This document contains the introduction, installation, and basic configuration of InGateway974 (IG974) such as networking, software version update, etc., so that users can easily master the basic configuration of the IG974 and the use of common functions.

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1. Introduction of IG974

1.1 Overview

The InGateway974 (IG974) series is the new generation industrial-grade 5G edge computing gateway launched by InHand for the industrial IoT. The product provides high-speed, uninterrupted Internet access base on 5G network and multiple broadband services. The IG974 supports a variety of mainstream industrial protocols including Modbus TCP/RTU and can be connected to mainstream IIoT cloud platforms including AWS and Azure, ensuring on-site devices can easily log into the cloud. With strong edge computing capabilities, the IG974 provides an open edge computing platform to support data optimization, real-time response, agile connection, and intelligent analysis at the edge nodes of the IoT. Therefore, the IG974 significantly reduces the data traffic on-site and at the center, minimizes operating expenses for users, and improves cloud performance.

The Common application scenarios of IG974:



1.2 Accessories List

Each IG974 product shipped from the factory includes common accessories for customer sites (e.g. standard accessories list), after you receive our products, please check them carefully, and if you find any missing or damaged, please contact INHANTONE sales staff in time.

In addition, we can provide customers with optional accessories according to different site characteristics, please refer to the optional accessories list for details.

Item	Quality	Description						
Gateway	1	InGateway974						
Resources	1	QR code quick installation manual, user manual						
Rail-mounted Installation	1	Fixed gateway metal clips						
Accessory								
Terminal	2	2-pin power terminal and 6-pin serial port						
		terminal						
Network Cable	1	1.5m						
Antenna	4	5G Antenna						
Product Warranty Card	1	The warranty period is 1 year						
Certificate of Conformity	1	Edge Computing Gateway Certificate of						
		Conformity						

Optional Accessories

Item	Quality	Description
AC Power Cord	1	AC Power Cord-China Standard
Power adapter	1	12VDC Power adapter
Antenna	1	Wi-Fi Antenna
	1	GNSS Antenna
Serial Cable	4	Gateway serial debug cable

1.3 Panel & Dimensions

1.3.1 Panel Introduction

IG974 panel introduction is shown below (IG974 series products have a variety of panel appearance form, but the installation method is the same, the specific panel condition please subject to the physical).



1.3.2 Dimensions

The dimensions of IG974:



1.4 Panel Indicators

1.4.1 LED Indicators

PWR	SYS	WARN	ERR	NET	Description
(Power Indicator-	(Status Indicator-	(Warning	(Error Indicator-	(Network	
Red)	Green)	Indicator-Yellow)	Red)	Indicator-Green)	
Light on	Light off	Light off	Light off	Light off	Start-up
Light on	Slow Blink	Light off	Light off	Light off	Start-up
					successful
Light on	Slow Blink	Light off	Light off	Quick Blink	Dialing
Light on	Slow Blink	Light off	Light off	Light on	Dialing
					successfully
Light on	Slow Blink	Slow Blink	Slow Blink	Light off	Reset
					successfully
Light on	Slow Blink	Quick Blink	Quick Blink	Light off	Upgrading

1.4.2 Signal Status Indicators

Signal: 1-9 (The signal condition is problematic, please check whether the antenna is well installed and whether the signal condition in the area is good)



Signal: 10-19 (The signal status is normal and the device can maintain normal operation)



Signal: 20-31 (The signal is very good)



2. Installation

2.1 Install Notice

- Power requirements: 24VDC (12 to 48VDC), please note the power supply voltage level; rated current is 0.6A (1.2 to 0.3A).
- Environmental requirements: working temperature -25 °C ~ 75 °C, storage temperature -40 °C ~ 85 °C,

relative humidity 5% ~ 95% (no condensation). The surface of the equipment may be high temperature,

the installation needs to consider the surrounding environment and should be installed in a restricted area.

- Avoid direct sunlight and stay away from heat generating sources or areas with strong electromagnetic interference.
- Gateway products need to be mounted on industrial rails.
- Check the availability of cables and connectors required for installation.

