

Operation Manual

ICA417 Series 4G IoT Data Transmission Terminal



SHENZHEN INVT ELECTRIC CO., LTD.

Change history

| No. | Change description | Version | Release date | | |
|-----|--|---------|----------------|--|--|
| 1 | First release. | V1.0 | December 2022 | | |
| | Added three function descriptions (antenna gain, power consumption and heat dissipation method) in section 1.2 Product specifications. | | | | |
| 2 | • Added product weight data in section 2.3 Outline dimensions and weight. | V1.1 | September 2024 | | |
| | Updated all operation descriptions and interface diagrams in chapter 3 Quick startup. | | | | |
| | Added the mainstream industrial protocols supported in chapter 1 Product overview. | | | | |
| | Added support for S7, PPI, MC-3E, SLMP, and FINS communication protocols in section 1.2 Product specifications. | | | | |
| | Updated operation steps in section 3.1.2.1 IWOstudio monitoring equipment. | V1.2 | June 2025 | | |
| | Updated operation steps in section 3.1.2.2 Monitoring devices via the web portal. | | | | |
| | Updated operation steps in section 3.2 VPN pass-through configuration. | | | | |

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Read the safety precautions to ensure safe operation before operating the IoT data transmission terminal.

- The account and password are the authentication credentials of INVT industrial Internet
 platform and can be used for device management after login. You shall keep you account
 and password properly and take sufficient precautions to prevent others from stealing
 them. If the user name and password are stolen, significant losses may be caused.
- You shall communicate with the field personnel to ensure safety before using the device for remote operation, otherwise significant losses may be caused.
- The IoT SIM card is forced to be machine-card binding, SIM card can only be used in the device which is first powered on and networked. You shall not insert the IoT SIM card into other devices, otherwise the SIM card will be locked.
- This product is an industrial IoT product, we have taken necessary technical means to
 ensure data security, but there may be hacker invasion and other network security risks
 that are not under our control or responsibility. If the harm is not caused by the quality
 defects of our products, we shall not be liable for related losses.

1 Product overview

INVT ICA417 series 4G IoT data transmission terminal is an industrial-grade 4G IoT data transmission terminal. It operates on public carrier networks and provides stable and reliable remote data acquisition, program upload/download, and debugging functions to meet the demands of harsh industrial environments.

The product integrates multi-network access capabilities, including 4G, Ethernet, and Wi-Fi. It provides routing and switching, VPN pass-through, and virtual serial port pass-through functions. Equipped with RS485 and RJ45 dual interfaces, it supports mainstream industrial protocols such as Modbus RTU, Modbus TCP, S7, PPI, MC, and FINS. Through the INVT Industrial Internet Platform, it enables cloud-based device data access, remote monitoring, and intelligent operation and maintenance management.

1.1 Product features

- 1. Standard set-up for easy operation
- Provides standard RS485 interface for direct connection with serial device to collect data.
- Provides standard RJ45 network ports: LAN port can be directly connected to network devices for data collection. WAN port can be used for networking.
- Intelligent data terminal, able to enter the data transmission state once upon power-on.
- Adopts standard rail installation.
- · Powerful industrial Internet platform for easy device management.
- Easy system configuration and maintenance interface.
- 2. Powerful functions
- Supports remote data monitoring.
- Supports VPN pass-through (only in China), able to remotely upload, download, monitor PLC programs through network ports and VFD remote oscilloscope.
- Supports virtual serial port pass-through, able to remotely upload, download, and monitor PLC programs through serial ports.
- Supports remote upgrade of application programs and policy files.
- Supports 4G routing function to provide network for other devices.
- Supports exchange function.

- Supports multiple network connection methods.
- Supports APN (operator APN information needs to be provided overseas)
- Supports the upload of the data with changes, achieving the traffic saving mechanism.
- Supports 4G base station positioning.
- (Optional) Supports high-precision GNSS satellite positioning for real-time accurate acquisition of the device's geographic location.

1.2 Product specifications

| Function | Description |
|---|--|
| Supported | LTE FDD (CN version): Band 1/3/5/8 LTE TDD (CN version): Band 34/38/39/40/41 LTE FDD (EU version): Band 1/3/5/7/8 LTE TDD (EU version): Band 20 LTE FDD (LA version): Band 1/2/3/4/5/7/8 LTE TDD (LA version): Band 12/17/28/38/40/66 WCDMA/HSPA+: Band 1, 8 TD-SCDMA: Band 34,39 CDMA/EVDO: BC0 |
| | • GSM: 900/1800MHz |
| Supported interfaces | 1 RS485 interface 3 standard RJ45 interfaces (1 WAN port and 2 LAN ports) 1 USB TYPE-C commissioning port 1 SMA 4G antenna interface 1 spring-loaded SIM card socket (large card) |
| Wire communication distance (unshielded) | RS485: 50m LAN connection terminal control device: 10m WAN: 50m |
| Indicator | Power indicator, signal indicator, network status indicator, running status indicator |
| Communication protocol | Modbus RTU, Modbus TCP, S7, PPI, MC-3E, SLMP, FINS and others mainstream protocols MQTT communication protocol FTP transfer protocol |
| Theoretical bandwidth | LTE FDD Rel.9: 150Mbps DL/50Mbps UL LTE TDD Rel.9: 130Mbps DL/30.5Mbps UL WCDMA Rel.8: 384 kbps DL/384 kbps UL |

| Function | Description | | | | |
|-----------------|---|--|--|--|--|
| | TD-SCDMA Rel.4: 4.2Mbps DL/2.2Mbps UL | | | | |
| | GPRS: 85.6kbps DL/85.6kbps UL | | | | |
| Antenna gain | 2.2dBi | | | | |
| Power supply | DC10-25V | | | | |
| Power | | | | | |
| consumption | Average power: 70mA@24v, maximum power: 500mA@24v. | | | | |
| Temperature | -25-+60°C | | | | |
| range | | | | | |
| Shell | Sheet metal, ingress protection (IP) rating IP20 | | | | |
| Mounting method | Rail/Wall mounting | | | | |
| Cooling method | Natural cooling | | | | |

