

InGateway502 Quick Start Manual

This document is used to explain the basic configuration operations of InGateway502 (IG502 for short) networking, software version update, etc., so that users can master the basic configuration of IG502 and the use of common functions.

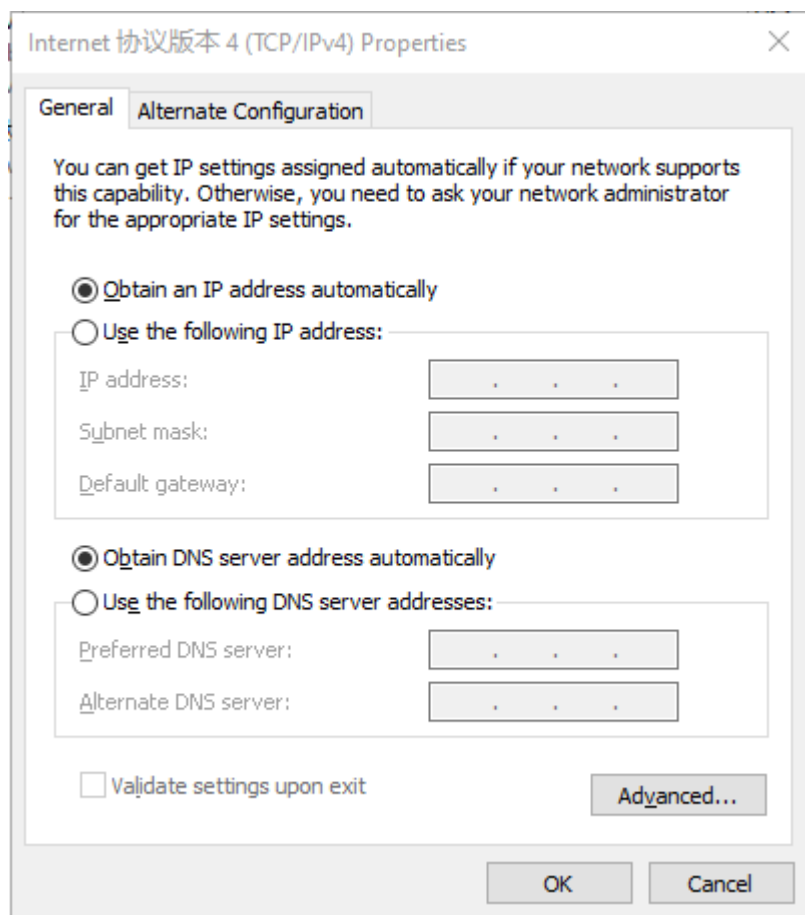
- [1. Configure IG502 Network Parameters](#)
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1. Configure IG502 Network Parameters

1.1 Access the IG502

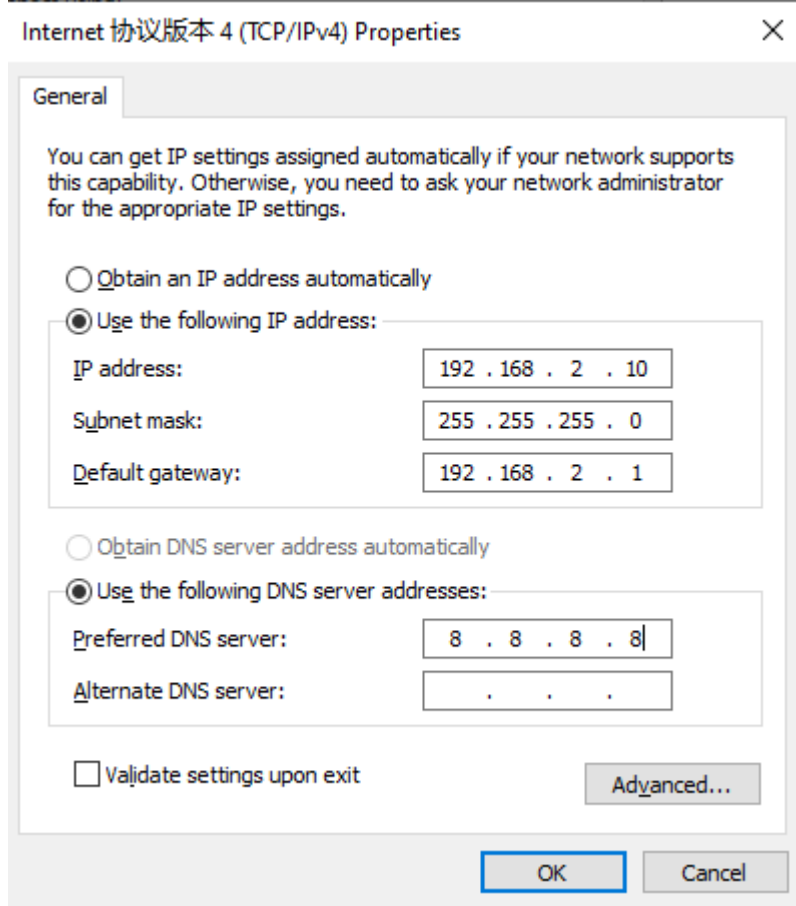
- Step 1: By default, the IP address of WAN on IG502 is 192.168.1.1; the IP address of LAN on IG502 is 192.168.2.1. This document uses the LAN port to access the IG502 as an example. Set the PC's IP address to be on the same subnet with LAN.