2.2 Rail Mounted and Dismounted

2.2.1 Rail mounted equipment

The specific steps for installing the IG902 are as follows.

- 1. Select the installation position of the device, ensuring that there is sufficient space.
- 2. Snap the upper part of the DIN rail holder onto the DIN rail and rotate the device with slight force at the lower end of the device upwards as shown by arrow 2 to snap the DIN rail holder onto the DIN rail and confirm that the device is reliably mounted onto the DIN rail as shown in the right figure below.



2.2.2 Rail dismounted equipment

To diamount the IG902, do the following:

- 1. Press down the device as shown by arrow 1 in the figure below, so that the lower end of the device is free from the DIN rail.
- 2. Turn the device in the direction of arrow 2 and move the lower end of the device outward at the same time, then lift the device upward after the lower end is free from the DIN rail to remove the device from the DIN rail.



2.3 Wall Mounted and Dismounted

2.3.1 Wall mounted

The specific steps for installing the IG902 are as follows.

1. Select the installation location of the device and make sure there is enough space.

2. Mount the wall mounting plate on the back of the device with a screwdriver, as shown in the figure below:



3. Remove the screws (packaged with the wall mounting plate), fix the screws in the mounting position with a screwdriver, and then pull down the device to make the device in a stable state, as shown in the figure below.



2.3.2 Wall dismounted

4.

To dismount the IG902, hold the device with one hand and remove the screw at the top end of the device with the other hand to remove the device from the installation position.

2.4 SIM Card installation

IG902 supports dual SIM cards, use a screwdriver to twist off the fixing screw on the card holder cover and then install the SIM card, as shown below.



2.5 Antenna Installation

Gently turn the movable part of the metal SMAJ interface by hand until it can't be turned (at this time you can't see the external thread of the antenna connection), don't hold the black rubber sleeve and screw the antenna. As shown in the picture below.



Description:

IG902 supports dual antennas, which are ANT antenna and AUX antenna. The ANT antenna is the antenna for sending and receiving data, while the AUX antenna can only enhance the signal strength of the antenna, and cannot send and receive data independently, so it cannot be used alone.

In general, only the ANT antenna can be used, when the signal is not good enough to enhance the signal, only when using the ANT antenna at the same time use the AUX antenna.

2.6 Power Supply Installation

The specific steps for installing the IG902 power supply are as follows.

- 1. remove the terminal from the gateway.
- 2. loosen the locking screw on the terminal.
- 3. Insert the power cable into the terminal and lock the screw tightly.



2.7 Protective Ground Installation

The specific steps for installing the IG902 protective earth ground are as follows.

- 1. unscrew the grounding nut.
- 2. set the grounding ring of the cabinet ground into the grounding stud.
- 3. tighten the grounding nut.

Note: To improve the overall anti-interference ability of the gateway, the gateway must be grounded when in use, according to the use of the environment will be grounded to the gateway grounding studs.

2.8 Network Cable Connection

Connect the gateway directly to the PC using a network cable as shown in the following figure.



2.9 Terminal Connection

The terminal provides RS232/RS485 two interface modes, you need to connect the corresponding cable to the terminal before use. When installing, remove the terminal from the device, loosen the locking screw on the terminal, insert the corresponding cable into the terminal and then lock the screw tightly. The individual line sequencing is shown in the following figure.



Note: This terminal description only applies to IG902 devices with industrial interfaces.