1.3 Model description

Model name illustration of INVT ICA series data transmission terminal:



| Symbol | Field description | Contents |
|--------|-----------------------------------|---|
| 1 | Product series abbreviation | ICA: Internet Communication Adapter |
| 2 | Wireless communication mode | 0: Do not support wireless communication 1: WIFI 2: GPRS 3: 3G 4: 4G 5: 5G |
| 3 | Wired communication mode | 0: Do not support wired communication 1: Ethernet |
| 4 | Local data collection mode | 0: RS485 1: Ethernet 2: CAN 3: RS485+Ethernet 4: RS485+CAN 5: Ethernet+CAN |

| Symbol | Field description | Contents |
|--------|-------------------|---|
| | | 6: RS485+Ethernet+CAN |
| | | 7: RS485+Ethernet+VPN |
| Ð | SIM cord type | 0: Plug-in card (Standard, default) |
| 0 | Silvi card type | 1: Embedded SIM card |
| | | 0: IP00 (without housing) |
| ® | ID rating | 1: IP20 (wall-mounted housing) |
| 6 | IF laung | 2: IP20 (rail-mounted housing) |
| | | 6: IP65 (direct-insert housing) |
| | | G: With GPS |
| | | U: With USB flash disk |
| | | A: Support audio |
| 7 | | V: Support video |
| | Special function | H: Cooperative development |
| | | N: Built-in antenna |
| | | P: With display screen |
| | | This bit is omitted for standard configuration since it |
| | | does not carry additional functions. |
| | | 5: 4.5–6V |
| 8 | Voltage type | The voltage for standard configuration is 10V–30V, so |
| | | this bit is omitted for standard configuration. |
| | | CN: China version |
| 0 | International | EU: Europe version |
| 9 | version | LA: Latin America version |
| | | Note: This bit is omitted for WIFI products. |

1.4 Port description

| Port identifier | Port instruction |
|-----------------|--------------------|
| 24V | Power supply + |
| GND | Power supply - |
| 485+ | 485A |
| 485- | 485B |
| TYPE-C | Commissioning port |
| 4G | 4G antenna |
| WAN | WAN port |
| LAN | LAN port |
| SIM | SIM card |
| RESET | Reset key |

Indicator Description identifier 4G network indicator Flash quickly: Data link established. NET Flash slowly: No SIM card/Network registration in progress/Network registration failed. Run indicator Flash quickly: RS485 communication is normal. RUN Flash slowly: RS485 communication is abnormal. On or off: The system works abnormally. Signal indicator On: Signal value CSQ ≥ 17, good signal. SIG Flash slowly: $9 \le$ signal value CSQ < 17, average signal. Off: Signal value CSQ < 9, poor signal. PWR Power supply indicator

1.5 Indicator description

2 Installation

2.1 Overview

ICA417 series 4G IoT data transmission terminal must be installed properly to achieve the designed function. Generally, the installation must be done under the guidance of our certified and qualified engineers.

Note: The device must be installed with power-off. Remove the rail clip before performing wall mounting.

2.2 Unpacking inspection

Before unpacking, check whether the package is in good condition and its product information is the same as on the order. The packing materials should be well maintained during inspection for future transshipment. If any question, please contact the supplier.

| Deliverables | Qty | Remarks |
|-------------------------------|-----|------------------------|
| 4G data transmission terminal | 1 | 1 |
| 4G antenna | 1 | / |
| Screw | 3 | Used for wall mounting |
| PIN port | 1 | 4-pin port |

| Table Z=1 1 Toutet deliverables | Table 2-1 | Product | deliverables |
|---------------------------------|-----------|---------|--------------|
|---------------------------------|-----------|---------|--------------|

2.3 Outline dimensions and weight

The outline dimensions of the IP20 model are as follows (unit: mm). The net weight of the product is about 260.6g, and the gross weight is about 427.5g.



Figure 2-1 Outline dimensions for ICA417

3 Quick startup

3.1 IoT module use instructions

3.1.1 Installation instructions

Equipment required: Networked computer, 4G data transmission terminal, IoT SIM card

- Step 1 Take out of the SIM card socket, and insert the SIM card into the card holder.
- Step 2 Record the device ID and 6-digit key from the label and add them to the IoT monitoring system.
- Step 3 Wire the product based on the port description.
- Step 4 Connect the 4G antenna.
- Step 5 Power on and start the 4G data transmission terminal.
- Step 6 When the NET indicator flashes with an interval of 75ms, the network is ready and the data transmission starts.
- Step 7 Go to real-time monitoring interface to review relevant information on the IoT monitoring platform.

3.1.2 Monitoring platform operation instructions

You can monitor devices using three methods. For information on how to obtain the account and password, refer to section 3.1.3 Monitoring platform account.

- Host controller software: IWOstudio
- Web portal: IWoscene industrial IoT application platform
- Mobile portal: INVT Cloud app

3.1.2.1 Monitoring devices via the IWOstudio

Step 1 Download IWOstudio from the official website (www.invt.com), install, and then open it.

| T IWOstadio ³⁸ Networking settings Configure tool Local settings | 0 c o - D |
|---|-------------------|
| IWOstudio - Log in | |
| · · · · · · · · · · · · · · · · · · · | User |
| | Passoord |
| | Remember passward |

Step 2 Enter the account and password to log in and enter the network configuration interface.

✓Note: For account information, refer to section 3.1.3 Monitoring platform account.

| 101 IWOstudio ^{3,0} Networking set | tings Configure tool | Local settings | | | econom_tWiteme | 00 | - 🗆 × |
|---|--------------------------|------------------------------|------|-------------------------|----------------|-------------------|-------|
| Denice norm/Device type/Mela Q 4 Maintenance group by device ∨ at | 1 Total number | O Online | 0 | O Maintenance | 0 | O Alarm | 0 |
| Ø demo[01 (1) * | | | | | | | |
| | | | | 0 | | | |
| | | | 1 | | | | |
| | | | No [| Jata | | | |
| | | | | | | | |
| | | | | | | | |
| | | 副海 | | | | | |
| New Global Man_ HomePage | INVESTIGAT APP | Bectronic instruction manual | | | | | |

Step 3 If it is your first time using the software, you need to add a device type. Choose **New > New device type** at the bottom left corner. If it is not your first time adding a device type, proceed to Step 5.

| 187 IWOstudio ¹⁸ Networking se | ttings Configure tool | Local settings | | | e comm.,700 | C @ | - 🗆 × |
|---|-----------------------|------------------------------|----|------------------|--------------------|-------------------|-------|
| Device remer Device type Huter, (9) | 1 Total number | O O Online | 0 | 0 Maintenance | 0 | O Alarm | 0 |
| Ø demo001(1) * | | | | | | | |
| | | | | | | | |
| | | | No | Deta | | | |
| | | | | | | | |
| New device . | IX | | | | | | |
| New device type New device group | | | | | | | |
| Cobel Man. HomePage | INVESTIGAT APP | Bectronic instruction menual | | | | | |

Step 4 Enter the Type name of the device, and click OK.