- Method 1: Enable the PC to obtain an IP address automatically (recommended)

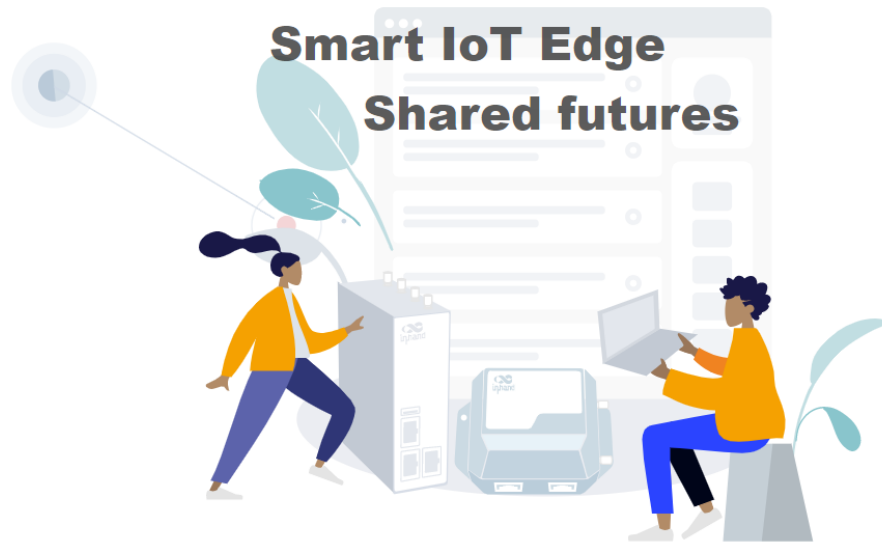


- Method 2: Set a fixed IP address

Select Use the following IP address, enter an IP address (By default, any from 192.168.2.2 to 192.168.2.254), subnet mask (By default, 255.255.255.0), default gateway (By default, 192.168.2.1), and DNS server address, and click OK.



- Step 2: Launch the browser on the PC and access the IP address of LAN. Enter the login user name and password. The default user name and password are adm and 123456 respectively.

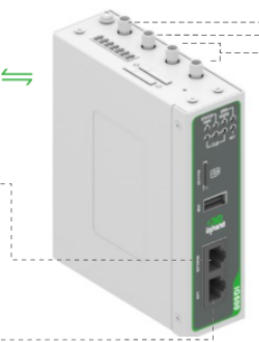


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- Step 3: After successful login, you can see the web page as shown below:

Network Connection Status

External Network	
WAN IP	10.5.23.213
Gateway	10.5.23.254
DNS	114.114.114.114
WAN Set UP	
IP Address	10.5.23.213
Netmask	255.255.255.0
DNS	114.114.114.114
LAN Set UP	
IP Address	192.168.2.1
Netmask	255.255.255.0

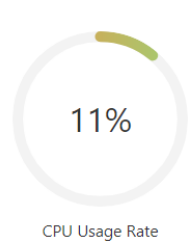


Time	
Location	
Station Role	
Wireless State	
SSID	
IP Address	
Status	Connected
Signal Level	
Register Status	Registered
Connection Time	0 Day 00:23:30
IP Address	10.95.139.155
Netmask	255.255.255.255
DNS	218.6.200.139 61.139.2.69

System Information

Name:	EdgeGateway
Model:	IG502L
Serial Number:	
MAC Address:	00:18:05:33:44:55 00:18:05:33:44:56
Firmware Version:	2.0.0.r13595
Bootloader Version:	2017.01.r13594
Device Time:	2021-01-20 20:41:07
Host Time:	2021-01-20 20:41:07
System Up Time:	8 Days 06:26:57
Python Edge Computing Engine:	Enable
Python SDK Version:	1.4.2

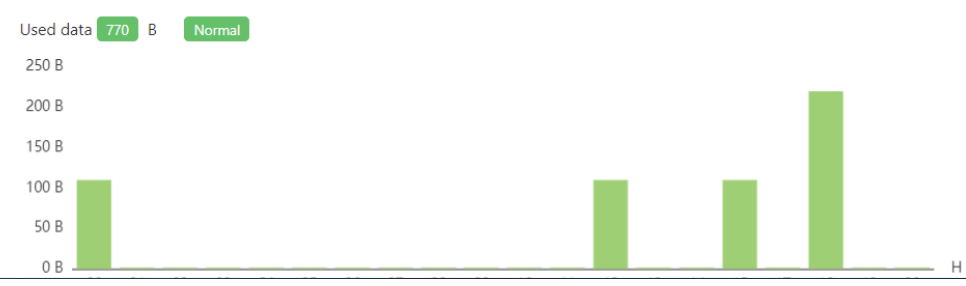
Performance And Storage



Memory 29%	Used 142MB/ 495MB
Flash 1%	Used 66MB/ 6550MB
MicroSD 0%	Used 0B/ 0B

Flow Usage Monitoring(Day)

Flow Usage Monitoring(Month)



- Step 4: To change the user name and password for logging in to the web management interface of IG502, choose System > User Management page of IG502 and set the new user name and password.

System Time

Log

Configuration Management

InHand Cloud

Firmware Upgrade



Access Tools

User Management

Reboot

Network Tools

3rd Party Notification

Username	User Permissions	Operation 
adm	15(Admin)	

- Step 5: To change the IP address of LAN, choose Network > Network Interfaces > LAN page of IG502 to configure LAN.

InHand InGateway Overview Network Edge Computing System Advanced

Overview / Network / Network Interfaces / LAN

Network Interface ^

- Cellular
- WAN
- LAN**
- Loopback
- Network Services v
- Routing v
- Firewall v

Status

IP Address: 192.168.2.1 Netmask: 255.255.255.0 MTU: 1500

Status: Up Connection Time: 8 Days 06:28:45 Description:



Configure

* Primary IP Address:

* Netmask:

Description:

Secondary IP Settings

Secondary IP	Netmask	Operation 
 No Data		

1.2 Connect IG502 to the Internet

- Method 1: Connect to the Internet by SIM card
 - Step 1: Insert the SIM card. (Note: Before inserting or removing the SIM card, unplug the power cable; otherwise, the operation may cause data loss or damage the IG502.) After inserting the SIM card, connect the 4G LTE antenna to the ANT interface and power on the IG502.