3. IG974 Network Parameters Configuration

3.1 Access IG974

- Step 1: The default of IG974 WAN port is DHCP; the default IP address of LANX port is 192.168.2.1. This document takes accessing IG974 through LANX port as an example and sets the IP address of PC and LANX port in the same network segment.
 - Method 1: Obtain IP address automatically (recommended)

Internet	办议版本 4 (TCP/IPv4) Prop	perties			\times							
General	Alternate Configuration											
You car this cap for the	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.											
	otain an IP address automatic	cally										
	e the following IP address: –											
<u>I</u> P ad	ldress:											
Subr	et mask:											
Defa	ult gateway;		1.1									
() O	tain DNS server address aut	omatically										
OUs	e the following DNS server a	ddresses:-										
Prefe	erred DNS server:											
<u>A</u> lter	nate DNS server:											
V	alidate settings upon exit			Ad <u>v</u> ano	ced							
			ОК		Cancel							

Method 2: Use a fixed IP address

Select "Use the following IP address", enter the IP address (default is

192.168.2.2~192.168.2.254); subnet mask (default 255.255.255.0); default gateway (default 192.168.2.1) and DNS server address, click OK.

Internet 协议版本 4 (TCP/IPv4) Proper	rties	\times									
General											
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.											
O Obtain an IP address automatically											
• Use the following IP address:											
IP address:	192.168.2.10										
Subnet mask:	255 . 255 . 255 . 0										
Default gateway:	192 . 168 . 2 . 1										
Obtain DNS server address autom	natically										
• Use the following DNS server add	resses:										
Preferred DNS server:	8.8.8.8										
Alternate DNS server:											
Validate settings upon exit Ad <u>v</u> anced											
	OK Cancel										

• Step 2: Open a browser and access the IG974's LAN port IP address and enter the login username and password. The default user name/password shipped with the device is adm/123456.

← → C ▲ 不安全	https://192.168.2.1/user/login		🖈 📕 🛛 🗿
	Smart IoT Edge Enjoy The Future	Cogin	
	Copyright © 2001-2020 InHand Networks Co.	Ltd. All rights reserved.	

• Step 3: After successful login, you can see the webpage as shown below.

inphand InGateway	🕑 Overview	品 Network	Edge Computing	ඟී System	🔠 Advan				adm 🌐
Network Connection Stat	us							System Information	
	External Network				O Time			Name:	🗹 EdgeGateway
	WAN IP Gateway	10.5.23.37 10.5.23.254	-		Location			Model:	IG974
	DNS	114.114.114.114		s ,	2.4G 5G Station Role	Client		Serial Number:	GN9742226000764
	🖨 WAN	Set UP		k.	Wireless State	Disconnected		MAC Address:	00:18:05:22:35:96
	IP Address	10.5.23.37			SSID IP Address	inhand-visitor-2g 0.0.0.0		Firmware Version:	IG974-V2.0.0-beta.2
	LAN	255.255.255.0 Set UP			((A) Status	Disconnected		Bootloader Version:	2012.07.r475
	IP Address	192.168.2.1			Signal Level Register Status	Registering		Device Time : Host Time :	2023-02-10 16:32:16
	INELINASK	-			Connection Tir	ne 0 Day 00:00:00		System Up Time:	0 Day 00:25:20
			L		Netmask DNS	0.0.0.0		Python Edge Computing Engine: Python SDK Version:	Disable 1.4.5
Performance And Storage	•					Flow Usage Monitoring(Day)	Flow Usage Monito	oring(Month)	
	Memory 1	16%		Used 156.5 M	B/ 989.1 MB	Used data 0 B Normal			
12%	Flash 5%			Used 334.4	MB/ 6.2 GB				
CPILLISago Pate									
Ci o osage Kate									
				Copyright ©2001-	2022 InHand Net	works Co., Ltd. All rights reserve	ed.		

• Step 4: To change the user name and password of WEB management interface, please visit "System>>User Management" page to set a new user name and password.

inhand InGateway	🕐 Overview	료 Network	Edge Computing		器 Advanced	adm	
System Time	Overview / System	/ User Management					
Log	Username	U	ser Permissions	Op	eration 🕂		
Configuration Management	adm	1	5(Admin)				
InHand Cloud							
Firmware Upgrade							
Access Tools							
User Management							
Reboot							
Network Tools							
3rd Party Notification		Cop	yright ©2001-2022 InHand Netv	vorks Co., Ltd. All ı	ights reserved.		