If the message **Successfully created** appears, the creation of the device type is complete.

| New device type | × | |
|-----------------|--------|--|
| * Type name | | |
| | Cancel | |

Step 5 Choose New > New device at the bottom left corner.

| iðt IWOstudio ^{3.8} Networking se | ttings Configure tool | Local sett | ings | | | 0 | erro C 🕸 | - 🗆 × |
|--|-----------------------|---------------|-----------------|----|-------------------------|----------|------------|-------|
| Denter same (Senis type Rids., Q, AB Maintenance > group by device., V (al V) | 1 Total number | 0 | 0 Online | 0 | O Maintenance | 0 | 0 Alarm | 0 |
| Ø demo001 da 🔹 | | | | | | | | |
| | | | | | | | | |
| | | | | 1 | | | | |
| | | | | No | Data | | | |
| | | | | | | | | |
| | | | | | | | | |
| New device New user | | 殿 | ž. | | | | | |
| New device type New device group | | iii. | ж 1 | | | | | |
| New Clobal Mgmt HomePage | INVELOT APP | Dectronic ins | druction manual | | | | | |

Step 6 Enter Adapter ID, Adapter key, Device name, select Device type, and click OK to complete the process.

✓Note: Adapter ID is the S/N code of the IoT terminal, and Adapter key is the six-digit number under the QR code next to the S/N code.

| New device | × |
|---------------------------------|-----------|
| Adapter ID | |
| Adapter key | |
| Device name | |
| Device type | |
| Device group | × (•) |
| | × 🕙 |
| | Cancel OK |

Step 7 Add a communication type.

If the device is added for the first time, click the added device, you need to click Communication Type at the top right corner to add the communication type.

| All | Maintenance | |
|-------------|----------------|---|
| group by de | vice V all | ~ |
| Ijm-12 | 3 (1) | ^ |
| 🛜 🔀 ljm | -0020 M0020 | 1 |
| | | |

Create a communication type: Enter any alias in **Alias**, and select an **Address Table**. If no address table is available, click + next to **Address Table** to create a new one.

| tcp [jm-100] to | p rtu | |
|-----------------|-------------|------------|
| Alias | * Address | Table |
| | | × 🕀 |
| Brand: | Brand model | Agreement: |

Create a new address table: Enter any name in **Address Table Name**, select a brand (such as INVT, Inovance, Siemens, Delta, Xunjie, Mitsubishi, and Omron) from **Brand**, select a model from **Brand and model**, choose the desired protocol from **Agreement**, and click **OK**.

| Create a new address table | | × |
|----------------------------|--------|----|
| * Address table name | | |
| test-ljm-100 | | |
| * Brand | | |
| Standard Modbus | | |
| * Brand and model | | |
| Other | | |
| * Agreement | | |
| Modbus_TCP | | |
| Remarks | | |
| | | |
| | | |
| | Cancel | ОК |

In the page that pops up, set the communication parameters, and click **Save and Incremental Sync**.

| * Alias | * Address Table |
|-------------------------|------------------------------|
| ljm-100 | test-ljm-100 V 🕒 |
| Brand:通用品牌 Brand model: | General Agreement:Modbus_TCP |
| * Slave address | * Adapter IP |
| 1 | 192.168.1.1 |
| * Device IP | * Port |
| 192.168.1.10 | 512 |
| | |
| Cancel Save and | d Incremental Sync 🕥 🛛 Save |

The communication type must be added upon first use. For subsequent use of the same communication type, you can select it directly.

Step 8 Add a connection address.

Click the desired device, and click New.

| State | Collection addr name | Numerical value | Comm type | Address | Operation |
|-------|----------------------|-----------------|-----------|----------|------------------------------|
| 0 | 2 | 190 | ljm-100 | (4x) 1 | Chart Edit Copy Delete |
| 0 | temperature | 190°C | ljm-100 | (4x) 200 | Chart Edit Copy Delete |
| 0 | kaiguan | 1 | ijm-100 | (0x) 10 | Chart Edit Copy Delete |
| 0 | shidu | 250 | ljm-100 | (4x) 20 | Chart Edit Copy Delete |
| | wendu | 170°C | ljm-100 | (4x) 10 | Chart Edit Copy Delete |

Address adding parameters: Fill in **Collection addr name** freely, select the address table you just created from **Address Table**, and select an option from **Data Type**, **Address Type**, and **Address** based on actual needs. Other parameters such as **Unit**, **Base value**, **Scale factor**, and **Decimal places** have default values and can be left unchanged or modified as needed. After completing the setting, click **Save**.

| Collection addr na | ime | | | Upload method | Upload cycle(s) | Numerical process 🕥 |
|--|---------------|-------------------------------|----------------|-----------------|-----------------|---------------------|
| temperature | | | | Change upload V | 30 | Numerical value |
| Address Table | | Data type | | Address label | | |
| test-ljm-100 | | 16-bit unsigned in | teger | | | ×) |
| Address type | | * Address | | Remarks | | |
| 4x | | 200 | | | | |
| Joit | Base value 🕲 | Scale factor 🕲 | Decimal places | | | |
| °C | 0 | 1 | 0 | | | |
| l&W methods | Chart display | Size end 🕥 | | | | |
| Read-only V | No V | Small end V | | | | |

The added address is displayed in the monitoring interface.

| Sillection | radur nan | | | | | Search |
|------------|-----------|----------------------|-----------------|-----------|----------|------------------------------|
| | State | Collection addr name | Numerical value | Comm type | Address | Operation |
| | • | 2 | 190 | ljm-100 | (4x) 1 | Chart Edit Copy Delete |
| | 0 | temperature | 190°C | ljm-100 | (4x) 200 | Chart Edit Copy Delete |
| | • | kaiguan | 1 | ljm-100 | (0x) 10 | Chart Edit Copy Delete |
| | • | shidu | 250 | ljm-100 | (4x) 20 | Chart Edit Copy Delete |
| | • | wendu | 170°C | ljm-100 | (4x) 10 | Chart Edit Copy Delete |
| New | Batch | ∧ More ∧ | | | Tota | 15 < 1 > 10/page |

Click New to add other collection addresses.

| | 0 | shidu | 250 | ljm-100 | (4x) 20 | Chart Edit Copy De |
|-----|-------|--------|-------|---------|---------|--------------------------|
| | 0 | wendu | 170°C | ljm-100 | (4x) 10 | Chart Edit Copy Dr |
| New | Batch | More A | | | Total 5 | < 1 > 10/ |

After all the addresses have been added, click **More**, and then click **Sync** collection addr to send all the addresses to the module.

| ollection | addr nan | 1e: | | | | Search |
|-----------|----------|--|-----------------|-----------|----------|------------------------------|
| | State | Collection addr name | Numerical value | Comm type | Address | Operation |
| | | 2 | 190 | ljm-100 | (4x) 1 | Chart Edit Copy Delete |
| | | temperature | 190°C | ljm-100 | (4x) 200 | Chart Edit Copy Delete |
| | 0 | kaiguan | 1 | ljm-100 | (0x) 10 | Chart Edit Copy Delete |
| | 0 | shidu | 250 | ljm-100 | (4x) 20 | Chart Edit Copy Delete |
| | • | Sync collection addr ③ Comm type mgmt | 170°C | ljm-100 | (4x) 10 | Chart Edit Copy Delete |
| New | Batch | ∧ More ∧ | | | Total 5 | < 1 > 10/page |

Step 9 Check data monitoring.

