

Industrial Router IR302 Product Quick Guide

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https://support.inhandnetworks.com/portal/en/kb/articles/industrial-router-ir302-product-quick-guide

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Overview

This manual is for the installation and operation of InRouter302 series routers of InHand Networks Company. InHand makes every effort to provide accurate information in this manual, but InHand does not guarantee that there is no error in the manual. All statements, information and recommendations in this manual do not constitute any expressed or implied warranty.

Please confirm the product model and packaging accessories (power terminal, antenna). Please purchase SIM cards from local network operators.

1. Safety infomation

Before starting operating the device, please review recommendations and precautions to minimize the possibility of accidents. Safety precautions presented are supplementary and subject to the local safety regulations. When various operations are executed on the device, the user must fully follow the safety instructions and recommendations provided with the device.

1.1 General

IR302 router must be used in compliance with any and all applicable national and international laws and with any special restrictions regulating the utilization of the communication module in prescribed applications and environments.

Radio specifications				
RF technologies	2G, 3G, 4G, Wi-Fi			
Max RF power	33dBm@GSM, 24dBm@WCDMA, 23dBm@LTE, 20dBm@Wi-Fi			

1.2 RF exposure

This device meets the official requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by authorized agencies. The device must be used with a minimum separation of 20 cm from a person's body to ensure compliance with RF exposure guidelines. Failure to observe these instructions could result in your RF exposure exceeding the applicable limits.

External antennas used with IR300 must be installed to provide a distance of at least 20 cm from any people and must not be co-located or operated in conjunction with any other antenna or transmitter.

Any external antenna gain must meet RF exposure and maximum radiated output power limits of the applicable rule section.

1.3 Operating conditions

- Operating temperature: -20°C to +70°C.
- Humidity should be in the range of 5% to 95% (non-condensing).
- Only use the device in dry environments.
- Out of direct sunlight.

• Away from heat source, corrosive substances, salts, and flammable gases.

Attention: Operation outside the permissible range can considerably shorten the service life of the device.

1.4 Faulty and damaged products

- Do not attempt to disassemble the device or its accessories.
- Only qualified personnel must service or repair the device or its accessories.
- If your device or its accessories have been submerged in water punctured or subjected to a severe fall, do not use until they have been checked at an authorized service center.

1.5 Electrical safety

- Only use approved accessories.
- Do not connect with incompatible products or accessories.

1.6 Product handing

- Use of your device is subject to safety measures designed to protect users and their environment.
- Do not expose your device or its accessories to open flames, lit tobacco products, liquid, moisture, or high humidity.
- Do not drop, throw or try to bend your device or its accessories.
- Do not use harsh chemicals, cleaning solvents, or aerosols to clean the device or its accessories.
- Do not paint your device or its accessories.
- Do not attempt to disassemble your device (exemptions for devices that require disassembly for SIM insertion) or its accessories: it does not contain any user-serviceable parts. For safety reasons, the equipment should be opened only by qualified personnel.
- Make sure to use ESD personal protective equipment while the equipment is serviced.
- Do not use your device in an enclosed environment where heat dissipation is poor.
- Prolonged use in such space may cause excessive heat and raise ambient temperature, which will lead to the automatic shutdown of your device or the disconnection of the mobile network connection for your safety. To use your device again after such a shutdown, cool it in a well-ventilated place before turning it on.
- Please check all national laws and local regulations for the disposal of electronic products.
- Do not operate the device where ventilation is restricted.
- Do not use or install this product near water to avoid fire or shock hazards.
- Avoid exposing the equipment to rain or damp areas.
- Arrange power and Ethernet cables so that they are not likely to be stepped on or have items placed on them.
- Ensure that the voltage and the rated current of the power source match the device's requirements. Do not connect the device to an inappropriate power source.
- During a thunderstorm, no operations should be carried out on the device and cables.

