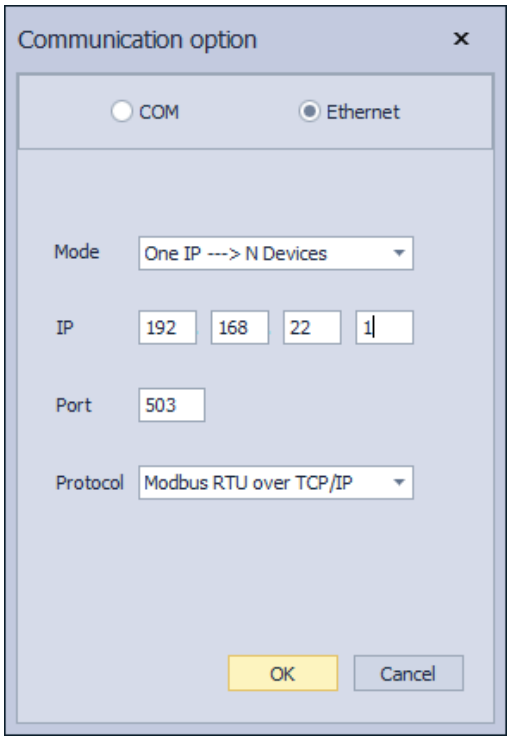
✧ **Communication configuration**

✓ COM port



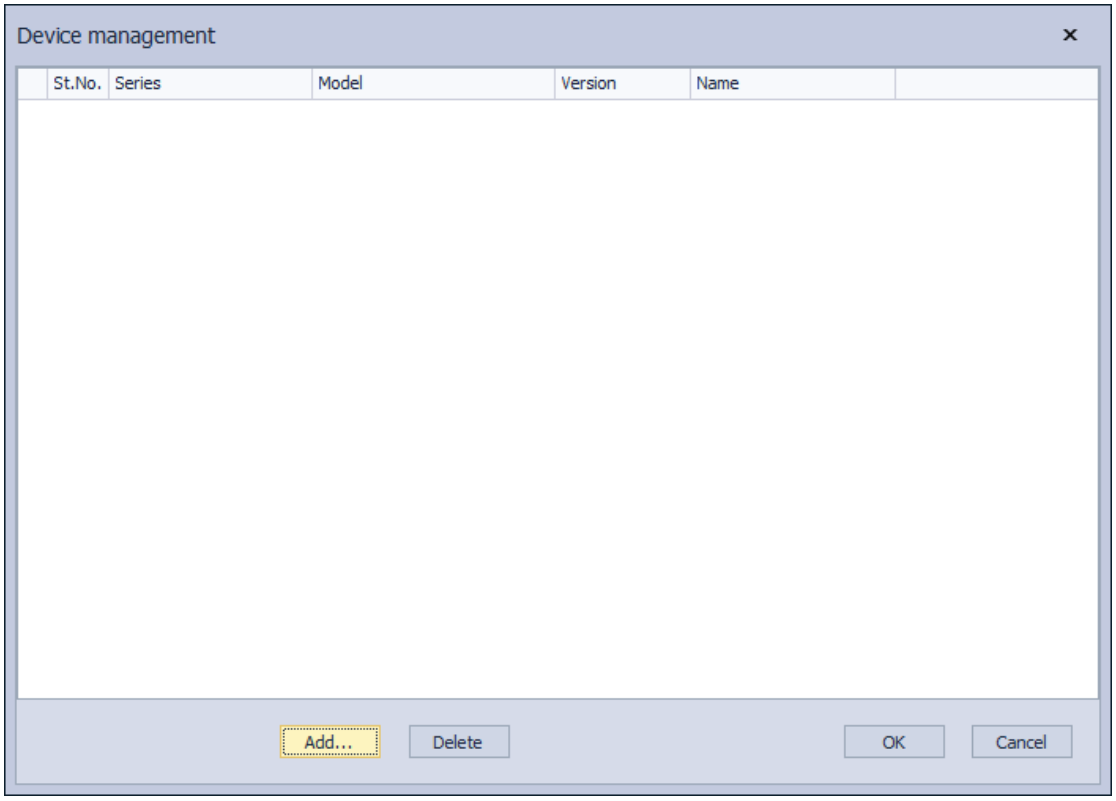
Set the correct port number, baud rate, verification method, data length, and stop bit. Click OK to complete the communication configuration. Perform device configuration.

