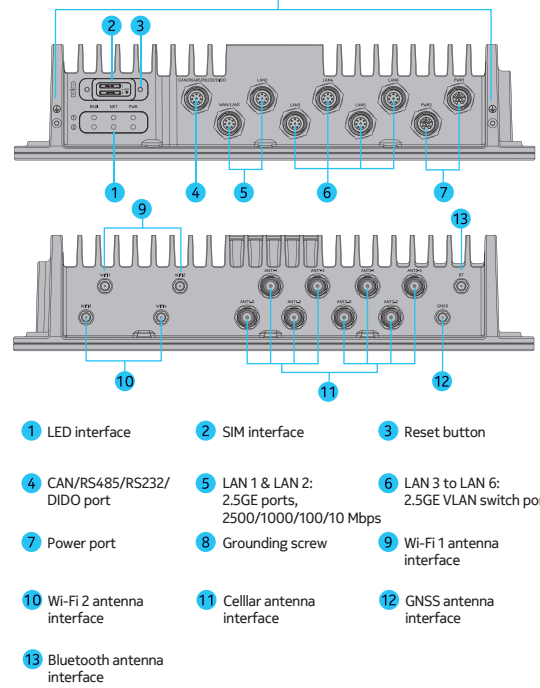




Number	Colors	CAN/RS232/RS485
1	ORANGE	RS485_A
2	YELLOW	RS485_B
3	GREEN	RS232_RX
4	BLUE	RS232_TX
5	PURPLE	RS_GND
6	GRAY	RS_GND
7	WHITE	CAN_H
8	PINK	CAN_L
9	LIGHTBLUE	DIO0_DIO1
10	RED	DIO0_DIO1
11	BROWN	DIO0_DIO2
12	BLACK	DIO0_DIO2

LAN/WAN cable definition			
	Number	Colors	LAN/WAN
 RJ45 CONNECTOR EQUIPMENT	1	Orange & White	MDIO-RJ45-1
	2	Orange	MDIO-RJ45-2
	3	Green & White	MDIO-RJ45-3
	4	Blue	MDIO-RJ45-4
	5	Blue & White	MDIO-RJ45-5
	6	Green	MDIO-RJ45-6
	7	Brown & White	MDIO-RJ45-7
	8	Brown	MDIO-RJ45-8

Power cable definition

Power Cable pin layout			
	Number	Colors	PWR
	1 & 4	Red	PWR_positive
	2 & 3	Black	PWR_GND

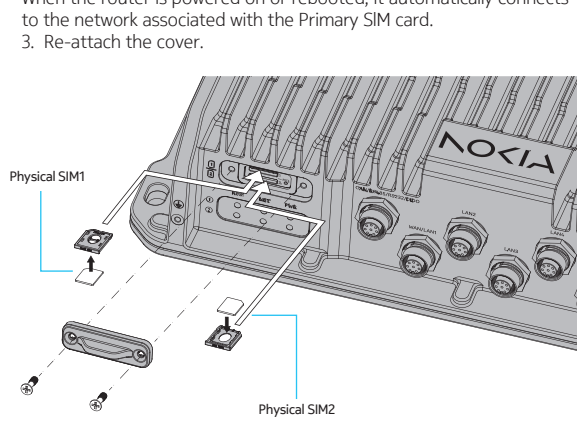
Operating temperature	-40°C ~ 70°C
Storage temperature	-40°C ~ 85°C
Humidity	5% ~ 95%
Power Supply	9 ~ 14VDC
Power Consumption	<150W
Water and Dustproof	IP67

