

FORANER3 configuration. (ver. 1.0)

The FORANER3 module provides connection between RUNNER8 and FORANER application over the internet. There are two ways through which you can connect:

- direct connection using public IP address or DDNS
- indirect connection via foraner.com server

In both cases, FORANER3 is in the local network which involves using router as a gateway for connection to the internet. Connection to the local network can be configured by setting the HI-LINK module which is a part of FORANER3. HI-LINK can be connected via Wi-Fi or Ethernet cable. For flawless and reliable connection, a good quality WiFi network is recommended. For longer distances from your router, please use a repeater or an Ethernet cable.

For connecting HI-LINK (as well as FORANER3) to the local network, take the following steps:

- 1, Reset Hi-LINK.
Hold the reset button for 10 seconds



- 2, On your laptop, tablet or phone, find a WiFi access point called HI_LINKxxxx where xxxx stands for last four digits of the MAC address. The MAC address can be found on your HI-LINK module's label.
- 3, Connect to the access point HI_LINKXXXX using a password: 12345678
- 4, Open up your web browser and go to 192.168.16.254. Once the HI-LINK configuration website loads up, log in using these credentials:

username: admin
password: admin

If FORANER3 has been previously connected and set up in your local network, feel free to skip steps 1-4 and connect to the IP address of FORANER3 in your local network. Once the HI-LINK configuration website loads up, log in using credentials admin/admin

Following steps depend on the type of your connection:

- | | | |
|-------------|---|------------------------------|
| A, WiFi LAN | + | direct connection to FORANER |
| B, WiFi LAN | + | connection via server |
| C Ethernet | + | direct connection to FORANER |
| D, Ethernet | + | connection via server |

A, If connecting to the local network using WiFi and you want to access FORANER through public IP address or DDNS, set the HI-LINK parameters according to the picture.

Hi-Link™ WIRELESS-N ROUTER IEEE 802.11N

NetMode: WIFI(CLIENT)-SERIAL

SSID: myNetwork Scan

Encrypt Type: WPA/WPA2 AES Wireless LAN name

Password: myPassword Wireless LAN password

IP Type: STATIC You can use DHCP

IP Address: 10.0.0.152 FORANER IP in your LAN

Subnet Mask: 255.255.255.0 FORANER IP mask in your LAN

Default Gateway: 10.0.0.138 Router IP in your LAN

Primary DNS Server: 10.0.0.138

Secondary DNS Server:

	Current	Updated
Serial Configure:	115200,8,n,1	9600,8,n,1
Serial Framing Lenh:	64	64
Serial Framing Timeout:	10 milliseconds	10 milliseconds (< 256, 0 for no timeout)
Network Mode:	server	Server
Remote Server DomainIP:	192.168.11.245	192.168.11.245
Locale/Remote Port Number:	8080	5000
Network Protocol:	tcp	TCP
Network Timeout:	0 seconds	10 seconds (< 256, 0 for no timeout)

LAN IP Address of your FORANER is 10.0.0.152:5000 now

For connection from internet you must correctly setup port forwarding on your router. Internal port is 5000 In this example.

Instructions for setting the router for DDNS may vary for each router and DDNS provider and are not included in this manual.

B, If connecting to the local network using WiFi and you want to access FORANER via foraner.com server, set the HI-LINK parameters according to the picture.

The screenshot shows a network configuration interface with the following fields and callouts:

- NetMode:** WIFI(CLIENT)-SERIAL (Callout: Wireless LAN name)
- SSID:** myNetwork (Callout: Wireless LAN name)
- Encrypt Type:** WPAWPA2 AES (Callout: Wireless LAN password)
- Password:** myPassword (Callout: Wireless LAN password)
- IP Type:** STATIC (Callout: You can use DHCP)
- IP Address:** 10.0.0.152 (Callout: FORANER IP in your LAN)
- Subnet Mask:** 255.255.255.0 (Callout: FORANER IP mask in your LAN)
- Default Gateway:** 10.0.0.138 (Callout: FORANER IP mask in your LAN)
- Primary DNS Server:** 10.0.0.138 (Callout: Router IP in your LAN)
- Secondary DNS Server:** (Empty field)

The bottom section is a table for serial configuration:

	Current	Updated
Serial Configure:	115200,8,n,1	9600,8,n,1
Serial Framing Lenth:	64	64
Serial Framing Timeout:	10 milliseconds	10 milliseconds (< 256, 0 for no timeout)
Network Mode:	server	Client
Remote Server Domain/IP:	192.168.11.245	foraner.com
Locale/Remote Port Number:	8080	5005
Network Protocol:	tcp	TCP
Network Timeout:	0 seconds	10 seconds (< 256, 0 for no)

C, If connecting to the local network using Ethernet cable and you want to access FORANER through public IP address or DDNS, set the HI-LINK parameters according to the picture.

NetMode: You can use DHCP

IP Type: FORANER IP in your LAN

IP Address: FORANER IP mask in your LAN

Subnet Mask: FORANER IP mask in your LAN

Default Gateway: Router IP in your LAN

Primary DNS Server:

Secondary DNS Server:

	Current	Updated
Serial Configure:	115200,8,n,1	<input type="text" value="9600,8,n,1"/>
Serial Framing Lenth:	64	<input type="text" value="64"/>
Serial Framing Timeout:	10 milliseconds	<input type="text" value="10"/> milliseconds (< 256, 0 for no timeout)
Network Mode:	server	<input type="text" value="Server"/>
Remote Server Domain/IP:	192.168.11.245	<input type="text" value="192.168.11.245"/>
Locale/Remote Port Number:	8080	<input type="text" value="5000"/>
Network Protocol:	tcp	<input type="text" value="TCP"/>
Network Timeout:	0 seconds	<input type="text" value="10"/> seconds (< 256, 0 for no timeout)

LAN IP Address of your FORANER is 10.0.0.152:5000 now
For connection from internet you must correctly setup port forwarding on your router.
Internal port is 5000 in this example.

D, If connecting to the local network using Ethernet cable and you want to access FORANER via foraner.com server, set the HI-LINK parameters according to the picture.

NetMode: You can use DHCP

IP Type: FORANER IP in your LAN

IP Address: FORANER IP in your LAN

Subnet Mask: FORANER IP mask in your LAN

Default Gateway: Router IP in your LAN

Primary DNS Server:

Secondary DNS Server:

	Current	Updated
Serial Configure:	115200,8,n,1	<input type="text" value="9600,8,n,1"/>
Serial Framing Length:	64	<input type="text" value="64"/>
Serial Framing Timeout:	10 milliseconds	<input type="text" value="10"/> milliseconds (< 256, 0 for no timeout)
Network Mode:	server	<input type="text" value="Client"/>
Remote Server Domain/IP:	192.168.11.245	<input type="text" value="foraner.com"/>
Locale/Remote Port Number:	8080	<input type="text" value="5005"/>
Network Protocol:	tcp	<input type="text" value="TCP"/>
Network Timeout:	0 seconds	<input type="text" value="10"/> seconds (< 256, 0 for no timeout)

Proper connection to the local network can be tested by 'ping IP_address' or opening the IP address in the browser on any computer in the local network.

Proper connection of FORANER3 to the foraner.com server can be tested by logging in to your account at www.foraner.com. In the list on the website, you will see all your devices. All currently connected FORANER3 modules are marked as „is connected“.