✓ Ethernet

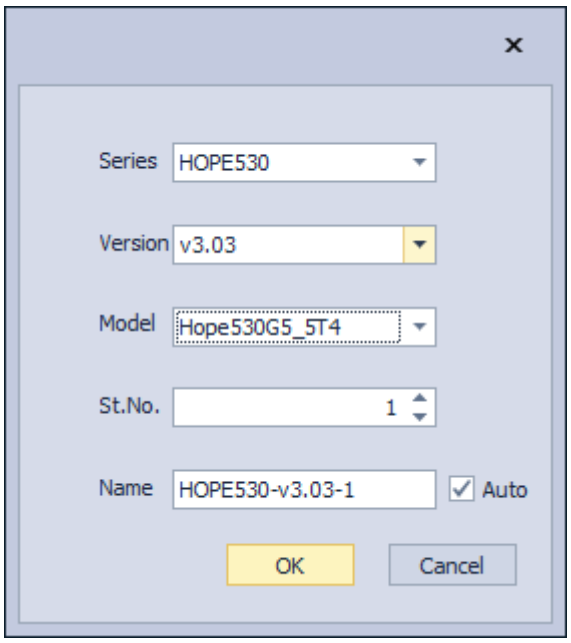


Set the correct Ehternet mode, IP, port, and protocol, click OK, and the communication configuration is completed. Then configure the device.

✧ **Device configuration**



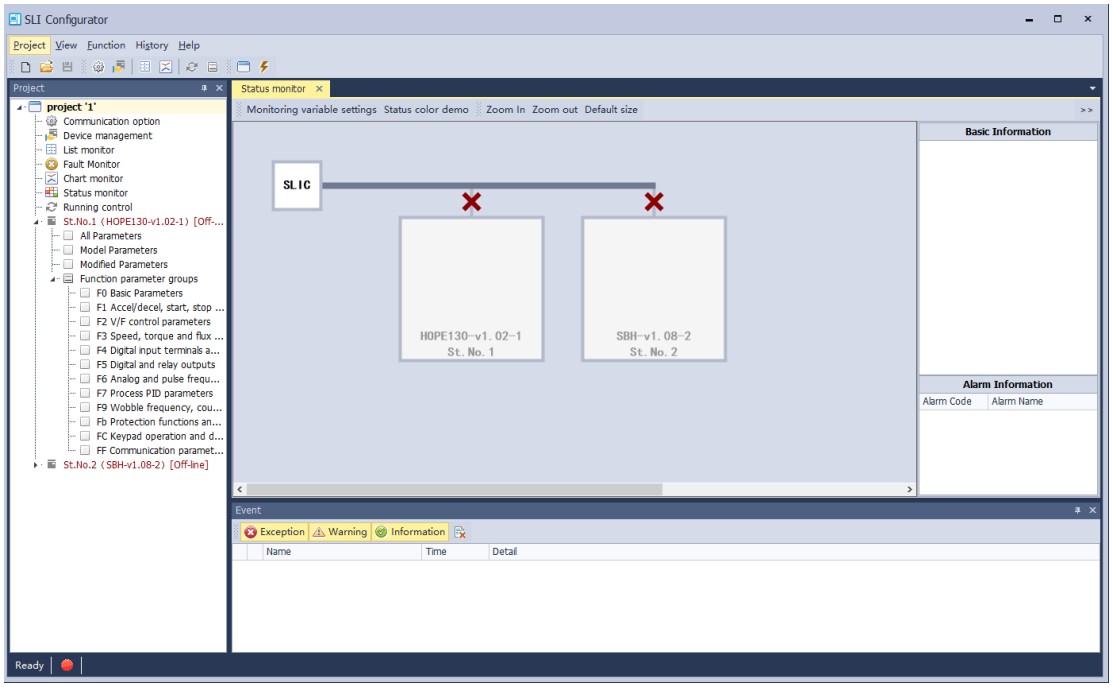
Click the "Add..." button to enter the add device interface, as shown below:



Select the correct device series, version, and model, set the station number and name of the device, and click OK to complete adding the device.