After receiving the address configuration, the data transmission terminal collects and uploads the data, which is then displayed on the monitoring interface, as shown in the following figure.

| All | 1 | Monitor Param | | | @ Comr | n type < 🕜 ljm-100 🛛 🗸 > |
|------------|------------|----------------------|-----------------|-----------|----------|------------------------------|
| Collection | n addr nan | ne: | | | | Search Reset |
| | State | Collection addr name | Numerical value | Comm type | Address | Operation |
| | • | 2 | 8 | ljm-100 | (4x) 1 | Chart Edit Copy Delete |
| | • | temperature | 8°C | ljm-100 | (4x) 200 | Chart Edit Copy Delete |
| | • | kaiguan | 0 | ljm-100 | (0x) 10 | Chart Edit Copy Delete |
| | • | shidu | 8 | ljm-100 | (4x) 20 | Chart Edit Copy Delete |
| | • | wendu | 8"C | ljm-100 | (4x) 10 | Chart Edit Copy Delete |

To modify a collection address, select the desired address and click **Edit**. After making the necessary changes, click **Save and Incremental Sync** to complete the modification.

To add a new collection address, click **New**, enter the necessary information for the new address, and then click **Save and Incremental Sync** to complete the addition.

| Please choose | the address format | | | | | | | |
|-----------------------------|--------------------|------------------|--------------|-----------------|---------------|-----------------|---------------------|---|
| | | | | | | | | |
| * Collection addr name | | | | | Upload method | Upload cycle(s) | Numerical process (|) |
| kaiguan | | | | Change upload V | 30 | Numerical value | × | |
| Address Table Data type | | | | Address label | | | | |
| test-ijm-100 | | Boolean | | | | | | 0 |
| Address type | | + Address | | | Remarks | | | |
| 0x | | 10 | | | | | | |
| Unit | Base value 🕲 | Scale factor (1) | Decimal plac | (es (1) | | | | |
| | 0 | 1 | 0 | | | | | |
| R&W methods | Chart display | Size end 🕲 | | | | | | |
| Read-only V | No v | Small end V | | | | | | |

3.1.2.2 Monitoring devices via the web portal

Step 1 Enter: iot.invt.com in the address bar of Google Browser and press Enter to visit the login page of the industrial IoT application platform. As shown in the following figure, enter the account number and password to complete the login.

✓Note: For account information, refer to section 3.1.3 Monitoring platform account.



Step 2 After successful login, the homepage appears as shown below. Under Add devices quickly, enter the adapter number, secret key and device name; select the device type according to the monitoring type; select ICA417 as the adapter type; and keep the default communication mode 485, which can be changed to LAN if a network port is used. Then click Submit after confirming the input is correct.

Note: If the device has already been added via the IWOstudio or the app, this step can be skipped.

| ∃ ⊕ ********* | et industry application plat | om | | | | Teach adapter number, menu, device name, device tairo | de, descepper (), | 00 Y 2 4 | () sonn jedenster Lagout | VALUE: 10 | 1 |
|---------------------------------------|------------------------------|-----------------|----------------|-------------|------------------------|---|----------------------|------------------------|--------------------------|-------------|---|
| 🗑 Maratar 🔹 🔹 | ≪ ⊡Main page | | | | | | | | | >> | v |
| Disconset. I | Connerment + | | | | Outrites | | Logo internation | | | | |
| th device place control | ٢ | 1 | ۲ | 因 | Registered Star Reserv | | Login trives | 15571 2013-07-02 11 | 32.15 | | |
| 🕼 Dalament contar 🔍 | Epiprani most | Charts | Parameters | Param label | | | Last tops time | 2023-06-24-05 | 142.32 | | |
| 4. Alter sales carlar 🗸 | | 瞍 | - | Ð | | | | | | | |
| Bastress Center v | Centralized mont. 1 | Nork order over | Ramele upgrade | | | | Add devices quickly | | | | |
| M Usercenter v | Data Overview | | | | | | Pease error Tre ad | agter number | Please other securit key | 0 | |
| O System careful v | | | | Ogree | Device Info | | Device Type | | Please order device name | | |
| Customenten C., ~ | 5 | nist office | - al | - | | | ICA417 | | 400 | | |
| 🔮 Operation center 🕞 | | | | | | | Oderet | | | _ | |
| 🛞 Configuration ce. 👻 | | | | | · artis | | | | | | |
| 📷 data conter 🗸 👻 | | | | | - texted office | | Real time monitoring | | | | |
| | | | | attine | | | 24.70% | | | onton Tallo | |
| | | | | | | | 7.89% | | Abe | arts Patto | |

Step 3 Enter the adapter number in the search box on the homepage. Select the desired adapter to view its monitoring state.

| | ≪ ⊖ Main page | | | | | | | | | 20 |
|---------------------------------|------------------|------------|-------------------|-----------------|---|--|-----------------------|--------------|--------------------------|-------------------------------|
| Register runk. 🗉 | Control tions + | | | | Overview | | Logie information | | | |
| Borks juict control | 0 | 1 | ١ | 凤 | Republicad liber Review | | Loginitimus | 10571 | | |
| | Dpipment reant | Users | Panaradors | Param label | | | Hoppstation and | 2010-07-021 | 7.12.13 | |
| | 2 | 良 | 57 | ۲ | | | Cast operate | 202010-240 | 9.42.14 | |
| | Centralized moni | not over . | Remain opposite . | envir upgrede . | | | A03 004126-Q.830) | | | |
| | Data Overview | | | | | | Please entry the ad | ajter sunder | Please enter secret key | 0 |
| aan casar | | To be seen | | Online | berine Info | | Device Type | | Please enter device name | |
| | | | | | | | ICAH17 | | 465 | |
| | | Page - | | | | | Same | | | |
| | | | | | Kend. Fair | | | | | |
| | | | | | A is actualed | | Deal free months inst | | | |
| | | | | | A be addressed | | | | | |
| | | | | - best | | | 24.70% | | | Critice Ra |
| | | | | - bead | | | 24.70% 7.89% | | ю | Criticie Rust Iorinal Rust |
| th Message | | | | - Real | · / / KONA | | 24.70% 7.89% | | 10 | Craine Rat |
| ch Message 516LJM0020 | Q | learch | | - text | | | 24.70% 7.89% | | 10 | Online Rat |
| ch Message 316LJM0020 ype | Q | learch | | - Keel | Content | | 24.70% 7.89% | | 40 | Critice Part |