- Step 2: Choose Network > Network Interfaces > Cellular page of IG502 and select Enable Cellular and click Submit.

InGateway Overview Network Edge Computing System Advanced

Overview / Network / Network Interfaces / Cellular

Network Interface

- Cellular
- WAN
- LAN
- Loopback


Network Services

- Routing
- Firewall

Status

Modem

Active SIM: SIM 1 IMEI Code: IMSI Code:

ICCID Code: Signal Level:  Register Status: Registering

Operator: Network Type: LAC:

Cell ID:

Network




Status: Disconnect [Connect](#) IP Address: 0.0.0.0 Netmask: 0.0.0.0

Gateway: 0.0.0.0 DNS: 0.0.0.0 MTU: 1500

Connection Time:

Enable Cellular:

Profile

Index	Network Type	APN	Access Number	Auth Method	Username	Password	Operation 
1	GSM	3gnet	*99***1#	Auto	gprs	*****	 

Dual SIM Enable:

Network Type:

When the network connection status is Connected and an IP address has been allocated, the IG502 has been connected to the Internet with the SIM card.

InGateway Overview Network Edge Computing System Advanced

Overview / Network / Network Interfaces / Cellular

Network Interface

- Cellular
- WAN
- LAN
- Loopback


Network Services

Routing

Firewall

Status

Modem




Active SIM: SIM 1 IMEI Code: 868626047849230 IMSI Code: 460115272101243
 ICCID Code: 89860320040280355090 Signal Level:  Register Status: Registered
 Operator: China Telecom Network Type: 4G LAC: EA00
 Cell ID: E779B81

Network

Status: **Connected** **Disconnect** IP Address: 10.126.128.49 Netmask: 255.255.255.255
 Gateway: 1.1.1.3 DNS: 218.6.200.139 61.139.2.69 MTU: 1500
 Connection Time: 0 Day 00:00:01

Enable Cellular:

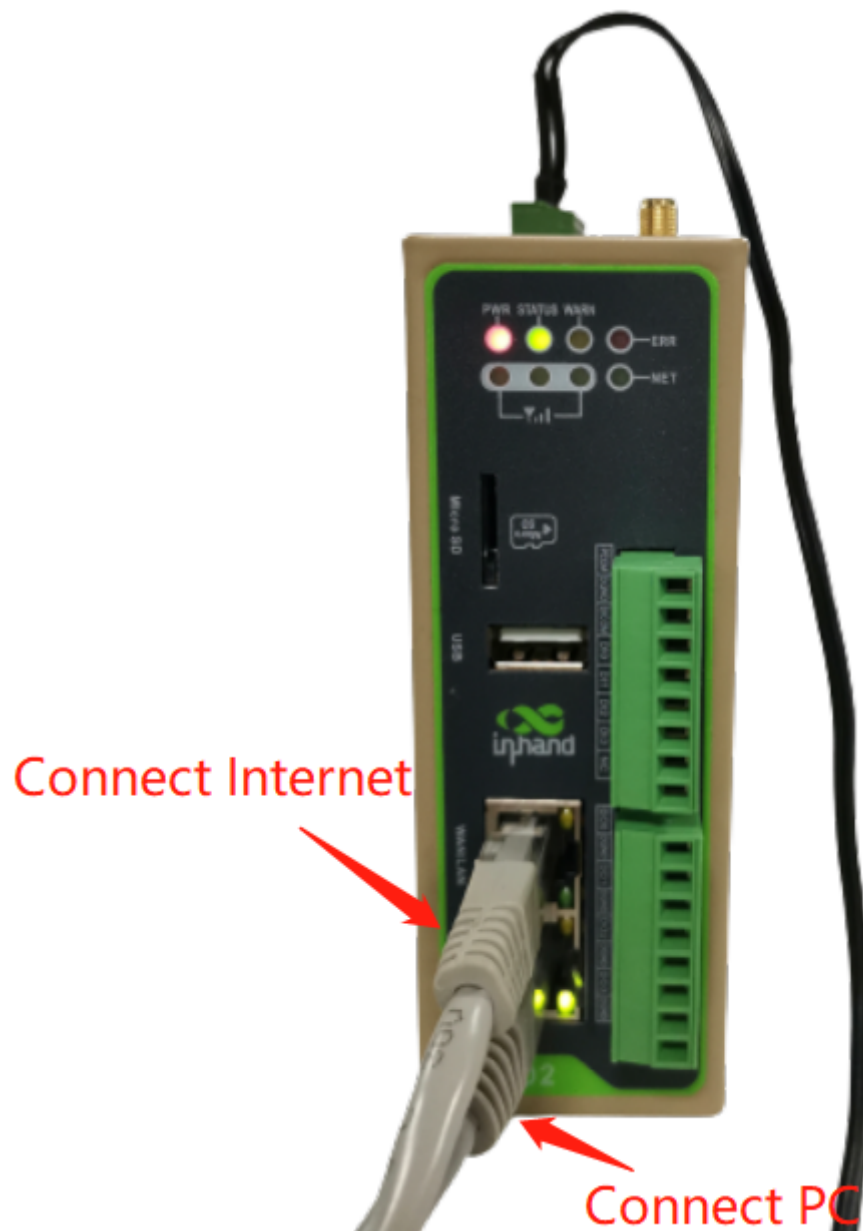
Profile

Index	Network Type	APN	Access Number	Auth Method	Username	Password	Operation 
1	GSM	3gnet	*99***1#	Auto	gprs	*****	 

Dual SIM Enable:

Network Type:

- Method 2: Connect to the Internet by Ethernet
 - Step 1: Use the Ethernet cable to connect the WAN and LAN ports of the IG502 respectively, as shown below:



- Step 2: Choose Network > Network Interface > WAN page of IG502 to configure the IP address of the WAN port and click Submit. (When the network type is a static IP address, you need to configure the IP, subnet mask, and other information according to the site network conditions.)