When all device configurations are completed, click OK on the device management interface to complete the device configuration. The entire software configuration is completed,

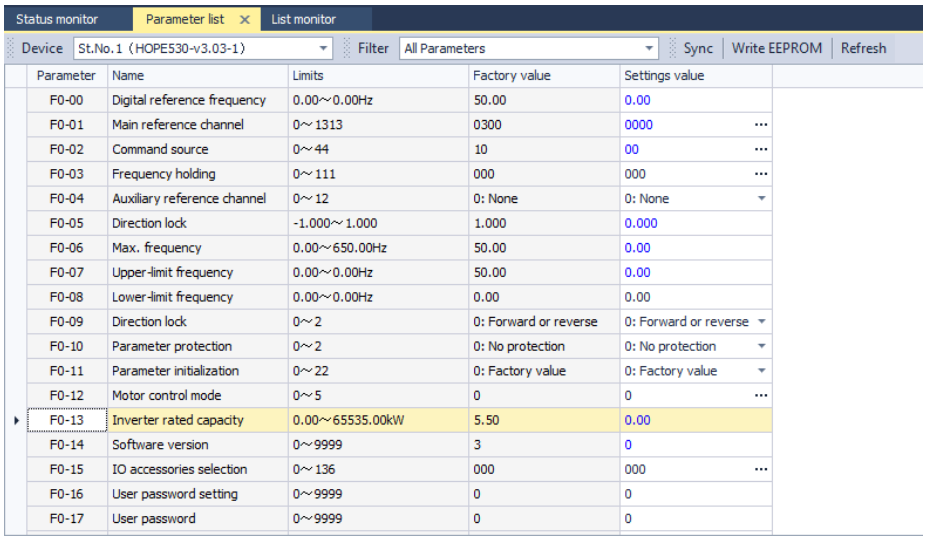
As shown below:



3. Device Parameters

Equipment parameters include parameter display, parameter value setting, parameter synchronization, etc.

On the project panel, double-click the "--All Parameters", "--Model Parameters", "--Variable Value Parameters" nodes under the equipment node, or the parameter grouping section (such as "F0 Basic Parameters") to open the parameters List interface.



Parameter	Name	Limits	Factory value	Settings value
F0-00	Digital reference frequency	0.00～0.00Hz	50.00	0.00
F0-01	Main reference channel	0～1313	0300	0000
F0-02	Command source	0～44	10	00
F0-03	Frequency holding	0～111	000	000
F0-04	Auxiliary reference channel	0～12	0: None	0: None
F0-05	Direction lock	-1.000～1.000	1.000	0.000
F0-06	Max. frequency	0.00～650.00Hz	50.00	0.00
F0-07	Upper-limit frequency	0.00～0.00Hz	50.00	0.00
F0-08	Lower-limit frequency	0.00～0.00Hz	0.00	0.00
F0-09	Direction lock	0～2	0: Forward or reverse	0: Forward or reverse
F0-10	Parameter protection	0～2	0: No protection	0: No protection
F0-11	Parameter initialization	0～22	0: Factory value	0: Factory value
F0-12	Motor control mode	0～5	0	0
F0-13	Inverter rated capacity	0.00～65535.00kW	5.50	0.00
F0-14	Software version	0～9999	3	0
F0-15	IO accessories selection	0～136	000	000
F0-16	User password setting	0～9999	0	0
F0-17	User password	0～9999	0	0