• Step 5: To modify the IP address of the LANX port, please visit the "Network>>Network Interface>>LAN" page.

infinand InGateway	② Overview 格 Netv	vork 🐵 Edge Computin	ng ll System		adm 🌐						
	Overview / Network / Network In	Overview / Network / Network Interfaces / LAN									
Network Interface	Status										
Cellular	IP Address: 192.168.2.1		Netmask: 255.255.255.0	MTU: 1500							
LAN	Status: Up		Connection Time: 0 Day 00:37:07	Description:							
WAN											
	Configure										
WLAN	* Primary IP Address:	192.168.2.1									
Loopback	* Netmask :	255.255.255.0									
Network Services 🗸	Description:										
Pouting	Secondary IP Settings	Madaraada									
Nouting	Secondary IP	Netmask	Operation U								
Firewall ~											
VPN ~		No Data									
	Submit Reset										

3.2 Connect to the Internet

- Method 1: Internet connection using SIM card dial-up (to be changed)
 - Step 2: Insert the SIM card into the card slot (Note: When inserting or removing the SIM card operation, the power must be unplugged to avoid data loss or device damage). Insert the SIM card and connect the 5G antenna to the ANTX port and power on the IG974.



Step 2: Go to "Network>>Network Interface>>Cellular" page of IG974, check
 "Enable Cellular Network" and click Submit.

inprand InGateway	🕐 Overview	品 Network	Edge Comput	ing 🔅 Syst	tem 🗄	Advanced					adm	۲
Network Interface	Enable Cellul	lar: 🗸										
	Profile											
Cellular	Index Ne	etwork Type APN	Access Number	Auth Method	Username	Password	Operation					
LAN	1 GS	iM 3gnet	*99***1#	Auto	gprs	*****	ß					
WAN	Network	Type: Aut	0									
WLAN	Profile:	Aut	0									
Loopback	Roaming	g: 🔨										
	PIN code	e:										
Network Services 👻	Static IP:	:										
	* Redial I	Interval:	10 sec(0-3600)									
Routing ¥												
Firewall ~	ICMP Probes	>										
VPN ~	Advanced Set	tings >										
	Submit	Reset										

When the network connection status shows "Connected" and the corresponding IP address is assigned, the IG974 is connected to the network via SIM card.

inhand InGateway	e) Overview	₩ 🖁 Neti	work	Edge Computi	ng 🏟 Sys	tem 🔠	Advanced				adm 🌐		
Network Interface	•	verview / Ne	twork / Network Ir	iterfaces / 0	Cellular									
Network interface	s	Status												
Cellular		Modem												
LAN		IMEI Code: 860965065414149 IMSI Code: 460018280526515 ICCID Code: 89860122801349158472												
		Signal L	evel: all			Regis	ter Status: Regi	stered			Operator: China Unicom			
WAN		Network	Type: 4G			LAC:	EA00				Cell ID: E779B81			
WLAN	•	Network												
		Status:	Connected			IP Ad	IP Address: 10.80.109.163				Netmask: 255.255.255.255			
Loopback		Gateway	/: 1.1.1.3			DNS:	119.7.7.7 119.6	.6.6			MTU: 1500			
Network Services	-	Connect	ion Time: 0 Day	00:04:02										
Posting	E	nable Ce	llular: 🗸	D										
Routing	P	Profile												
Firewall	~													
		Index	Network Type	APN	Access Number	Auth Method	Username	Password	Operation 🕀					
VPN	~	1	GSM	3gnet	*99***1#	Auto	gprs		ß					
		Network Type: Auto V												
		Profi	le:	Auto										

• Method 2: Connect to the Internet via Ethernet

■ Step 1: Connect the WAN and LAN ports of the IG974 using an Ethernet cable, as follows.