Access the device to view monitoring parameters. If the device's data collection address has already been added via the IWOstudio or the web portal, you can directly view the collected and uploaded data on the monitoring interface.

| | 0-3 | 8616LJM0020 < | rtu-ljm | Ŧ | > ⑦ | refresh | |
|---|----------------------------|-----------------|-------------|---|-----|---------|--|
| | | 🛜 On-line 🕜 On- | line | | | | |
| | Remote operation | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | Real-time monitor Real-tim | e chart | | | | | |
| I | Monitoring parameters | | | | | | |
| | switch s | hidu 30 | temperature | | | | |

Step 4 If the device is added for the first time, click **Communication type** at the top right corner to add the communication type.

| 30 | BINLANDD | (pr.NE | × >⊕ eres | The collection address | Communication type | Synchronize Labortium address |
|------------------|-----------|---------|------------|------------------------|--------------------|-------------------------------|
| Aprets operation | | | | | | |
| Assiste costs | Hine dief | | | | | |
| 2 | | | | | | |
| union parentes | | | | | | |
| torporature C | saguar | shidu | ventu T | | | |

Click +Add on the communication type management interface.

| Communication type | × |
|--|---------------------------------|
| device name: (m-0020 Adapter code: 8616L3M0020 | Full synchronous lasuance + Add |
| Adaptar V address] Social V address Port 1992-108-11 1992-108-11.0 512 Start Statuse New- 1 | |
| Communication type name: Um-100 (Address toole name: tracking 100 | |

Fill in the communication type name, and select the address table. If there is no address table available, click **Click Add** to create a new one.

| Communication | and the | • Address table | please select | P 18 11 | |
|---------------|---------------|-----------------|---------------------|---------|--------|
| type name | rtu-ijm | Address table | Click Add | | |
| * brand | please select | * Brand model | please select | | |
| Protocol | please select | | | | |
| | | | Save and distribute | Save | Cancel |

Click +Add on the address table management interface.

| address table mana | gement | | | | |
|--------------------|---------|-------------------|---------|---------------------|-----------|
| Address table name | Brand | greement Q Search | | | + Add |
| Address lable name | Brand D | Agreement | Founder | Create time | Operation |
| 通用TCP | 通用品牌 | Modbus_TCP | yyfu测试 | 2025-06-11 13:54:38 | |
| 通用RTU | 通用品牌 | Modbus_RTU | yyft测试 | 2025-06-11 13:54:14 | |
| lest-addr | 通用品牌 | Modbus_RTU | 通用管理员 | 2025-06-11 13:30:13 | |
| Nest-ljm-100 | 送用品牌 | Modbus_TCP | 递用管理员 | 2025-06-11 10:19:23 | |
| TS635TCP | INVT | Mothus_TCP | yyfu测试 | 2025-06-04 15:32:47 | |
| тв | INVT | Modbus_RTU | yyft测试 | 2025-06-04 15:19:56 | |

Add address table information based on actual needs, and click Save.

| Add | | × |
|----------------------|------------|-------------|
| * Address table name | test-addr | |
| * Brand | 通用品牌 | Ŧ |
| * Brand model | General | v |
| * Agreement | Modbus_RTU | v |
| Remark | | |
| | | Save Cancel |
| | | |

Return to the communication type filling interface, select the address table you just added, and set the communication parameters based on actual needs. Then click **Save and distribute**.

| * Communication type name | rtu-Ijm | * Address table | instructions | ▼ Click Add |
|---------------------------------|------------|-----------------|--------------------|-------------|
| * brand | 通用品牌 | * Brand model | General | |
| * Protocol | Modbus_RTU | | | |
| * Slave Station Number | 1 | * Serial port | COM1 | Ŧ |
| * Baud rate | 19200 - | * Data Bits | 8 | ~ |
| * Stop Bits | 1 ~ | * Check Bits | Even parity check | Ŧ |
| | | s | ave and distribute | Save Cancel |

The newly added communication type will appear on the communication type management interface.

| Baud rate Data Bits 19200 8 | Stop Bits | Adapter IP addr Device IP address Port 192.168.1.1 192.168.1.10 512 |
|--|-----------------------|---|
| Check Bits Serial port Even parity c COM1 | Slave Station Nu 1 | Slave Station Nu 1 |
| Communication type name : rtu-ljm Address table name : instructions | | Communication type name : Ijm-100 Address table name : test-ijm-100 |

Step 5 Add the data collection address. The collection address needs to be added for the first time.

Go back to the device data monitoring interface, select the communication type you just added from the red drop-down list box shown below, and click **Refresh**. Since no monitoring data is displayed, you need to add the data collection address before monitoring the data.

| 0.3 | 8616LJM0020 (rsv-lym | → > ② refresh | View collection address | Communication type | Synchronize collection adds |
|------------------|-----------------------|---------------|-------------------------|--------------------|-----------------------------|
| | 😤 On-Ime 🔗 Offine | | | | |
| ~ y. | | | | | |
| Remote operation | | | | | |

Click View collection address.

| 0 3 | 0695LJM0020 < rb-ijm | + > ⊕ retiesh | View collection address Communication type Sync | vanite collection address |
|------------------|----------------------|---------------|---|---------------------------|
| | 💎 On-line 🔗 Offine | | | |
| ~ | | | | |
| Remote operation | | | | |

Click +Add on the collection address management interface.

| | N DATE: | A Second D |
|--|---------|------------|

Fill in add related information. Fill in the name freely, and set the data type and address based on actual needs. If you need to set more parameters, click **More** to configure. After the input, click **Save**.

| name | * data type | * address | 3 | |
|-------------|------------------------|-----------|------|------|
| temperature | 16bit unsigned integer | | - 10 | |
| | | | | more |