✓ Parameter display

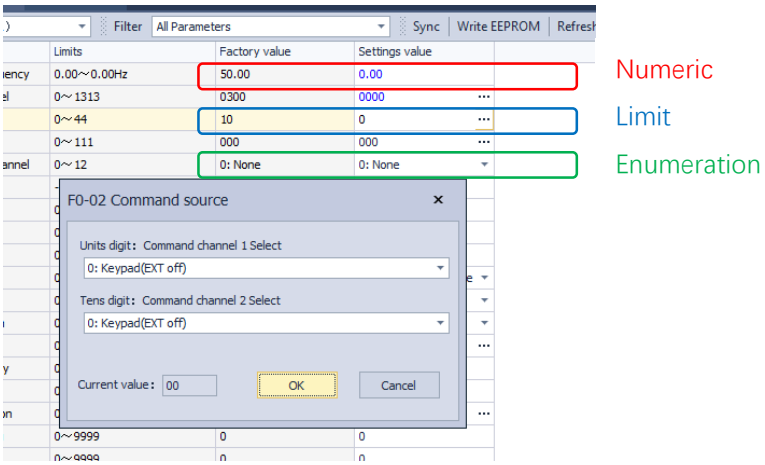
In the form of a parameter list, multiple data columns are displayed: parameters, parameter names, parameter setting ranges, parameter factory values, parameter setting values, etc.

When the set value is inconsistent with the factory value, the set value is displayed in blue.

✓ Parameter value setting

By setting the value of the parameter in the Set value column. There are three ways to set values: numerical type, enumeration type, and limit type.

- Numeric type: modify directly in the cell.
- Enumeration type: modified through the cell drop-down box.
- Limit type: Modify by clicking on the pop-up interface.



When setting the parameter value, if it exceeds the upper and lower limits, a prompt will be given.

✓ Parameter synchronization

Supports 3 synchronization methods:

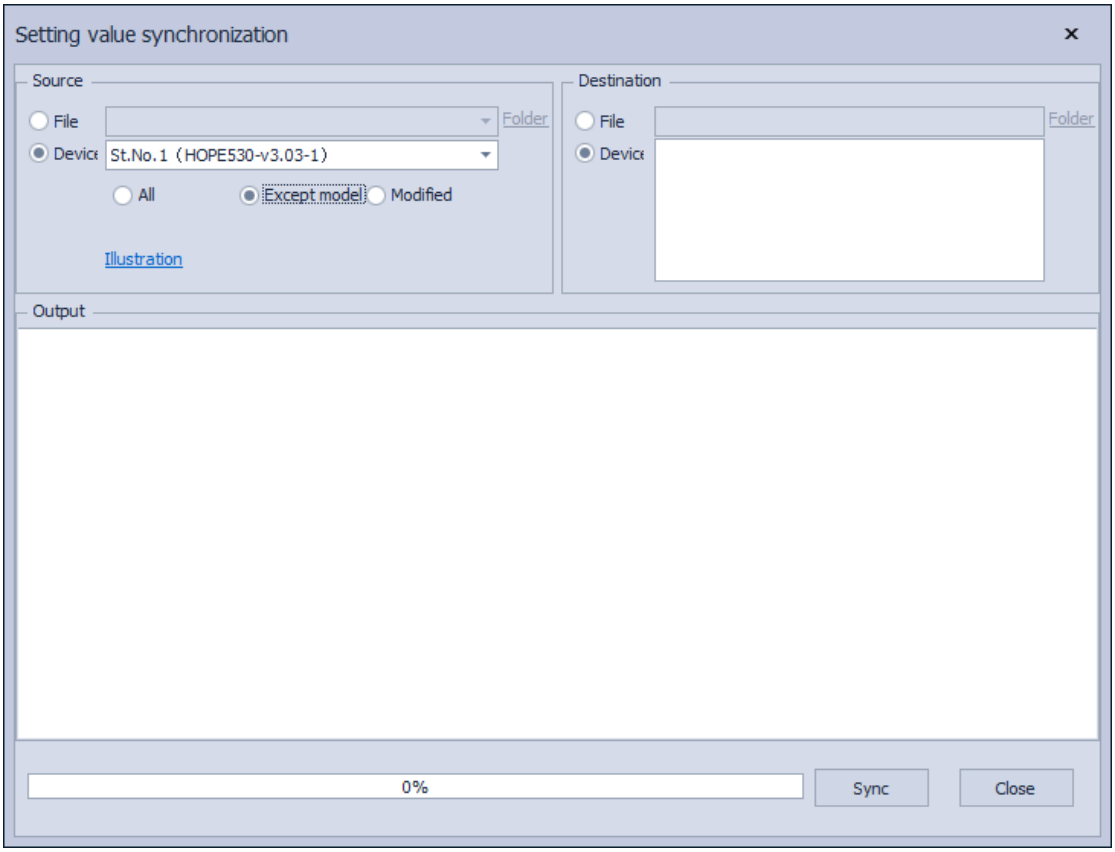
- Device to file: Stores parameter values from the device to a file.
- Files to devices: Loads parameter values from a file to the device.
- Device to device: Synchronizes parameter values in one device with other devices of the same series.