Step 2: Enter the "Network>>Network Interface>>WAN" page, configure the IP address of WAN port (if the network type is static IP address, you need to configure the IP, subnet mask and other information according to the site network condition) and click Submit.

ingateway	C	Overview	요. Network	Edge Computing	û System	器 Advanced	adm 🌐
Network Interface	•	Overview / Network	x / Network Interfaces	/ WAN			
Cellular LAN		Status Connection Status Netmask: 255.25	s: Static IP 5.255.0			IP Address: 10.5.23.37 Gateway: 10.5.23.254	
WAN		DNS: 114.114.11	4.114				
WLAN		Configure					
Loopback		* Enable:					
Network Services	¥	* Network Type: * IP Address:		Static IP 10.5.23.30	×		
Routing	Ý	* Netmask : Gateway :		255.255.255.0 10.5.23.254			
Firewall	Ť	DNS:		114.114.114.114			
VPN	÷	Submit R	leset				
				Copyright ©2001-202	2 InHand Networks	Co., Ltd. All rights reserved.	
inphand InGateway	🕐 Ove	erview 6	Network	Edge Computing	g 印 幻 Syst	tem 🗄 Advanced	
Network Interface A Cellular	Overview Status Connec	v / Network / N s ction Status: St	letwork Interfaces / atic IP	WAN		IP Address: 10.5.23.37	
LAN	Netmas	sk: 255.255.255	5.0			Gateway: 0.0.0.0	
WAN	DNS: C	0.0.0.0					
WLAN	Config	gure					
Loopback	* Enable	e:					
Network Services 🗸	* Netwo	ork Type: nit Reset		Dynamic	Address (DHCP)	v	
Routing ~							
Firewall Y							
VPN ¥							
				Copyright	©2001-2022 InH	Hand Networks Co., Ltd. All rights reserved.	

Step 3: Go to the "System >>Network Tools" page of the IG974 and use the Ping command to check whether the IG974 is successfully connected to the Internet.



4. Software Version Upgrade

For the latest software version of the IG974 product and information on its functional features, please visit the Resource Center. To update the software version of IG974, please refer to the following method.

4.1 IG974 Firmware Version Upgrade

Click "System >>Firmware Upgrade", select the appropriate firmware file and click "Start Upgrade" and "Confirm". Apply the new firmware.

infrand InGateway	🕐 Overview	品 Network	Edge Computing	ি System	🗄 Advanced
System Time	Overview / System	/ Firmware 🌖 Are	you sure you want to upgrade?]	
Log	Current Version : Select Firmware :	IG974-V2.0	Start Upgrading	1	
Configuration Management	· · · ·	Ø IG974-V2.0.0.r14	1255.bin		
InHand Cloud					
Firmware Upgrade					
Access Tools					
User Management					
Reboot					
Network Tools					
3rd Party Notification					

4.2 IG974 Python SDK Version Upgrade

Enter the "Edge Computing>>Python Edge Computing" page, click "Upgrade" and select the corresponding Python SDK file; click "Confirm" when the upgrade confirmation window pops up. ", IG974 will automatically complete the upgrade operation.



4.3 IG974 Docker SDK Version Upgrade

Go to the "Edge Computing>>Docker Management" page, click Upgrade and select the corresponding Docker SDK file.

inhand InGateway	🕐 Overview 🖁 No	etwork 🐵 Edge Compu	ting 🔯 System	🗄 Advanced
Python Edge Computing	Overview / Edge Computing /	Docker Manager		
Docker Manager	Enable Docker Manager: Docker Version:	19.03.6 L Upgrade		
Device Supervisor		Ø docker-sdk-19.03.6-IG9.tar.	gz	Are you sure to upgrade docker SDK?
	Enable Portainer Manager:		Cancel Confirm	
	Vser Name: * Password :	admin	Ø	
	* Port: Submit Reset	9000		

After successful installation, check the box "Enable Portainer Manager" and click "Submit".

inprand InGateway	② Overview 器 Network ④ Edge Computing 钧 System 器 Advanced
Python Edge Computing Docker Manager	Overview / Edge Computing / Docker Manager Enable Docker Manager:
Device Supervisor	Docker Version: 19.03.6 L Upgrade Submit Reset
	Enable Portainer Manager: User Name: admin
	* Password: Ø * Port: 9000 Submit Reset
	Conviciant @2001-2022 InHand Naturarks Co. Ltd. All vients recorded
	Copyright @2001-2022 Inhand Networks Co., Ed. All rights reserved.