Network Interface ^

Cellular

WAN

LAN

Loopback

Network Services v

Routing v

Firewall v

Status

Network Type: Static IP

IP Address: 10.5.23.213

Netmask: 255.255.255.0

Gateway: 10.5.23.254

DNS: 114.114.114.114

MTU: 1500

Status: Up

Connection Time: 0 Day 01:11:03

Description:

Configure

Interface Type:

WAN LAN

* Network Type:

Static IP v

* Primary IP Address:

10.5.23.213

* Netmask:

255.255.255.0

Gateway:

10.5.23.254

DNS:

114.114.114.114

* MTU:

1500

Track L2 State:

Shutdown:

Description:

InHand InGateway

Overview / Network / Network Interfaces / WAN

Network Interface

- Cellular
- WAN**
- LAN
- Loopback

Status

Network Type: Static IP	IP Address: 10.5.23.213	Netmask: 255.255.255.0
Gateway: 10.5.23.254	DNS: 114.114.114.114	MTU: 1500
Status: Up	Connection Time: 0 Day 01:11:33	Description:

Configure

Interface Type: WAN LAN

* Network Type: Dynamic Address (DHCP) ▾

Description:

- Step 3: Choose Network > Routing > Static Routing page of IG502 to add a static route for WAN port and click Submit. (Select “WAN” for the interface item, and configure the other items according to the site network conditions.)

The screenshot shows the InGateway Network configuration interface. The top navigation bar includes Overview, Network, Edge Computing, System, and Advanced. The left sidebar lists Network Interface, Network Services, Routing, Routing Status, Static Routing (highlighted), and Firewall. The main content area displays the Static Routing configuration page with a breadcrumb trail: Overview / Network / Routing / Static Routing. A table lists existing static routes:

Destination	Netmask	Interface
0.0.0.0	0.0.0.0	Cellular 1
0.0.0.0	0.0.0.0	WAN

Below the table are 'Submit' and 'Reset' buttons. An 'Add' dialog box is open in the foreground, containing the following fields:

- * Destination: 0.0.0.0
- * Netmask: 0.0.0.0
- Interface: WAN (highlighted with a red box)
- Gateway: 10.5.23.1
- Distance: (empty)
- Track ID: (empty)

The dialog box has 'Cancel' and 'OK' buttons at the bottom right.

- Step 4: Choose System > Network Tools page of IG502 and use the Ping tool to check whether the IG502 has successfully connected to the Internet. The following figure shows that IG502 have successfully connected to the Internet:

The screenshot shows the InHand InGateway Network Tools interface. The 'Ping' section is active, with the host 'www.baidu.com' entered in the 'Host' field. A red box highlights the host field, with a red arrow pointing to it and the text 'Any public network link' above it. A 'Ping' button is visible next to the host field. Below the host field, the 'Ping Count' is set to 4 and 'Packet Size' is set to 32. A modal window titled 'Ping Probe Results' is open, displaying the following information:

```
Ping Probe Results
2021-01-21 17:57:57

PING www.baidu.com (14.215.177.38): 32 data bytes
40 bytes from 14.215.177.38: seq=0 ttl=54 time=31.900 ms
40 bytes from 14.215.177.38: seq=1 ttl=54 time=36.365 ms
40 bytes from 14.215.177.38: seq=2 ttl=54 time=31.824 ms
40 bytes from 14.215.177.38: seq=3 ttl=54 time=31.126 ms

--- www.baidu.com ping statistics ---
4 packets transmitted, 4 packets received, 0% packet loss
round-trip min/avg/max = 31.126/32.803/36.365 ms
```

A red box highlights the statistics line: '4 packets transmitted, 4 packets received, 0% packet loss'. A red arrow points to this box with the text 'Successfully connected Internet' to its right. A 'Close' button is located at the bottom right of the modal window. The background interface shows various network tools options like Traceroute, Tcpcdump, and Configuration Management.

2. Update the Software

To obtain the latest software version of IG502 and updated functions, contact the customer service center. To update the IG502 software version, do as follows.

2.1 Update the IG502 firmware.

Choose System > Firmware Upgrade. Select a firmware file and click Start Upgrading. After the update is completed, you are prompted to restart the system to Apply the new firmware.

The screenshot displays the InGateway web interface for the Firmware Upgrade section. The top navigation bar is green and contains the InGateway logo and menu items: Overview, Network, Edge Computing, System, and Advanced. The left sidebar is light green and lists various system management options, with 'Firmware Upgrade' highlighted in a darker green. The main content area shows the current firmware version as '2.0.0.r13595'. Below this, there is a 'Select Firmwares' section with two buttons: 'Select File' (a light gray button with a download icon) and 'Start Upgrading' (a green button). A red rectangular box highlights these two buttons. Underneath the buttons, a file named 'IG502-V2.0.0.r13595.bin' is listed with a file icon.

2.2 Upgrade the Python SDK of IG502.

Choose Edge Computing > Python Edge Computing. Select Python Engine, select an Python SDK file, and click Upgrade; when the upgrade confirmation window pops up, click Confirm. Then the IG502 automatically performs the upgrade.

The screenshot displays the InGateway interface for Python Edge Computing. The top navigation bar includes 'Overview', 'Network', 'Edge Computing', 'System', and 'Advanced'. The main content area is titled 'Python Edge Computing' and shows the 'Python Engine' section. A red box labeled '1' highlights the 'Python Engine' toggle switch, which is currently turned on. Another red box labeled '2' highlights the 'Upgrade' button. A modal dialog box is open in the center, asking 'Are you sure to upgrade the Python SDK?' with a red box labeled '3' highlighting the 'Confirm' button. Below the dialog, the 'APP' section is visible, showing 'App Status' and 'App List' tables, both of which are currently empty and display 'No Data'.