- The unit must be powered off where blasting is in progress and explosive atmospheres are present or near medical life support equipment.
- Do not leave your device and its accessories within reach of small children or allow them to play with it. They could hurt themselves or others and could accidentally damage the device. Your device contains small parts with sharp edges that may cause an injury choking hazard.
- Like any wireless device, this device operates using radio signals, which cannot guarantee connection in all conditions. Therefore, you must never rely solely on any wireless device for emergency communications or otherwise use the device in situations where the interruption of data connectivity could lead to death, personal injury, property damage, data, or other loss.
- The device may become warm during regular use.

2. Packing list

Each IR302 product includes common accessories (such as standard accessories list), please check carefully, when you receive our products. Please contact the sales staff of InHand, if there is any missing or damage. In addition, according to different site characteristics, InHand can provide customers with optional accessories. For details,

please refer to the list of optional accessories.

Standard Accessories

Accessories	Unit	Description
IR 302	1	IR302 series industrial 4G router
Hanging ear	1	Fixed router
Power terminal	1	2-pin Green Power Terminal
Ethernet cable	1	1.5 m Ethernet cable
Antenna	1	3G /4G antenna
Product warranty card	1	Warranty period 1 year
Certificate of approval	1	IR 302 series industrial 4 G router certification

Optional accessories

Accessories	Unit	Description	
Power supply	1	VDC power adapter	
Antenna	1	Wi-Fi antenna	
Equipment slippery course	1	Fixed router	

3. Panel Introduction and Structural Size

3.1 Panel Introduction



Fig. 3-1 Equipment Panel

3.2 Structural Size



Fig. 3-2 Equipment Structure

4. Installation of Wireless Routers

Precautions for installation:

- Power requirements :12V DC (9~36V DC), please pay attention to the power voltage level; rated current is 0.2~0.22 A.
- Environmental requirements: working temperature in the range of -20°C~70°C, storage temperature in the range of -40°C~85°C, relative humidity in the range of 5% to 95% (non-condensing), equipment surface may be high temperature, installation needs to consider the surrounding environment, should be installed in the restricted area.
- Avoid direct sunlight, away from heat sources or areas with strong electromagnetic interference.
- Routers support wall hanging & Slippery course installation.
- Check for cables and connectors required for installation.

4.1 DIN-Rail Installation and Disassembly

4.1.1 DIN-Rail Installation

The steps are as follows:

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

Step 2: Tilt the equipment to the right 45°, so that the upper part of the DIN-rail seat is stuck on the DIN-rail, holding the lower end of the equipment, up slightly to rotate the equipment, the DIN-rail seat can be stuck on the DIN-rail. Verify that the equipment is fixed on DIN-ail.



Fig. 4-1-1 Slippery Course Installation

4.1.2 DIN-Rail Disassembly

The steps are as follows:

Step 1: Hold the bottom end of the equipment with one hand and the top end of the slippery course side with the other hand, push lower end of the device to leave the DIN-rail.

Step 2: Turn the equipment clockwise and lift the equipment, removed the equipment from the DIN rail.

4.2 Wall Hanging Installation and Disassembly

4.2.1 Wall Hanging Installation

The steps are as follows:

Step 1: Fix the hanging ear to both sides of the device with screws

Step 2: Fix the hanging ear to the wall with screws.



Fig. 4-2-1 Wall Hanging Installation

4.2.2 Wall Hanging Disassembly

Use one hand to hold the device and the other hand to remove the screws with screwdriver, remove device from the fixed position.

4.3 SIM Card Installation

IR302 support dual SIM card, hold down SIM pop-up button will pop up the card holder, load the SIM card.



Fig. 4-3 SIM Card Installation

4.4 Antenna Installation

Rotate the metal interface clockwise until the movable part cannot be rotated, do not hold the black glue stick to twist the antenna.



Fig. 4-4-1 Glue Stick Antenna Installation



Fig. 4-4-2 Chuck Antenna Installation

IR302 support dual antennas, ANT antenna and AUX antenna. The ANT antenna is the antenna which receives and transmits data, AUX antenna can only enhance the antenna signal degree and cannot receive and sent data, so it can't be used alone. Generally, only use ANT antenna.