After enabling Portainer, you can access the administration page by clicking "Go to Portainer

management page".

infrand InGateway	② Overview 🖁 Network	Edge Computing	্টি System	Hadvanced	
Python Edge Computing	Overview / Edge Computing / Docker M	anager			
Docker Manager	Enable Docker Manager: Docker Version: 19.03.6) 」 Upgrade			
Device Supervisor	Submit Reset				
	Enable Portainer Manager: User Name: admin * Password: 1234 * Port: 9000 Go to the Portainer management pag) 15678 © 1 19			
	Submit Reset				
		Copyright ©20	01-2022 InHand Netv	works Co., Ltd. All rights reserved.	

Enter the account password set in the image above to log in to the administration page.

After successful login, select "Local" and click "Connect".

		fin fou mane to manage.		
لابني Loc ﷺ Hore Manage the local Doc	cal ker environment	Remote Manage a remote Docker environment	F Agent Connect to a Portainer agent	Connect to Microsoft Azure ACI
nformation				
Annara the Decker on	vironment where Po	rtainer is running.		
hanage the Docker en				
Ensure that you have	e started the Portain	er container with the following Docker flag:		
Ensure that you have	e started the Portain	er container with the following Docker flag: r.sock" (Linux).		
Ensure that you have v "/var/run/docker.s r	e started the Portain ock:/var/run/docke	er container with the following Docker flag: r, sock" (Linux).		

5. Python Edge Computing

5.1 Install and operate Python App

To install and run the Python App (App) in IG974, please refer to the following procedure.

• Step 1: Install the App

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

inhand InGateway	② Overview 品	Network	Edge Computing		品 Adv	vanced			
Python Edge Computing	Overview / Edge Computing	/ Python Edge C	Computing						
Docker Manager	Python Engine		D						
Device Supervisor	SDK Version: 1.4.6 Python Version: Py	thon3	rade		Python App log account Username:				
	Used User Storage:	389MB/6GB	6%		Password: 🖾 ****** 🚿 🗍				
	APP								
	App Status						Entire Op	peration (b) (1) ()	
	App Name	App Version	n SDK Version	i S1	itate	Uptime	Log	Operation	

Enter the "Edge Computing>>Python Edge Computing" page, click the Add button and select the app package file to be installed, then click OK.

infrance in Gateway	⑦ Overview 뮵	n Network	🗊 Edge Computi	ng ගි Syste	m 🗄 Ad	vanced				
Python Edge Computing	Overview / Edge Computir	ng / Python Edge Com	nputing				_			
Docker Manager Device Supervisor	Python Engine SDK Version: 1.4 Python Version: Used User Storag	.6 L Upgrad Python3 e: 389MB/6GB	1e 6%	L Se	lect File	ncel Con	firm (
	APP App Status				Entire Ope	eration (Þ) (II)	Q			
	App Name	App Version	SDK V	lersion	State	Uptime	Log	Operation		
	Ann List									
	App List	App List								
	Enable App N	lame	App Version	SDK Version	Log File Size(MB)	Start Parameters	Operation		

You can view the imported app after successful import, as shown in the following figure.

hand InGateway	🕑 Overview	品 Network	Edge Cor	mputing 🔯 Sy	stem 🔠	Advanced		
	SDK Version:	1.4.6 土 Upg	jrade		Pytho	on App log account		
on Edge Computing	Python Versio	on: Python3				Username:		
ker Manager	Used User Sto	orage: 389MB/6GB	6%			Password: 🗹 ****	** Ø 🗍	
ce Supervisor	АРР							
	App Status						Entire Op	peration 🕟 🕕 🤇
	App Name	App Versio	n	SDK Version	State	Uptime	Log	Operation
	App List							
	Enable Ap	pp Name	App Version	SDK Version	Log File Si	ze(MB) Sta	rt Parameters	Operation
	de	vice_supervisor	2.4.3	1.4.5	2			110
	Submit Res	et						
			Сор	yright ©2001-2022 InF	and Networks Co	., Ltd. All rights reser	ved.	