Repeat the address adding process until all the addresses have been added. Then click Synchronize collection address.

| Collection address name | Q, dearch | | | | | Synchronize collection | n addmaa 🛛 + Add |
|-------------------------|-----------------------|------------------------|-----------------------|------|---------|------------------------|------------------|
| Collect address labels | Collection address na | data type | Reading and writing m | Unit | Founder | Create time | Operation |
| setth_3 | switch | boot | Read only | | 通行首項员 | 2025-06-11 16:05:21 | |
| shibu_2 | shidu | 16bit unsigned integer | Read only | | 進行監護法 | 2025-06-11 16:05:05 | - |
| temperature_1 | temperature | 16bit unsigned integer | Read only | | 进行世纪风 | 2025-06-11 16:04:50 | - |

On the collection address synchronization interface, select the target adapter, and click **The agreement is delivered**.

| The protocol address is delivered | | | | | |
|-----------------------------------|------------------------------------|---------------|-----------------------|-----------------------------------|--|
| Adapter encoding Online presence | - Quisann | | | | |
| The agrounced is delivered | | | | | |
| Adapter encoding | The name of the communication type | Address table | The latest bisser | The most recent time it was based | The status of the most recent delivery |
| 0616LJN0020 | nəim | instructions | General Administrator | 2025-06-22 10:08:54 | succeed |
| | | | | 3 × Þ | 10 1 (HO) ge 1 (H 100) 10/ page |

If the distribution is successful, the distribution status becomes succeeded.

| Adapter en | coding Online presence | * Q.Search | | | | |
|------------|------------------------|------------------------------------|---------------|-----------------------|------------------------------------|--|
| The agree | met is definited | | | | | |
| | apter encoding | The name of the communication type | Address table | The latest issuer | The most recent time it was issued | The status of the most recent delivery |
| 0 66 | 102.340022 | n-in | instructions | General Administrator | 2025-06-23 10:08:34 | sacceed |

The collection address configuration is completed.

Step 6 Check data monitoring.

Go back to the monitoring interface to view the collection address data that has just been configured.

| a 3 | 8616LJM0020 < | rtu-ljm | ▼ > ⑦ | refresh |
|-----------------------------|-----------------|-------------------|-------|---------|
| | 🛜 On-line 🥜 On- | line | | |
| Remote operation | | | | |
| | | | | |
| | | | | |
| Real-time monitor Real-time | chart | | | |
| Monitoring parameters | | | | |
| switch sh 0 3 | idu O | temperature 30 | | |

3.1.2.3 Monitoring devices via the app

Step 1 Download and install the INVT Cloud app on your mobile device.

Note:In Android, search the app store or Google Play for INVT to download; in iOS, search the App Store for INVT to download.

Step 2 Open the INVT Cloud app, enter the account and password to log in. On the homepage, tap the + icon at the top right corner; enter Adapter code, Secret key and Device name, select Device type; and then tap Submit to complete the device addition. Note: For account information, refer to section 3.1.3 Monitoring platform account.



Step 3 Enter the adapter number in the search box. Select the desired adapter to view its monitoring state.

| 09:44 🛙 🗩 | # 22 Eal Sal (92) | 09:44 🛚 🗭 | \$. J. 2. | Sal (92) |
|---|-------------------|--------------------------------------|---------------------|------------|
| < Q 00065 | Search | | | |
| Device | Location | demo ⊂ 8616YS00065 | | + Follow |
| demo © 8616YS00065 | | di Strong 🥭 485 | | |
| 目 demo001 目 演示 ① 广东省菜城市全安区燕罗路6号 | > | Running info Charts | s Operation records | History fa |
| al Strong @ Normal | | Monitoring param | | ^ |
| NO MORE | | Status Para name | Para value | Oper. |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | 00 modbus ~ (eg: 1 | 02) Para value | ← |

3.1.3 Monitoring platform account

You can register a monitoring platform account through the Web or APP, and the same account and password can be used on all three monitoring platforms.

3.1.3.1 Registration via the web portal

- Step 1 Enter iot.invt.com in the address bar of Google Browser and press Enter to visit the login page of the industrial IoT application platform.
- Step 2 Click Register.

Step 3 Fill in the **Company name**, **User name**, **Password**, then confirm the password again. Enter your **Mobile number**, click **Verification code**, fill in the verification code received via SMS, and enter the invitation code. Invitation code: You can obtain it through the higher-level user account. If there is no higher-level one, you can fill in dbf20a (INVT administrator invitation code). Review and check the User Privacy Agreement, click **Register**, and wait for review. You will receive a notification via SMS once approved.



3.1.3.2 Registration via the app

Step 1 Download and install the INVT Cloud app on your mobile device.

✓Note: In Android, search the app store or Google Play for INVT to download; in iOS, search the App Store for INVT to download.

- Step 2 Open the INVT Cloud app, and click Registered.
- Step 3 Fill in the Company name, User name, Password, then confirm the password again. Enter your Mobile number, click Verification code, fill in the verification code received via SMS, and enter the invitation code. Invitation code: You can obtain it through the higher-level user account. If there is no higher-level one, you can fill in dbf20a (INVT administrator invitation code), review and check the User Privacy Agreement, click Register, and wait for review. You will receive a notification via SMS once approved.

| 14:32 🖾 | 0 8 7.50 Di Bat Mat 820 | 14:32 😫 | 10 10 1110 ED1 12m 12m 12m |
|---------------------------|-----------------------------|------------------------------------|----------------------------|
| ⊕ English v | | < | |
| Hello! | | Registered | |
| Welcome to INVT IOT | Cloud Platform | *Company name Please | enter |
| Account Please enter m | obile phone number | *User name Please enter | |
| Password Please enter | password | *Password Please enter | |
| Verify Code Please ente | Gelg | *Confirm password Plea | se enter |
| Registered | ☆ Forget password? | *E-mail Please enter | |
| Sign | in | *Verify Code Please ente | er Get code |
| I have read and agree Use | r Agreement, Privacy Policy | Invite code Please enter | |
| | | Register | now |
| | | I have read and agree Us Policy | er Agreement, Privacy |

3.2 VPN pass-through configuration

Note: VPN pass-through is only used in China.

- Step 1 Open and run the host controller software iWoStudio.
- Step 2 Click Configure tool in the menu, then click VPN transmission.