4.5 Power Installation

The steps are as follows:

Step 1: Remove power terminal from router;

Step 2: Unscrew the locking screw on the power terminal;

Step 3: Insert the power cable into the terminal and lock the screws.



Fig. 4-5 Power Supply Installation

4.6 Ground Installation

The steps are as follows:

Step 1: Unscrew the ground nut;

Step 2: Put the grounding ring of the cabinet ground wire into the ground stud;

Step 3: Tighten the ground nut.

Attention: in order to improve the anti-jamming ability of the router, the router must be grounded when it is used, and the ground wire is connected to the grounding stud of the router according to the actual use environment.

5. Quick access to Internet

The device supports three ways of accessing the Internet: Wired, Cellular Dial-Up, Wi-Fi

note: when the device does not use Cellular Dial-up access, the "dial-up interface" must be disabled, otherwise the device cycle dial-up to the maximum number, it will lead to device restart, network business interruption.



Fig. 5 Disable Cellular Dial-Up

5.1 Wired to Internet

Step 1: Plug in the power cord and network cable according to the diagram, connect WAN port to the Internet, connect LAN2 port to PC.



Fig. 5-1 Ethernet Connection

Step 2: Set the PC in the same network segment as the IP address of gateway device.

Method 1: DHCP automatically get the address (Recommended).

Method 2: Use fixed IP address, set the PC and gateway in the same address segment(DHCP Server for LAN2 Port is default enabled).

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Obtain an IP address automatically		O Obtain an IP address au	tomatically
Use the following IP address:		• Use the following IP add	ress:
IP address:		IP address:	192 . 168 . 2 . 10
Subnet mask:		Subnet mask:	255 . 255 . 255 . 0
Default gateway:		Default gateway:	192 . 168 . 2 . 1
Obtain DNS server address automatic	ally	Obtain DNS server addre	ess automatically
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Validate settings upon exit	Advanced	Validate settings upon e	exit Ad <u>v</u> anced
	OK Cancel		OK Cance

Fig. 5-1-2 Dynamic acquisition/manual Configuration

PC only needs to configure the IP address to any value in: "192.168.2.2.2~192.168.2.254"

The gateway is set to: "192.168.2.1", the subnet mask is: "255.255.255.0".

The DNS is configured to "operator DNS server address".

Step 3: Input the device default address 192.168.2.1 in the browser, enter the device Web page management (If the page indicates that the page is not secure, open hidden or advanced, select continue to go)

Fig. 5-1-3 Login WEB Page Management

Step 4: Configuration WAN port, click on the navigation bar "Network >>WAN/LAN Switch" , select WAN mode to configure IP address of Wan port, so that the device can access to the Internet.. (Make sure the interface is in WAN mode, initial default LAN mode)

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Fig. 5-1-4 WAN Port Setup

Step 5: Three ways to assign address, dynamic DHCP(recommended), static address, ADSL dial (click application after configuration is completed)

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Fig. 5-1-4-a Dynamic Ip Configure of WAN

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Apply Cancel				

Fig. 5-1-4-c ADSL Dial-up of WAN

Step 6: Use the PING tool to verify your network connection.

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Host www.cicso.com Ping					
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Fig. 5-1-5 Ping Result Diagram

5.2 SIM Card Dial-Up

Step 1: Insert the SIM card into the slot 1 and Install 3G/4G LTE antenna to the ANT antenna connector, then connect the network cable and power cable, at last, power the device.

Attention: to replaced or plugged SIM Card, you must power off and restart to avoid data loss or equipment damage.

Step 2: Open the browser, login device WEB interface. (refer to 4.1 Wired to Internet >> Step1, Step2) **Step 3**: Click on the navigation bar "network >>Cellular" set dial-up access parameters, the device initial default on dial-up function, wait a few minutes to access the Internet.(if not dial-up, you can restart Cellular Service).

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				Add	
Apply Cancel					

Fig. 5-2-1 SIM Card Dial-Up

Step 4: The device supports dual card mode, when the SIM card insert card slot 2, need to enable dual SIM card function in advanced settings, private network dial parameters can be set in the dial parameter set, new click on the application, and then select at the cellular network operator.