• Step 2: Operate App

Check the box to enable the app and click Submit.

inphand InGateway	🙆 Overview	品 Network	Edge Con	nputing 🔅 Syst	em 🗄 Ad	lvanced		
Python Edge Computing	SDK Vers Python V	ion: 1.4.6 <mark>土 Upg</mark> 'ersion: Python3	rade		Python	App log account Jsername:		
Docker Manager	Used Use	er Storage: 389MB/6GB	6%		P	Password: 🗹 *****	ø	
Device Supervisor	APP						Entire One	untion (A) (A)
	App Name	App Version	n	SDK Version	State	Uptime	Log	Operation
				No Da	ta			
	App List							
	Enable	App Name	App Version	SDK Version	Log File Size((MB) Start	Parameters	Operation 🕀
		device_supervisor	2.4.3	1.4.5	2			1 1 1 1
	() After the co	nfiguration changes accep Reset	pted, the APP will	automatically restart!				

When enabled, the app will run in IG974 and automatically after every power on.

inphand InGateway	🕐 Overview	品 Net	work 💮	Edge Computi	ing 🏟	System		dvanced			
Python Edge Computing	Python Eng	jine									
Docker Manager	SDK Ver	sion: 1.4.6	む Upgrade				Pytho	n App log acco	unt		
Davies Supervisor	Python	Version: Pythor	13			Username:					
Device Supervisor	Used Us	Used User Storage: 389MB/6GB 6% Password: 🗹 ****** 🚿 🗍									
	APP										
	App Status								Entire Ope	eration 🕟 🕕 🕻	0
	App Name		App Version	SDK Ver	rsion	State Uptime		Uptime	Log	Operation	
	device_supe	ervisor	2.4.3	1.4.5	.5 RUNNING			00:00:13	노흡 <	<u>ା</u> ೧	
	App List										
	Enable	App Name	A	pp Version	SDK Versi	ersion Log File Size		e(MB)	Start Parameters	Operation	Ð
	device_supe		visor 2.	2.4.3 1.4			2			1 1 Ō 🗹	
	Submit	Reset									
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5.2 Python App Running Configuration Upgrade

If the installed app supports importing configuration files to modify the operation mode, you can refer to the following procedure to update the running configuration of the app.

• Step 1: Enter the "Edge Computing>>Python Edge Computing" page, click the Import Config button and select the configuration file you want to import, and then click Confirm.

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Device Supervisor 🗸	Python Used U	Version: Pytho ser Storage: 38	n3 9MB/6GB	6%	<u>(</u>) A	① After importing the configuration, please restart the app 土 Select File						
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• Step 2: Restart the App after successful import, and the App will run according to the imported configuration file after the restart is completed.

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5.3 Python App Version Upgrade

To update the Python App version, please import the new version of the App from the "Edge Computing >> Python Edge Computing" page.

IG974-Quick-Start-Manual-EN.md

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After the update is completed, the following figure shows.

5.4 Enable Developer Mode

To run and debug Python code on IG974, you need to enable the developer mode of IG974. In "System>>Access Tools" page, check "Enable Developer Mode", and then you can develop on IG974 via VS Code. How to use VS Code to develop IG974 in Python, please refer to this link: <u>http://sdk.ig.inhand.com.cn/zh_CN/latest/MobiusPi-Python-QuickStart-CN.html.</u> (MobiusPi Python Development Quick Start)

inhand InGateway	② Overview 品 Networ	k 🐵 Edge Computing	鉸 System	🗄 Advanced	
System Time	Listening IP Address:	Any V			
Log	* Port: Remote Control:	23			
Configuration Management	Enable SSH:				
InHand Cloud	Listening IP Address :	Any \vee			
Firmware Upgrade	* Port: * Timeout:	22	sec(0-120)		
Access Tools	Private Key Mode:	RSA			
User Management	Private Key Length : Remote Control :	1024 V			
Reboot	Enable Developer mode:				
Network Tools	Username :	pyuser			
3rd Party Notification	Enable Fixed Password:				
	Submit Reset		yee Li		