3. Python Edge Computing

3.1 Install and run Python App

To install and run Python App (App for short) in IG502, please refer to the following process, this document takes **Device Supervisor** as an example:

- Step 1: Install the App

Before installing the App, you need to ensure that the Python Edge Computing Engine is enabled and the Python SDK is installed, as shown in the following figure:

The screenshot displays the InGateway interface for configuring the Python Edge Computing Engine. The navigation bar includes Overview, Network, Edge Computing (selected), System, and Advanced. The left sidebar shows Python Edge Computing. The main content area is titled 'Python Engine' and features a green toggle switch for enabling the engine, which is currently turned on. Below this, the SDK Version is listed as 1.4.2 with a green 'Upgrade' button, and the Python Version is listed as Python3. An 'Enable Debug Mode' toggle is also present and is currently turned off. At the bottom of the engine configuration, it shows 'Used User Storage: 37MB/6GB 1%'. Below the engine configuration, there are two sections: 'APP' and 'APP List'. The 'APP' section shows 'App Status' with 'Entire Operation' controls (play, pause, refresh) and a table with columns: App Name, App Version, SDK Version, State, Uptime, Log, and Operation. The table is currently empty, displaying 'No Data'. The 'APP List' section also shows 'App List' and a table with columns: Enable, App Name, App Version, SDK Version, Start Parameters, Log File Size(MB), and Operation. This table is also empty, displaying 'No Data'.

Choose Edge Computing > Python Edge Computing. click the Add button and select the App package file to be installed, then click Confirm.

The screenshot shows the InGateway interface for Python Edge Computing. The top navigation bar includes Overview, Network, Edge Computing, System, and Advanced. The main content area is titled 'Python Edge Computing' and features a 'Python Engine' section with a toggle switch, an 'Upgrade' button, and details for SDK Version (1.4.2), Python Version (Python3), and Used User Storage (37MB/6GB, 1%). A modal dialog box titled 'Import the APP package' is open, showing a 'Select File' button and a file named 'device_supervisor-V1.2.7.tar.gz'. Below the dialog, the 'APP' section includes an 'App Status' table with columns for App Name, App Version, SDK Version, State, Uptime, Log, and Operation, and an 'App List' table with columns for Enable, App Name, App Version, SDK Version, Start Parameters, Log File Size(MB), and Operation. Both tables currently display 'No Data'.

After importing, you can view the imported Apps, as shown in the following figure:

InGateway Overview Network Edge Computing System Advanced adm

Overview / Edge Computing / Python Edge Computing

Python Edge Computing

Device Supervisor

Python Engine

SDK Version: 1.4.2 [Upgrade](#) Enable Debug Mode:

Python Version: Python3

Used User Storage: 64MB/6GB 1%

APP

App Status Entire Operation

App Name	App Version	SDK Version	State	Uptime	Log	Operation
No Data						

App List

Enable	App Name	App Version	SDK Version	Start Parameters	Log File Size(MB)	Operation <input type="button" value="+"/>
<input type="checkbox"/>	device_supervisor	1.2.7	1.4.0		1	<input type="button" value="🗑️"/> <input type="button" value="📄"/>

- Step 2: Run the App
Select enable App and click Submit.

Python Engine

SDK Version: 1.4.2 [Upgrade](#)

Enable Debug Mode:

Python Version: Python3

Used User Storage: 64MB/6GB 1%

APP

App Status

Entire Operation

App Name	App Version	SDK Version	State	Uptime	Log	Operation
 No Data						

App List

Enable	App Name	App Version	SDK Version	Start Parameters	Log File Size(MB)	Operation
<input checked="" type="checkbox"/>	device_supervisor	1.2.7	1.4.0		1	

After the configuration changes accepted, the APP will automatically restart!

[Submit](#) [Reset](#)

Once enabled, the App automatically runs and will run every time the IG502 is started.

Python Engine

SDK Version: 1.4.2 [Upgrade](#) Enable Debug Mode:

Python Version: Python3

Used User Storage: 64MB/6GB 1%

APP

App Status Entire Operation

App Name	App Version	SDK Version	State	Uptime	Log	Operation
device_supervisor	1.2.7	1.4.0	RUNNING	00:00:15	↓ 🗑️ 🔍	<input type="button" value="⏸"/> <input type="button" value="🔄"/>

App List

Enable	App Name	App Version	SDK Version	Start Parameters	Log File Size(MB)	Operation <input type="button" value="⊕"/>
<input checked="" type="checkbox"/>	device_supervisor	1.2.7	1.4.0		1	🗑️ 📄

[Submit](#) [Reset](#)

3.2 Update Configuration File for App

If the installed App supports importing configuration files to modify the running mode, you can update the App running configuration by referring to the following process:

- Step 1: Choose Edge Computing > Python Edge Computing, click the Import Configuration button and select the configuration file to be imported, then click Confirm.

InGateway Overview Network Edge Computing System Advanced

Python Engine

SDK Version: 1.4.2 [Upgrade](#)

Python Version: Python3

Used User Storage: 64MB/6GB 1%

APP

App Status

App Name	App Version	SDK Version	State	Uptime	Log	Operation
device_supervisor	1.2.7	1.4.0	RUNNING	00:01:44	↓ 🗑️ 🔍	⏸️ 🔄
HelloWorld	0.0.1	1.3.5	RUNNING	00:00:17	↓ 🗑️ 🔍	⏸️ 🔄

App List

Enable	App Name	App Version	SDK Version	Start Parameters	Log File Size(MB)	Operation
<input checked="" type="checkbox"/>	device_supervisor	1.2.7	1.4.0		1	🗑️ ✎
<input checked="" type="checkbox"/>	HelloWorld	0.0.1	1.3.5		1	↑ ↓ 🗑️ ✎

[Submit](#) [Reset](#)

Import Config

⚠️ After importing the configuration, please restart the app

[Select File](#)

📎 config-inhand.yaml

[Cancel](#) [Confirm](#)

- Step 2: Restart the App after the import is successful. After the App restarts, it will run according to the imported configuration file.