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Network Select Type	Auto	InHand Networks Co., Ltd.
Static IP		
Connection Mode	Always Online 🗸	
Redial Interval	30 Seconds	
Show Advanced Options		
Dual SIM Enable		
Initial Commands	AT	
Binding ICCID		
PIN Code		
Dial Timeout	120 Seconds	
MTU	1500	
MRU	1500	
TX Queue Length	64	
Enable IP head compression		
Use default asyncmap		
Use Peer DNS		
Link Detection Interval	55 Seconds(0: disable)	

Fig. 5-2-2 Dialing Parameters

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Step 5: Click on the navigation bar "status >> network connection" to view the network status, showing the connected and assigned IP address and other status, indicating that the SIM card has successfully accessed the Internet.

Cellular		
Interface	Cellular 1	
Connection Type	Dial-up	
IP Address	10.103.60.136	
Netmask	255.255.255.255	
Gateway	1.1.1.3	
DNS	218.6.200.139	
MTU	1500	
Status	Connected	
Connection time	0 day,00:03:22	

Fig. 5-2-3 Dial-Up

5.3 Wi-Fi to Internet

Step 1: Wi-Fi the antenna to connect the WLAN antenna column, the network wire to the PC and insert the power supply. (Please refer to "4.1 Wired to Internet>> Step 1, Step 2" for login WEB interface)

Step 2: Set Wi-Fi two working modes: AP , STA.

Mode 1: In AP mode (initial default mode), the device acts as a wireless access point and emits the wireless signal, so that terminal devices can access the Internet through the connection to the AP. Ensure that the device has been connected to the Internet through the above wired, cellular dialing mode. You can set the SSID name and encryption authentication, and choose the terminal connection password according to your needs.



Fig. 5-3-1 SSID of AP

Mode 2: STA mode means that station, device does not have the function of Internet access, it needs to connect to the AP device to provide bridges for the terminal equipment that cannot connect to the AP, such as the PC device. **Step 3**: Click on the navigation bar "Network >>WLAN Mode Switch" to switch the working mode to the STA, then apply and restart the device as prompted.

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WLAN Type STA (Reboot to take effect)								

Fig. 5-3-2- WLAN Mode Switch

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	Confirm Reboot ?					
Logout						
	Don't display prompt message					
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Fig. 5-3-2- Reboot Device

Step 4: Click on the navigation bar "Network >>WLAN Client ", click on the scan to select the target SSID, set encryption and password.

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Fig. 5-3-4 Selected SSID

Step 5: Click on the navigation bar "Network >>WAN (STA)", set WAN port IP parameter. Three ways: dynamic address (recommended), static IP, ADSL dial.

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inhand InHand Networks	WAN(STA)	Help		Γ
• Stern Network Services Firewall QoS VPN Tools Application Status	More H	ielp	4 2020	Daiina	
Your password have security risk, please click here to change!	InHand	I Network	is Co., L	td.	
WAN(STA)					
Type Dynamic Address Shared Concetion(NAT) Default Route MCA Address MCA Address MTU Default Apply Cancel					

Fig. 5-3-5-a Dynamic Acquisition WAN (STA) Address

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inhand In	Hand Net	works							WAN(Help STA)		-
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				WAN(STA)								
Shared Connection(Default Route MAC Address IP Address Netmask Gateway MTU	NAT)	0 00.78 29 55.0 1 1500	Static Ir									
Aulti-IP Settings												
IP Address	Netmask	Description										
								Add				
Apply	Cancel											

Fig. 5-3-5- b Static IP Configuration of WAN (STA)

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	Your password have security risk, please click here to change!	InHar	d Netwo	rks Co.,	Ltd.	
	WAN(STA)					
Type Shared Connection(NAT) Default Route MAC Address MTU	ADSL Dealup (PPPOE) C C Consult local operater or relevant person for parameters					
ADSL Dialup (PPPoE) Setti Username Password Static IP Connection Mode Show Advanced Options	Igs					
Apply Cancel						

Fig. 5-3-5- c ADSL Dial Configuration of WAN (STA)

Step 6: Click on the navigation bar "Status >> Network Connection" to see the connection status, if connected and get the dynamic DHCP address, it means that the device is online.