When developer mode is enabled, the IG974 starts an SSH Server that listens to port 222 of the LAN (default IP address 192.168.2.1.). The SSH Server username and password will be displayed in the above web page. For better security, a new password will be regenerated randomly each time the developer mode is turned on or the device is rebooted.

6. Remote Monitoring Platform

The Device Cloud Platform developed by InHand supports monitoring the status of IG974, remote maintenance of devices, remote batch distribution of IG974 configurations and IG974 batch upgrades to help users manage IG974 and field devices conveniently and efficiently. In order to enable the device cloud platform to manage IG974 and field devices remotely, you need to connect IG974 to the cloud platform, and the connection method is as follows.

Enter the "System >>InHand Cloud" page, check Enable Device Cloud Platform and configure the corresponding server address and registration account, click Submit after the configuration is completed. InHand Connect Service platform mainly provides remote maintenance channel for users, and InHand Device Manager platform mainly provides gateway management services (e.g. Batch remote upgrade, etc.) for users.

- Server Address: The address of the device cloud platform
- Registered Account: The IG974 associated with the device cloud platform account (if you have not registered, please register an account first.)
- Advanced Settings: Including heartbeat interval and other configurations, generally use the default configuration.



The status of IG974 is described as "Connected" after successful connection to the device cloud platform.



7. Appendix

7.1 Restore Factory Settings

There are two ways to restore the factory settings of IG974: hardware restore factory settings and software restore factory settings.

- Hardware restore factory settings
 - Step 1: Press and hold the RESET key within 10 minutes after the device is powered on.
 - Step 2: Release the RESET key when the ERR lamp is always on.
 - Step 3: After the ERR light goes off, press and hold the RESET key again, and release the RESET key when the ERR light flashes; wait for the ERR light to go off, indicating that the factory settings are restored successfully.
- Software restore factory settings
 - Enter the "System >>Configuration Management" page, click the reset button and select OK. the IG974 will complete the operation of restoring the factory settings.



FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device , pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, installed and used in accordance with the instructions, installed and used in accordance with the instructions installed and used in accordance with the instructions of radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. RF Exposure

The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This device should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. The availability of some specific channels and/or operational frequency bands is country dependent and firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

The EUT only works at 5150~5250MHz frequencyand 5725~5850MHz frequency.

IC STATEMENT

This device complies with Industry Canada license-exempt RSS standard(s): Operation is subject to the following Two conditions:

(1) this device may not cause interference, and

(2) This device must accept any interference, including interference that may cause

undesired operation

of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareildoit accepter tout brouillage radioélectrique subi, même si le brouillage est

susceptible d'en compromettre le fonctionnement.

CAN ICES-3 (B)

Avis d'Industrie Canada

Le présent appareil est conforme aux CNR d'industrie Canada applicables aux appareils radio exem pts de licence L'exploitation est autorisée aux deux conditions suivantes:

1) l'appareil ne doit pas produire de brouillage; et

2) l'utillsateur de l'appareil doit accepterbrouillage radioélectrique subi meme si le brouillage est susceptible d'encompromettre le fonctionnement. mauvais fonctionnement de l'appareil. Cet appareil numériquie de la classe B est conforme à la norme NMB-003 du Canada.
CAN NMB-3 (B)

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.

Frequency band 5150-5250 MHz in Canada for indoor use only.

This radio transmitter IC:11594A-IG974 has been approved by Innovation, Science and Economic Development Canada to operate with the suction cup antenna , with The maximum 2.72dBi at 2412-2462MHz and 0.21dBi at 5150~5850MHz is indicated. If the gain is greater than the maximum gain, it is strictly prohibited to use the device together.