InGateway Overview Network Edge Computing System Advanced adm

Python Engine

SDK Version: 1.4.2 ✔ Import success Debug Mode:

Python Version: Python3

Used User Storage: 64MB/6GB 1%

APP

App Status Entire Operation

App Name	App Version	SDK Version	State	Uptime	Log	Operation
device_supervisor	1.2.7	1.4.0	RUNNING	00:02:14	<input type="button" value="↓"/> <input type="button" value="🗑️"/> <input type="button" value="🔍"/>	<input type="button" value="⏸"/> <input type="button" value="↺"/>
HelloWorld	0.0.1	1.3.5	RUNNING	00:00:47	<input type="button" value="↓"/> <input type="button" value="🗑️"/> <input type="button" value="🔍"/>	<input type="button" value="⏸"/> ↺

App List

Enable	App Name	App Version	SDK Version	Start Parameters	Log File Size(MB)	Operation <input type="button" value="⊕"/>
<input checked="" type="checkbox"/>	device_supervisor	1.2.7	1.4.0		1	<input type="button" value="🗑️"/> <input type="button" value="📄"/>
<input checked="" type="checkbox"/>	HelloWorld	0.0.1	1.3.5		1	<input type="button" value="↓"/> <input type="button" value="↓"/> <input type="button" value="🗑️"/> <input type="button" value="📄"/>

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3.3 Update Python App version

Generally, if you need to update the Python App version, you only need to import the new version of the App on the Edge Computing > Python Edge Computing page.

InHand InGateway Overview Network Edge Computing System Advanced adm

Overview / Edge Computing / Python Edge Computing

Python Engine

SDK Version: 1.4.2 Upgrade

Python Version: Python3

Used User Storage: 64MB/6GB 1%

Import the APP package

Select File

device_supervisor-V1.2.8.tar.gz

Cancel Confirm

APP

App Status Entire Operation

App Name	App Version	SDK Version	State	Uptime	Log	Operation
device_supervisor	1.2.7	1.4.0	RUNNING	00:02:59		

App List

Enable	App Name	App Version	SDK Version	Start Parameters	Log File Size(MB)	Operation
<input checked="" type="checkbox"/>	device_supervisor	1.2.7	1.4.0		1	+

Submit Reset

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After the update is completed, as shown below:

Python Engine

SDK Version: 1.4.2 Upgrade Enable Debug Mode:

Python Version: Python3

Used User Storage: 69MB/6GB 1%

APP

App Status Entire Operation

App Name	App Version	SDK Version	State	Uptime	Log	Operation
device_supervisor	1.2.8	1.4.0	RUNNING	00:00:15		

App List

Enable	App Name	App Version	SDK Version	Start Parameters	Log File Size(MB)	Operation
<input checked="" type="checkbox"/>	device_supervisor	1.2.8	1.4.0		1	

Submit Reset

3.4 Enable the Debug Mode

To run and debug Python code on IG502, you need to enable IG502's debug mode. Choose Edge Computing > Python Edge Computing, select Enable Debug Mode. After enabling, you can develop IG502 through VS Code. How to use VS Code for Python development of IG502, please refer to [Quick Start for MobiusPi Python Development](#).

InHand InGateway Overview Network Edge Computing System Advanced

Overview / Edge Computing / Python Edge Computing

Python Edge Computing

Device Supervisor

Python Engine

SDK Version: 1.4.2 [Upgrade](#) Enable Debug Mode:

Python Version: Python3 Username: pyuser

Used User Storage: 69MB/6GB 1% Password: #UJ2bZaVlw_F

APP

App Status Entire Operation

App Name	App Version	SDK Version	State	Uptime	Log	Operation
device_supervisor	1.2.8	1.4.0	RUNNING	00:00:50	↓ 🗑 🔍	<input type="button" value="⏸"/> <input type="button" value="↺"/>

App List

Enable	App Name	App Version	SDK Version	Start Parameters	Log File Size(MB)	Operation <input type="button" value="⊕"/>
<input checked="" type="checkbox"/>	device_supervisor	1.2.8	1.4.0		1	🗑 📄

After the debugging mode is enabled, IG502 will start an SSH server to listen on port 222 of LAN (default IP address being 192.168.2.1). The user name and password of the SSH server are displayed on the previous web page. A random password is generated every time the debugging mode is enabled or the IG502 is restarted to ensure security.

4. InHand Cloud

The InHand Cloud developed by InHand supports functions such as monitoring IG502 status, remote maintenance of equipment, remote batch delivery of IG502 configuration, and IG502 batch upgrade, helping users to conveniently and efficiently manage IG502 and field devices. In order to enable the InHand Cloud to remotely manage the IG502 and field devices, the IG502 needs to be connected to the cloud platform. The

connection method is as follows: Choose System Management > InHand Cloud, tick Enable InHand Cloud and configure the corresponding server address and registered account, and click Submit after the configuration is complete. The **InHand Connect Service** platform mainly provides users with remote maintenance channels, and the **InHand Device Manager** platform mainly provides users with gateway management services (such as batch remote upgrades, etc.).

- Server address: the address of the InHand Cloud.
- Registered account: the InHand Cloud account associated with the IG502 device (if you have not registered an account, you need to register an account first)
- Advanced settings: Contains configurations such as heartbeat interval. Generally, you can use the default configuration.