When the "sync source" is a device, there are 3 sync filtering options for its parameters:

- All parameters.
- Non-model parameters, other than model-dependent parameters
- Modified value parameters, whose set value and factory value are not equal.

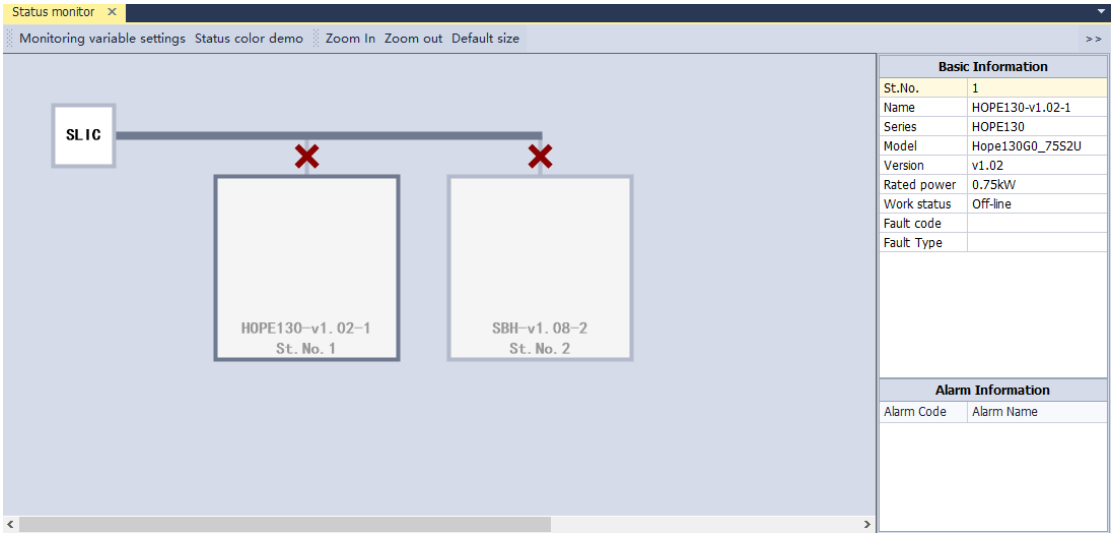
Note: FF communication parameters and read-only parameters do not participate in synchronization regardless of the filtering options.

The synchronization interface is as follows:



4. Device Status Monitoring

The interface for the device status monitoring function can monitor the main status of multiple devices.
Each device can have 8 customizable monitoring parameters.
You can view basic information, current alarm information, current fault information, etc. for the selected device.
To open the device status monitoring interface, double-click on the "Status Monitoring" node in the project panel. It will appear as follows:

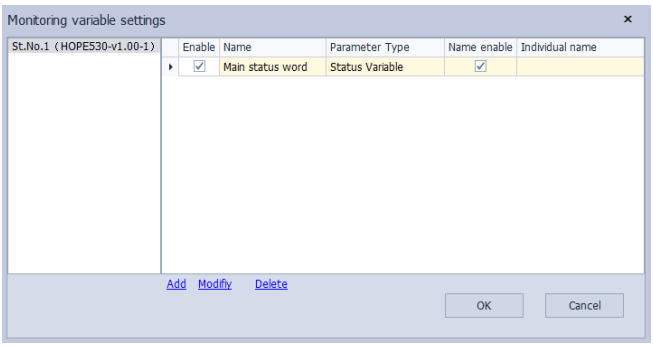


✓ **Status monitor**

Can be displayed in the main screen area. the device's connection status, forward and reverse running status, alarm status, fault status, etc.
Device connection status: A red cross indicates disconnection on the device block, while no red cross indicates a connected state.
Equipment forward and reverse running status: Forward and reverse rotation arrows appear in the middle of the equipment block.
Equipment alarm status: The background of the equipment block is displayed in yellow.
Equipment fault status: The background of the equipment block is displayed in red.