VAN(STA)	
MAC Address	00:00:00:00:78
Connection Type	Dynamic Address (DHCP)
IP Address	10.5.20.19
Netmask	<u>255.255.255.0</u>
Gateway	<u>10.5.20.254</u>
DNS	<u>219.141.136.10</u> ,8.8.8.8
MTU	1500
Status	Connected
Connection time	0 day, 03:46:18
Remainding Lease	0 day, 04:13:42
Renew Release	

Fig. 5-4-6 Schematic diagram of wireless networking results

6. DM Cloud Management Platform

6.1 Environmental Conditions

Make sure the device has been successfully accessed Internet, click on the "Service >> Device remote management platform" of the navigation menu to set up the access of DM Cloud Platform. (Follow-up version supports user experience plan, which can automatically access Inhand Cloud Platform and enjoy efficient and convenient service)

Server address: the address of the Device Manager. The address of the Device Manager developed by InHand is as follows:

Device Manager: iot.inhandnetworks.com

inhand Networks		User Experience Plan
System Network Services Firewall QoS VPN Tools Applic	ication Status	Help Help
Your password have security risk, please click here	e to change!	
Device Manager		Nore Help
	C	opyright @2001-2023, Beijing Hand Networks Co., Ltd.
Enable		
Server iot inhandnetworks com x		
Secure Channel		
Registered Account theronluo@inhandnetworks.com Sign up/Sign in		
LBS info Upload Interval 1 Hours		
Series Info Upload Interval 1 Hours		
Channel Keepalive 30 Seconds		
Apply Cancel		

Fig. 6-1 Remote Platform Configuration

6.2 Platform Account Creation

Jump to the registration/login page through the link below for user registration. Link: https://iot.inhandnetworks.com.

.IIIIIdilulletworks.colli.		
🖷 🖅 🥨 Device Manager 🛛 🗙 🕂 🗸		- a ×
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	inband	
	Device Manager	
	innand vetworks Gateway Management Cloud	
	Email Login Phone Login	
	A Email	
	A Password #	
	Automatic Login Reset Password	
	Login	
	Registration	
	Copyright () 2018 InHand Networks v1.9.0 [20200526]	

Fig. 6-2 Account Registration/Login

6.3 Add Device to Platform

<u>Login to DM platform address https://iot.inhandnetworks.com,click on "Gateway >> Create" menu to add device.</u> Name the device and fill in the serial number, the device can be added to the cloud platform.

🖶 🖅 🛪 Gateways - Dev	ice Man \times + \vee					- o ×
$\leftarrow \rightarrow$ C \Leftrightarrow	A https://iot.inhandnetworks.com/device/list?page=1	8csize=10			□ ☆	↓ <i>L</i> & …
C Device Manager	Home Map Gateways Config	Firmware Edge Com	puting Administration		(A) mashuai	@inhan 🌐 🕜
Gateways	Home / Gateways / Gateways					
Gateways	All 0 Online 0 Offline 0 Name	Create Gateway		×	+ Create 🔯 Import 🕞 Export	🗉 Column Display
濟 Alert	Gateway Name				Firmware Version 💠 Action	
i Groups		* Gateway Name :	Gateway Name			V
Tasks		Carial Number				
G Statistics		 Senai Number: 				
				Cancel OK		
Collapse sidebar						

Fig. 6-3-1 Add Device to Platform

View Serial Number Method

Click on the navigation bar "status" to view the device sequence and other basic information, or on the back of the device to view the serial number.