System Time

Log

Configuration Management

InHand Cloud

Firmware Upgrade

Access Tools

User Management

Reboot

Network Tools

3rd Party Notification

InHand Connect Service

InHand Device Manager

Status:

State Description:

Enable:



* Server Address:

iot.inhand.com.cn

[Sign Up/Login](#)

* Register Account:

zhangning@inhand.com.cn

Advanced Settings >

Submit

Reset

After the IG502 is successfully connected to the InHand Device Manager, the status is described as Connection Accepted.

[System Time](#)[Log](#)[Configuration Management](#)[InHand Cloud](#)[Firmware Upgrade](#)[Access Tools](#)[User Management](#)[Reboot](#)[Network Tools](#)[3rd Party Notification](#)[Overview](#) / [System](#) / [InHand Cloud](#)[InHand Connect Service](#)[InHand Device Manager](#)

Status: Connected

State Description: Connection Accepted

Enable:

* Server Address:

[Sign Up/Login](#)

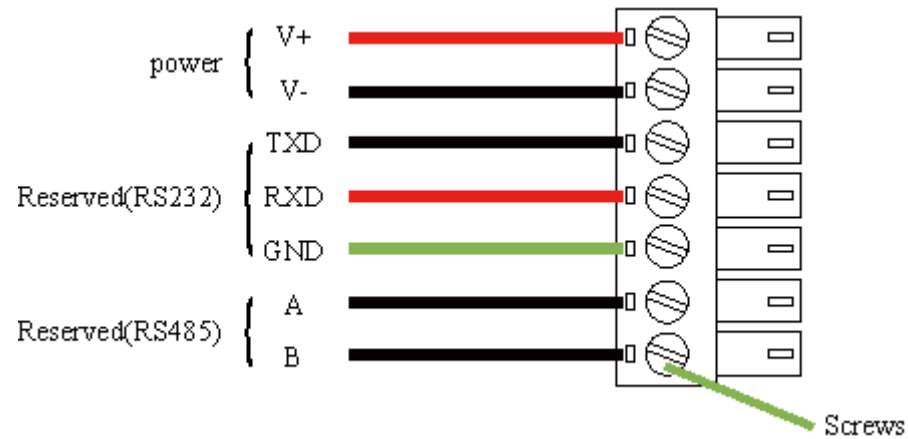
* Register Account:

[Advanced Settings >](#)

5. Data Collection And Upload To The Cloud

- Step 1: Connect PLC

Use Ethernet or serial cable to connect IG502 and PLC, the following figure describes how to connect serial port terminals of IG502:

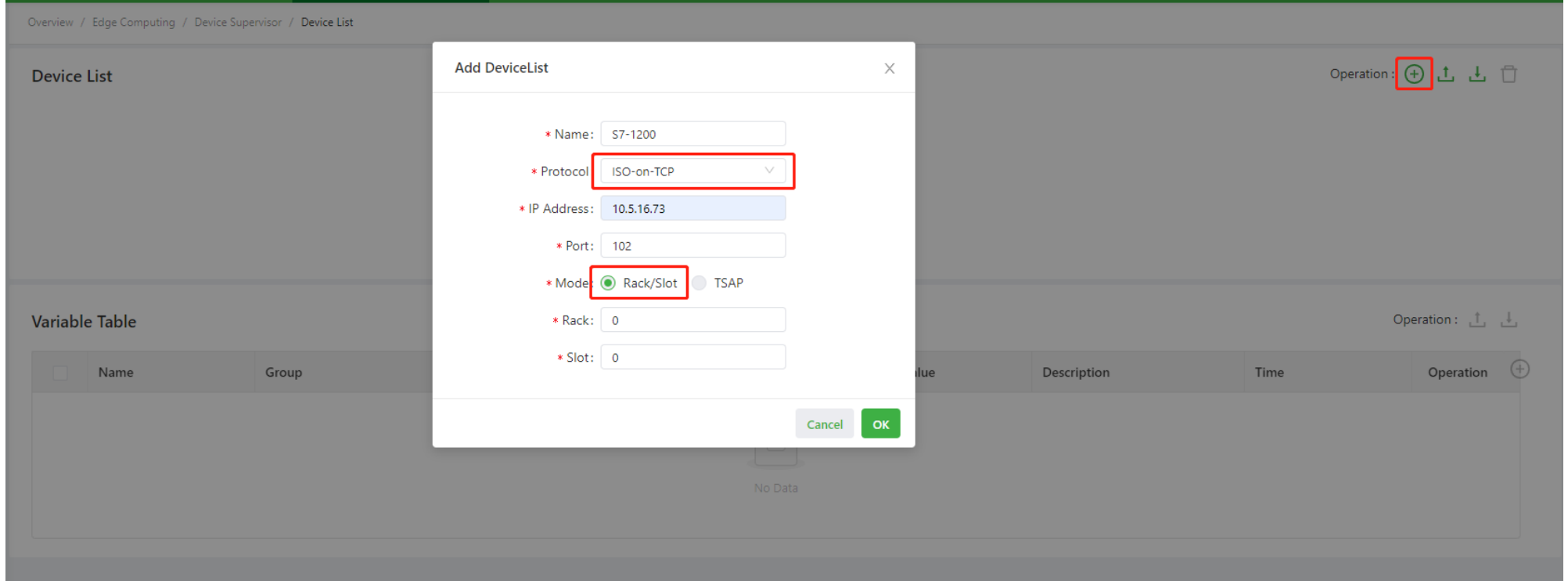


- Step 2: Install and run Device Supervisor

Please refer to [3.1 Install and Run Python App](#) for how to install and run Device Supervisor.