✓ **Monitor variable setting**

To access the "Monitoring Variable Settings" interface, click on "Monitoring Variable Settings" as shown below:

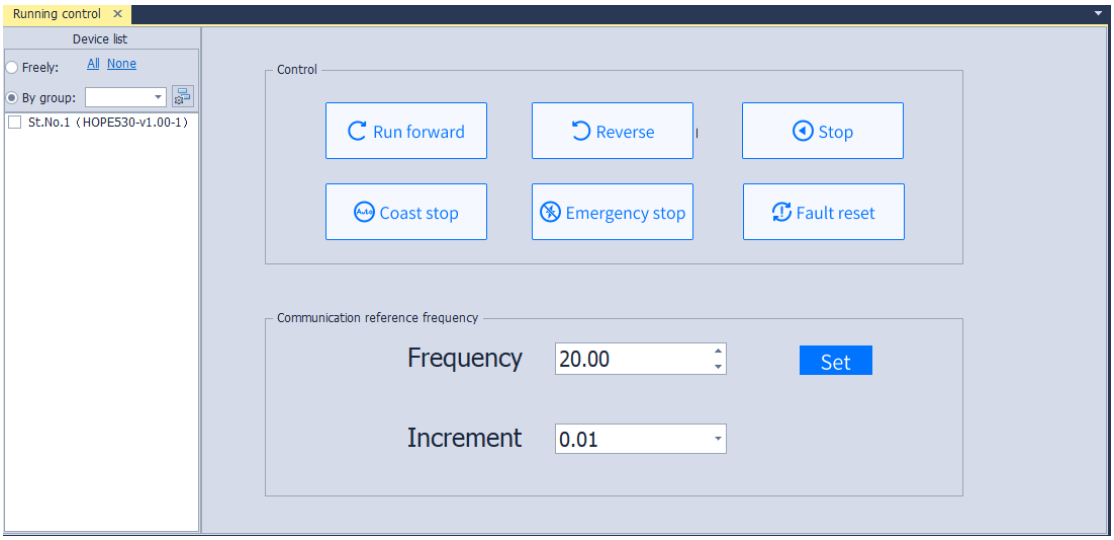


Select the device on the left, and then complete operations such as adding, setting, and deleting the monitoring variables of the device in the table on the left.

5. Running control

Through the running control panel, functions such as forward rotation, reverse rotation, stop, free stop, emergency stop, fault reset, and communication given frequency setting of the equipment can be completed.

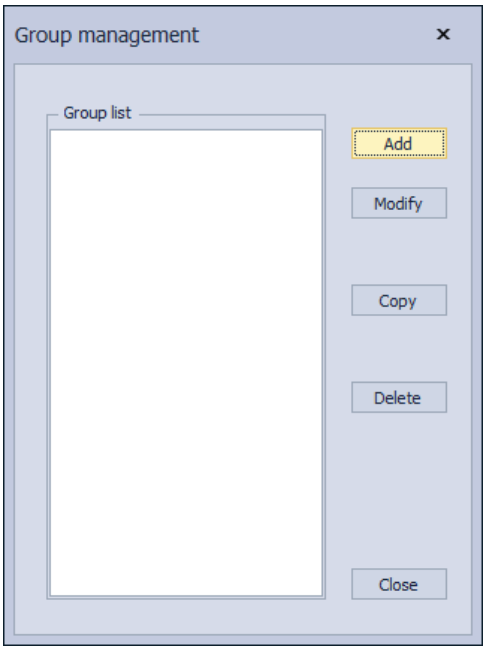
Double-click the "Operation Control" node in the project panel to open the device operation control interface. As shown below:



There are 2 ways to select equipment:

1. Freely choice: Users can freely check the devices they want to control.
2. By group: Users can only select a fixed group, and then the devices in the group will be selected for control.