Step 3 Enter the user name and password to log in.

| it IWOstudio ^{3.0} | Networking settings | Configure tool | Local settings | | Θ | 0 | \$ - | × |
|-----------------------------|---------------------|----------------|----------------|-------------------|---|---|---------|---|
| 💽 Back | | | | | | | | |
| | IWOs | tudio · | Log in | | | | | |
| | ~ [| | | User | | | | |
| | | | | Password | | | | |
| | - A- | | | Remember password | | | | |
| | | | | taga | | | | |

Step 4 Select or search for the module ID of the adapter that requires VPN pass-through.

| ling the drive Restart the module 1 | neip | |
|---|---|-----|
| Communication settings | ~ • Log | |
| Module ID: C | Internet status: @ comme VPN status: Office | |
| BELEUMIXXXX UMTEST3 | | |
| Local Computer IP: ① | | 8.0 |
| 192 • 168 • 1 • 3 | [2025-06-20,09:43:55:131]Module disconnected VPN connection | |
| Server Node : | | |
| WeLink(South China 2) | | |
| Connect VPN | | |
| Device IP: | | |
| 192 · 168 · 1 · 10 | | |
| Gateway IP: | | |
| 192 · 168 · 1 · 1 | | |
| Device IP equal gateway Sector Setting | | |
| | | |
| | | |

Step 5 After the module ID is selected, the information of the module (including module ID and device VPN online state) will be displayed automatically. If the VPN status is Offline, the current module does not use the VFD pass-through function. If the VPN status is Online, the current module is performing pass-through and cannot be connected.

| Communication settings | | |
|---|--|------|
| Module ID: | Internet status: @ Online VPN status: Office | |
| 8616UM0003 UMTEST3 | | |
| Local Computer IP: (| 0 | 8 0- |
| 192 • 168 • 1 • 3 | | |
| Server Node : | | |
| WbLink(South China 2) | | |
| Connect VPN | | |
| Device IP: | | |
| 192 · 168 · 1 · 10 | | |
| Sateway IP: | | |
| 192 • 168 • 1 • 1 | | |
| Device IP equal gateway Senior Setting | | |
| | | |

Step 6 Set the local virtual IP. Note that the local IP needs to be in the same network segment with the device IP and module IP of the PLC/VFD but they cannot be the same. **Obtain IP timeout time** is null by default, and you have no need to set it. **Device IP** can be set in the module strategy file, which is consistent with IP of the VFD/PLC.

| Vpn transmission | | - | | × |
|--|---------------------|---|---|---|
| installing the drive Restart the module Help | | | | |
| Operation information Module ID: Internet status: Operation information Internet status: Operation information | VPN status: [onive] | | | |
| Local IP: 292 • 168 • 1 • 2 Convert VMM | | 8 | Đ | |
| Device IP: 192 • 168 • 1 • 10 Gateway IP: | | | | |
| 32 1.01 1 If Device IP equal potensy The local IP meets to be in the device IP and | | | | |
| Setting | | | | |

Step 7 After the settings are complete, click **Connect VPN**. The connection process will take one to two minutes.



Step 8 When The configuration is complete, and VFD pass-through is performing is displayed, it indicates that VPN channel is established successfully and VFD pass-through can be conducted. To exit the VPN passthrough, click **Disconnect VPN**.

| Vpn transmission | | - | | × |
|---|--|---|----|---|
| Installing the drive Restart the modul | Help | | | |
| Communication settings | | | | |
| Module ID: O | Internet status: O Chiline VPN status: Transmitting | | | |
| 8616LIM0003 LIMTEST3 V | | | | |
| Local Computer IP: | | ŧ | G+ | |
| 192 · 168 · 1 · 3 | (2025-06-20,09:40:56:344)Configuring VPN (2025-06-20,09:40:56:941)Hest III:121,15,209,218 | | | |
| Server Node : | [2025-06-20,09:41:02:125]Module is connecting to VPN | | | |
| WoLink(South China 2) | (2025-06-20,09:41:02:131)VPN Host location : China (2025-06-20,09:41:02:131)Try 1 to connect to VPN Server | | | |
| Disconnect VPN | [2025-69-20,099.11.08:020/Juscoissilly connected to VPM server [2025-69:00,099.11.02:027/html an levelow for ad adapter obtained successfully: 本地连接 [2025-66:20,099.11.10:243]The information is verified correctly, and the virtual NiC configuration begins! [2025-66:20,099.11.2174]bit routes | | | |
| Device IP: | [2023-04-20,0994128459]Woldule VPN connection status vprstatus? [2025-06-20,0994128458]Getting IP, please wait [2025-06-20,0994127:0310/Hodule VPN connection status venStatus:3 | | | |
| 192 • 168 • 1 • 10 | (2025-06-20,09:41:27:038)After configuration, VPN transparent transmission is in progress | | | |
| Gateway IP: | | | | |
| 192 • 168 • 1 • 1 | | | | |
| Device IP equal gateway Senior Serting | | | | |
| | I | | | |
| | | | | |

Step 9 Open the VFD/PLC upper computer, and operate the commissioning device as same as the local.

3.3 Virtual serial port pass-through configuration

- Step 1 Run the host controller software IWOstudio.
- Step 2 Click Configure tool in the menu, and click Serial port transmission.



Step 3 Enter the account and password to log in.

| ● box IWOstudio - Log in | r TWOstudio ^{3.0} Networking settings Configure tool Local settings | |
|--------------------------|--|--|
| IWOstudio - Log in | € Back | |
| | IWOstudio - Log in | |
| | | |
| | | |
| | | |

Step 4 After logging in, enter the main interface of the software, and select the ID of the module that needs to be connected to the upgraded PLC. Click **Start Transmission**, click **OK** in the pop-up window, and remember the serial port number at this time.

| Communication set | 1182J | ransmission security | | | |
|--------------------|-------|---------------------------|---|---|---|
| Serial port num: | 0 | Adapter ID : | Lafore closing the polyage plagate the transmission! | | |
| COM5 | | i22A093277 F06227056303 V | erure clusing une surmane, prease surp vansmission | | |
| Serial port state: | | Internet status: | | Ē | ₽ |
| Opened | | Online | [2024-08-05,16:54:57:561]Log: Openning com [2024-08-05.16:55:00:159]Log: Open serial port COM5 successfully! | | |
| Baud rate: | | Transmission state: | | | |
| 19200 | | O Disconnected | | | |
| Parity bit: | | | | | |
| Even parity | | | | | |
| Data bit: | | | | | |
| 8 | | | | | |
| Stop bit: | | | | | |
| | | | | | |

| 187 IWOstudio ^{3,0} | Networking settings | Configure | tool Local settings | | 😫 comm_instmaster | С | ۲ | - | □ × |
|------------------------------|--|-----------------|--|-----------|--|---|---|---|-----|
| Virtu | al serial port transmission | | | | | - | | × | |
| insta | alling the drive Del Com Ro | estart the mode | ale Switch MQTT server Help | | | | | | |
| | Communication settings | | Transmission Setting | | | | | | |
| | Serial port num: | © | Adapter ID: | | | | | | |
| | COMS | | | | THE, prease stop transmission | | | | |
| | Serial port state: Opened Baud rate: | | Switch servers Are you sure to start transmission | 2 | Leg: Openning com Leg: Open serial port COMS successfully | Ð | Ð | | |
| | 19200 | | | Cancel DK | | | | | |
| | Parity bit: | | | | | | | | |
| | Even parity | | | | | | | | |
| | Data bit: | | | | | | | | |
| | 8 | | | | | | | | |
| | Stop bit: | | | | | | | | |
| | 1 | | | | | | | | |
| | | | | | | | | | |
| | | _ | | | | | | | |
| | Cose smalport | | | | | | | | |
| | | | | | | | | | |