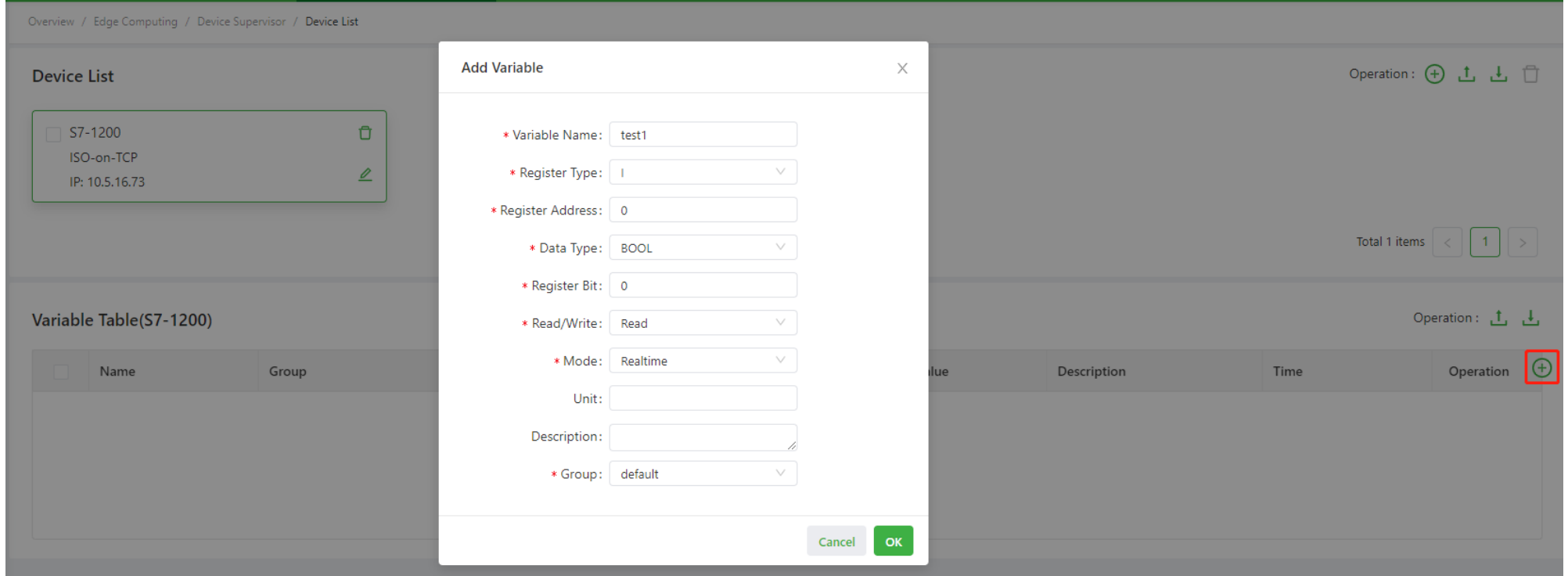
- Step 3: Add a PLC

Choose **Edge Computing > Device Supervisor > Device List**, and click **Add**. On the device adding page, select the PLC protocol and configure the PLC communication parameters. The following figure is an example of adding S7-1200 PLC:



- Step 4: Add variable

On the **Device List** page, click **Add** variable, and configure the variable parameters in the pop-up box.



- Step 5: Configure a cloud service to report and receive data

Choose Edge Computing > Device Supervisor > Cloud. Select Enable Cloud Service, configure the MQTT connection parameters and publish and subscribe messages (this document takes the configuration of publish messages as an example), and then click Submit. After the above configuration is correctly completed, the collected data can be monitored in the gateway and cloud platform.

Status

Cloud Status: Disconnect

Connection time:

Enable Cloud Service:



* Type:

MQTT



* Server Address:

demo.thingsboard.io

* Client ID:

datatest

Enable Authority:



* Username:

24

Password:



Advanced Settings

* Port:

1883

* Keep Alive:

60

s(1-3600)

* TLS Encryption:



Disable



Enable

* Clean Session:



NO



YES

* MQTT Version:



MQTTv31



MQTTv311

* Name:

* Topic:

* Qos(MQTT):

Group Type: Collect Alarm

* Group:

* Main Function:

 Matches the name of the entry function in the script

* Script:

```
1 from common.Logger import logger #Import log printing module
2
3 def upload_test(data, wizard_api): #Define the main function
4     logger.info(data) #Print the collected data in logs of
5     value_dict = {} #Define the report data dictionary value
6     for device, val_dict in data['values'].items(): #Traverse
7         for id, val in val_dict.items(): #Traverse variable
8             value_dict[id] = val["raw_data"]
9             value_dict["timestamp"] = data["timestamp"]
10    logger.info(value_dict) #Print data of the value_dict
11    return value_dict #Send value_list to the app, which th
```

Cancel

OK

Factory reset

There are two ways to restore the IG502 to factory settings: hardware factory reset and software factory reset.

- Hardware factory reset
 - Step 1: After the device is powered on and the ERR light is off, press and hold the RESET key;
 - Step 2: When the ERR light is always on, release the RESET key;
 - Step 3: After the ERR light goes out, press and hold the RESET key again, and release the RESET key when the ERR light flashes; wait for the ERR light to go out, indicating that the factory reset was successful.
- Software factory reset

Choose System Management > Configuration Management, click the reset button and select OK. IG502 will complete the factory reset operation by itself.

System Time

Log

Configuration Management

InHand Cloud

Firmware Upgrade

Access Tools

User Management

Reboot

Network Tools

3rd Party Notification

Configuration Management

Autosave
 Autosave After the Modified Configuration

Encrypted
 Encrypted Plaintext Password

Configuration Files Operations

Import Startup Config

Export Startup Config

Export Running Config Generate Key

Restore Factory Configuration