To complete the group settings, click on the "Set Group" button to open the "Group management" interface. It is shown below:



6. Variable monitor

Variable monitoring can be done in 2 ways: Chart monitor and list monitor.

✓ Chart Monitoring

To access the equipment curve monitoring interface, double-click on the "chart Monitor" node in the project panel. It will appear as shown below:

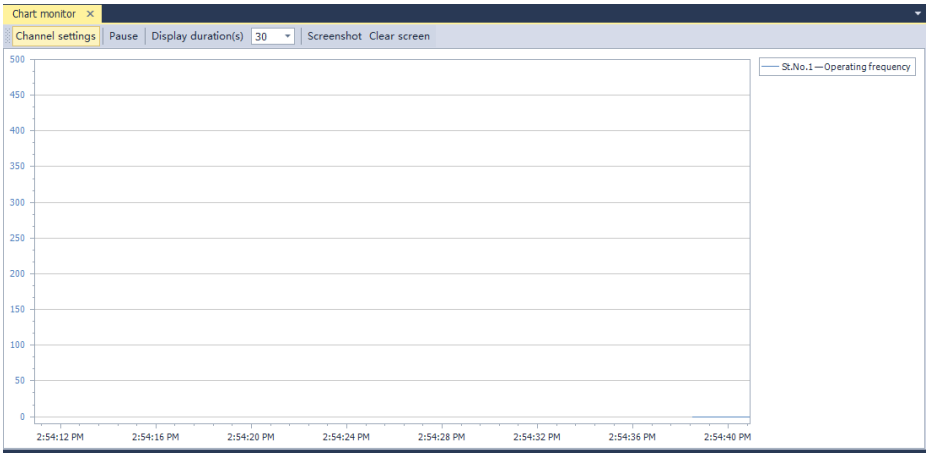
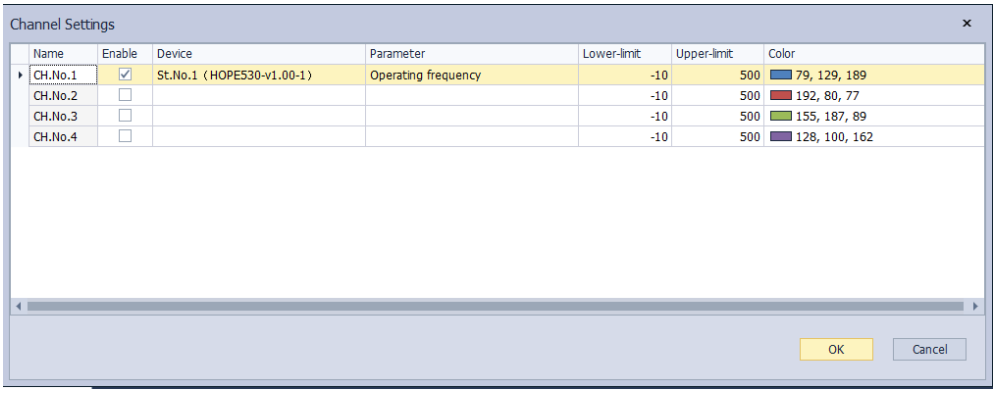
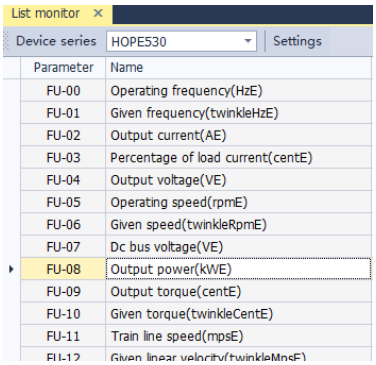


Chart monitor can set up to 4 channels.
Complete the channel settings through the "Channel Settings" function, as shown in the figure below:



✓ List monitor

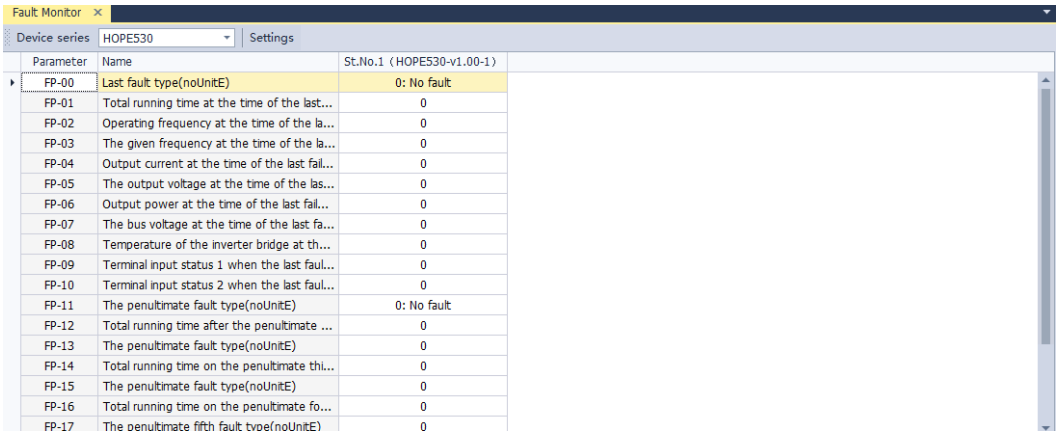
Double-click the "List Monito" node in the project panel to open the device list monitoring interface. As shown below



Through "Settings", you can selectively monitor some parameters.

✓ **Fault monitor**

Double-click the "Fault monitor" node in the project panel to open the fault record interface. As shown below:



7. History alarm

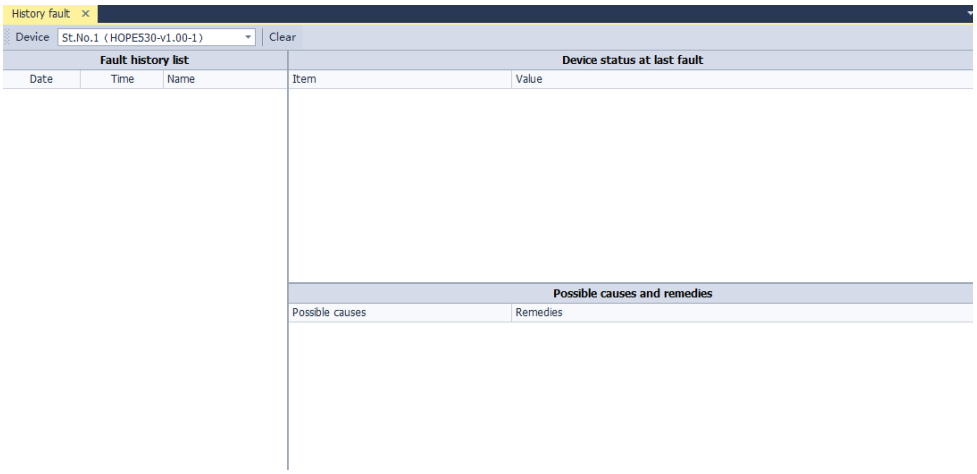
View the history of device alarms through the "Alarm History" function.

Click the menu "History"→"History Alarm" to open the interface, as shown in the figure below:

8. History fault

View the history of device alarms through the "Fault History" function.

Click the menu "History"→"History Fault" to open the interface, as shown in the figure below:



✓ The difference between the menu “History fault" interface and the left project list "Fault Monitor" interface:

"History fault" interface: Only when the SLIC software is connected to the device, each time a fault occurs, it will be recorded

Record a fault information into the historical fault list.

"Fault Monitor" interface: It is the display of the device's FP parameters on the SLIC software.

9. Operating environment

Computer

With serial port or Ethernet interface.

Operating system

Windows 11/10, Windows 8.1/Pro/Enterprise, Windows 8, Windows 7 (32/ 64)

Windows XP sp3 (32-bit version).

Runtime

.Net Framework 4.0.