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inhand InHand	d Networks	Help System					
System Network	Services Firewall QoS VPN Tools Application Status	Sync Time: synchronize					
-,	Your password have security risk, please click here to change!	router time with PC					
		More Help					
	System	Copyright @2001-2020, Beijing InHand Networks Co., Ltd.					
Name Model Serial Number Description Current Version Current Bootioader Version Router Time PC Time Up time CPU Load (1 / 5 / 15 mms) Memory consumption Total/Free	Router [R902-WLAN R130220- WWW Mhad com.on 2.3.0.15179 1.1.3.4954 2020-06-26 18-48-40 						

Fig. 6-3-2 Serial Number Query

7. Quick-Use Guidance

7.1 Restore Factory Setting

7.1.1 Web Setting

Login to the WEB page, click on the "System>> Configuration Management" menu in the navigation tree to enter the "configuration management" interface. Click the "restore factory settings" button to determine the recovery of the factory after the configuration, restart the system, restore factory success.

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inhand Networks		Config	He Manage	lp 📼 nent	
System Network Services Firewall QoS VPN Tools Application Status Your password have security risk, please click here to change!		Router 'Import configu 'Backu configu Restor	Configu t' to impo uration o ip' to bac uration o re default	ration: rt a bac f router kup cur f router	Click ckup r. Click rrent r.
Config Management Configuration	1	Restor	e default er.	configu	uration
No file selected. Browse Import Backup Restore default configuration		Networ 'Import Click 'E curren list is p vendo	rk Provid t' to impo Backup' t t ISP list provided r.	er(ISP): rt an IS o backu of route by rout	: Click SP list. up er. This ter
Disable the hardware reset button Network Provider		Disable button hardw	e the har If you d are reset	dware r isable t button,	reset the , please
No file selected. Browse Import Backup		passw lost, th recove	ord, if the le device red.	will not	vord is t be
		More He Copyrigh InHand I	Ip tt @2001-2 Vetworks C	020, Beij o., Ltd.	jing

Fig. 7-1-1 Restore Factory Settings

7.1.2 Hardware Restored

Steps:

Step 1: Find the RESET reset key on the device panel.

Step 2: Hold down the RESET key for 10 seconds.

Step 3: When you see the Status light on, release the RESET key;

Step 4: After a few seconds when the Status lights go out, then re-hold the RESET key not release;

Step 5: When you see the Status light flashing release the RESET key, indicating that the recovery factory settings are successful.

7.2 Import/Export Configuration

Login to the WEB page, click on the "System>> Configuration Management" menu in the navigation tree to enter the "configuration management" interface.

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\leftarrow \rightarrow O \Diamond 79aecafa.iot.inhand.com.cn.82/mdex.jsp	☆ ☆ & ピ …
inhand InHand Networks	Help Config Management
System Network Services Firewall QoS VPN Tools Application Status	Router Configuration: Click 'Import' to import a backup configuration of router. Click 'Backup' to backup current
Tour password have security risk, please click refe to change!	configuration of router. Restore default configuration Restore default configuration
No file selected Browse Import Backup Restore default configuration	Network Provider(ISP): Click 'Import to import an ISP list. Click 'Backup' to backup current ISP list of router. This list is provided by router vendor.
Disable the hardware reset button Network Provider No file selected Browse Beckup	Disable the hardware reset button: If you disable the hardware reset button, please take care of your login password, if the password is lost, the device will not be recovered.
	Copyright @2001-2020, Beijing InHand Networks Co., Ltd.

Fig. 7-2 Restore Factory Settings on Web

Click Browse to select the profile, and then click the Import button. After importing the configuration file, restart the system to take effect.

Click Backup to export the currently applied configuration parameter file, and the exported file is in ".dat" format, with the default file name config.dat

7.3 Log and Diagnostic Records

Log in to the Web page, click on the "Status >> Log" menu in the navigation tree to enter the "system log" interface. Click the corresponding button to complete the log and diagnostic records download.