When the message **Transmission status disconnected** changes to **Transmission status connected**, it indicates that the transmission channel has been established and the next operation can be carried out.

| Communication setting | lgs | Transmission Setting | ✓ Log | |
|-----------------------|-----|---------------------------|---|----|
| Serial port num: | 0 | Adapter ID : | | |
| COM5 | | 16Y50033CS F06227066303 V | before closing the solution, prease stop transmission | |
| Serial port state: | | Internet status: | B | €÷ |
| Opened | | Online | [2024-08-07,17:41:30:816]Log: Openning com [2024-08-07,17:41:33:494]Log: Open serial port COMS successfully] | |
| Baud rate: | | Transmission state: | [2024-08-07,17:41:36:005]Log: Switching the pass-through server, please | |
| 19200 | | Onnected | [2024-08-07,17:41:56:144]Log: Module launch | |
| Parity bit: | | | | |
| Even parity | | | | |
| Data bit: | | | | |
| 8 | | | | |
| Stop bit: | | | | |
| 1 | | | | |
| | | | | |

Step 5 Open the PLC host controller software (using Auto Station as an example) to enter the main interface, and choose Tool > PLC Communication > Connect. A communication configuration window pops up.

| · 이제 · 이미 · 이제 · 이제 · 이제 · 이제 · · · · · · · · · · | |
|--|----------------------|
| View Rut Topi Help | |
| □ □ + + Introdice Ward. [1 + 0 + 0 0 0 0 = 1 → h. | |
| Manager Oxeck Power Supply Capacity | Detruction Tree 1 |
| Marcella Contraction of the Cont | (Per) (Per) (Per) |
| RC Comming data | |
| GPRS Communication Discovery | |
| Upgrade firmuse | |
| Described (PGA | |
| Option_ | |
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Step 6 In the Communication Config window, choose Modbus protocol, and click Modbus setting. In the Modbus Protocol window that displays, select the serial port number +1 for serial port of connecting the PC to the PLC (for example, if the serial port of the virtual pass-through tool is set to COM5, then the serial port number for connection is set to COM6); set the serial port communication parameters according to the PLC; and click **OK** to complete the settings.

| Communication Config | Modbus Protocol |
|---|--|
| Communication protocol configuration | Connection: Serial Default Value PC serial port setting |
| Program port protocol Program port setting | Serial port for connection Baud rate 19200 |
| Modbus protocol Modbus setting | Data bit 8 COM17 |
| Important notes: This setting aims at the PC serial port. To set PLC serial port to Modbus, you need to use the System Block and download to the PLC. | PLC station no. 1 Tensout time of the main mode 2000 1 ms Retry times 3 1 |
| OK Cancel | Cancel |

Step 7 Perform program upload, download, running, stop, and other debugging operations as if you were on site.

3.4 FAQs

1. After powering on, the power indicator does not flash or light up.

Answer: Check whether the power supply voltage polarity is reversed, and whether the input voltage 24V and GND are in consistent with the silkprint on the casing.

When 4G network is used, the network status indicator keeps flashing slowly, and the status offline is displayed on the web page.

Answer:

- The SIM card is not installed properly. Power off and re-install it for a good connection.
- 2) Move the 4G antenna to a place with good signal.
- 3) Ensure that the SIM card is activated and has remaining balance.
- 3. Data uploading doesn't match the web page display.

Answer:

- 1) Re-power on and upload all data again.
- Check whether the policy file and device type are matched, if not, please contact the manufacturer.
- The 4G network indicator and signal indicator flash normally but the web system displays no data.

Answer: Check the communication cable between the Modbus terminal device and IoT

transmission terminal is well connected.

In the web system, only data content can be displayed, and commands cannot be issued.

Answer: Check that the signal enabling switch of the Modbus terminal device is turned on.

When VPN pass-through is enabled, the device IP displayed by the VPN pass-through tool does not match the actual device IP.

Answer: The device IP displayed by the VPN pass-through tool is MSIP set in the IoT module strategy file. When the device IP displayed by the VPN pass-through tool is inconsistent with the actual device IP, you can modify the MSIP in the strategy file to keep consistent with the actual device IP.

7. Enter the VPN pass-through, and programs cannot be downloaded remotely.

Answer:

- VPN pass-through is only applicable to devices whose programs are downloaded through network ports. For devices whose programs are downloaded through serial ports, you need to use virtual serial port pass-through.
- Ensure that the laptop computer has only one networking method. If there are other networks, disable other network cards and disconnect VPN pass-through, then enter VPN pass-through again.
- Ensure that the actual IP of remote device is in the same network segment with LAN port gateway of the module.
- 8. Downloading programs remotely through virtual serial port pass-through failed.

Answer: Increase the main mode timeout time when setting the host controller communication. It is recommended to be no less than 8000ms.



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The products are owned by Shenzhen INVT Electric Co., Ltd. Two companies are commissioned to manufacture: (For product code, refer to the 2nd/3rd place of S/N on the name plate.) Shenzhen INVT Electric Co., Ltd. (origin code: 01) INVT Power Electronics (Suzhou) Co., Ltd. (origin code: 06) Address: INVT Guangming Technology Building, Songbai Road, Address: No. 1 Kunlun Mountain Road, Science & Technology Matian, Guangming District, Shenzhen, China Town, Gaoxin District, Suzhou, Jiangsu, China Industrial Automation: HMI PLC VFD Servo System Elevator Intelligent Control System Rail Transit Traction System UPS DCIM Solar Inverter SVG Energy & Power: New Energy Vehicle Powertrain System New Energy Vehicle Charging System New Energy Vehicle Motor

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