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்டு	and Inl	Hand N	letworks		.og)isplay	H	elp n log.	
Sys	tem Net	vork Servi	ces Firewall QoS VPN Tools Application Status	N	fore He	p		
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			Modem Le Les	- "				
			Log					
		00	Irame Statistics	Â				
view	recent	20	Alarm					
	-		WIAN					
Leve	I Time	Module	Content					
info	lup 26 20-40-20	narok[4112]	Too many togs, ool togs are not otsplayed. Please download tog nile to check more togs! Network					
info	Jun 26 20:49:43	mattagent[1138]	state connecting					
info	Jun 26 20:49:56	httpd[4119]	Send out task uponts in costige (v) : exceeded for a send out task uponts in costige (v) : exceeded for a send out task uponts in costige (v) : exceeded for a send out task uponts in cost out tas					
info	Jun 26 20:49:56	httpd[4119]	adm load because of dam terrors. Because and the second administration of					
notice	e Jun 26 20:56:21	ngrok[4113]	route fable					
info	Jun 26 20:56:21	syslog	ngclient close tunnel Device List					
info	Jun 26 20:56:21	mqttagent[1138]	ngrokc exit(pid.4113).					
info	Jun 26 21:05:03	mqttagent[1138]	topic: v1/5edf39448d9f6700015e9043/lbs, payload : {"cell": {}, "timestamp": "2020-06-26T13.05:03+0(
info	Jun 26 21:05:03	mqttagent[1138]	topic: v1/5edf39448d9f6700015e9043/series, payload : [["d" "300011","value":0,"timestamp" "2020-0[Third Party Software Notices					
info	Jun 26 21:19:34	mqttagent[1138]	received notification message. (topic:v1/5ed139448d9f6700015e9043/task/notice, payload ["id":"5ef5f5e5f8/1e00001c45/35", "name":"ngrok connect", "type":23,"data". ["server":"fot.inhand.com.cn.4443", "proto":"http:"port":8					
info	Jun 26 21:19:34	mqttagent[1138]	handle ngrok notice.					
info	Jun 26 21:19:34	mqttagent[1138]	ngrok server;iot.inhand.com.cn:4443 protocol:http host:127.0.0.1 port:80, keepalive:300					
info	Jun 26 21:19:34	ngrok[4304]	remotehost 54.223.100.252 prot 4443 protocol http localhost 127 0.0.1 localport 80 regid 600881523 keepalive 300					
info	Jun 26 21:19:34	ngrok[4304]	state: Init->Config					
info	Jun 26 21:19:35	ngrok[4304]	state: Config>Connecting					
info	Jun 26 21:19:35	ngrok[4304]	state:Connecting>Connected					
info	Jun 26 21:19:39	mqttagent[1138]	send out task update message: ["id": "5ef5f5e5f871e00001c45735", "type": 23, "status"; "success", "timestamp": 1593177579, "progress": 1.0, "response": "http://79aecafa.iot.inhand.com.cn.82"]					
into	Jun 26 21:19:45	nttpd[4312]	Web auth succeeded for adm from 127.0.0.1					
into	Jun 26 21:19:45	nttpa[4312]	adm login from 127.0.0.1					
			Clear Log Download Log File Download System Diagnosing Data					
			1 Minute V Stop	\sim				

Fig. 7-3 Diagnostic Log Function

8. Description of panel indicator

8.1 Panel LED Indicator Description



Fig. 8-1 Led Indicator Description

Equipment LED Light Description Table:

1 1	0	1	
Power(red)	Status(Green)	Cellular(Wong)	Definition
Off	Off	Off	No Power
On	Off	Off	System Fault
On	On	Off	Module or SIM Card not identified

On	On	Flash	Dialing			
On	On	On	Dialing Success			
On	Flash	On	System Upgrade			
On	Flash -> On	Off	Finalized Writing -> Finalized Writing			
reset key description (both start-up and run support to restore factory): Power 1. device, press reset button immediately, hold for 10 seconds until Status is on 2. release the Reset, Status destroy						
3. immediately hold down Reset, then Status flicker, release the Reset button,						

restore factory success

Note:

	Red	Signal values 0~10
	Yellow	Signal value 11~20
Signal	Green	Signal value 21~30
T . T . T . (Not enabled	Destruction
Wi-Fi(Green)	AP	Flash
Greenj	STA	Data flash
Lamps	Driven Control	Yellow green, data flash

Contact Us

Add: 43671 Trade Center Place, Suite 100, Dulles, VA 20166 USA

E-mail: support@inhandneworks.com

T: +1 (703) 348-2988

URL: www.inhandnetworks.com