Packing list

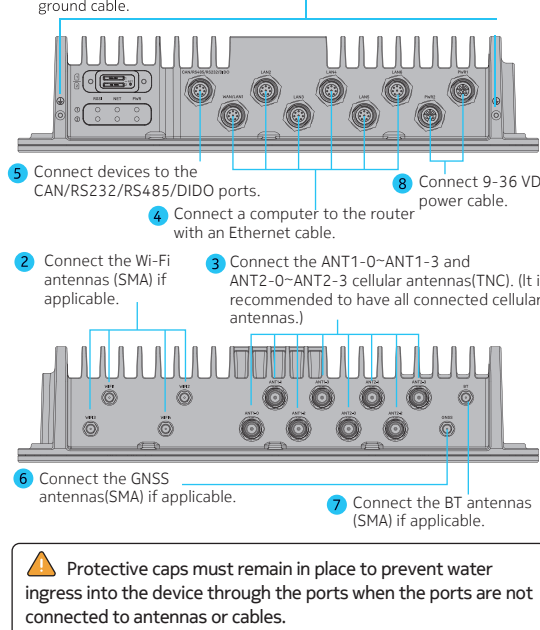
Items	Accessories	Quantity
1	FR8050Sc router	1
2	A-Cable to RJ45 jack (Ethernet cable) + Cat6	4
3	Protective kit for RJ45 connector	4
4	A-Cable 8-pin cable (Data cable - bare wire)	1
5	L-Cable 4-pin cable (Power cable) 6A 5.5/2.5mm DC Jack	1
6	Mounting bolt	4
7	Grounding cable	1
8	Protective cap (TNC)	8
9	Protective cap (SM4)	6
10	Protective cap (MT2)	9
11	FR8050Sc Quick start guide	1

Install SIM card

1. Slide the SIM card into the slot.
2. Slide the SIM card into the slot.



connect 9-36 VDC power cable as the



FI80505c supports PoE PSE 802.3af standard. It provides power to network devices over Ethernet cables. It allows you to transmit both data and power on the same cable, which is particularly useful for devices like IP cameras, VoIP phones, and wireless access points.

1. Before using the PSE, ensure that your network devices are PoE compliant.
2. Prepare the Ethernet Cables: Use Cat 5e, Cat 6, or higher category cables that are capable of carrying both data and power. The maximum length of the cable should not exceed 100 meters to maintain signal integrity.
3. Connect the Network Devices: Connect one end of the Ethernet cable to the PoE PSE port (LAN1-LAN8) and the other end to the PoE-compliant device. Do not select the device and begin supplying power.
4. Troubleshooting: If a device is not receiving power, check the cable connections, the power output, and the device's PoE compatibility. Always ensure that the PSE is not overloaded with too many devices drawing power.
5. Safety Precautions: Always handle the PoE PSE and Ethernet cable with care. Avoid overloading the PSE with more power than it can handle, as this can lead to overheating or damage.

Please contact support service for detailed and model-specific guidance if needed.

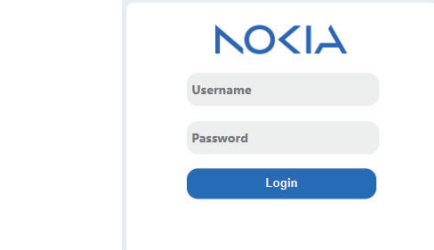
Please contact support service for detailed and model-specific guidance if needed.

ports	Definition	Remark
SN-NC	LTB TRD TRK M&B M&B L&B U&B TD&CK	
INTC10	LTB TRD TRK M&B M&B L&B U&B TD&CK	
INTC10	LTB TRD TRK M&B M&B TAG&G&B L&B U&B TD&CK	
SN-NC	LTB TRD TRK M&B L&B U&B TRD M&B	
INTC10	LTB TRD TRK M&B L&B U&B TRD M&B	
INTC10	LTB TRD TRK M&B L&B U&B TRD M&B L&B U&B TAG&G&B M&B	LTB 470-560 MHz M&B 510-520 MHz L&B 540-550 MHz U&B 580-590 MHz
INTC10	LTB TRD TRK M&B L&B U&B TD&CK	
INTC10	LTB TRD TRK M&B L&B U&B TD&CK	
INTC10	LTB TRD TRK M&B L&B U&B TD&CK	L&B 730-750 MHz
INTC10	LTB TRD TRK M&B L&B U&B TD&CK	
INTC10	LTB TRD TRK M&B L&B U&B TD&CK	
WPT1	WPT 2.45G 2.45G 5.0G	WPT 2.45G 2.45G 2.45G
WPT1	WPT 2.45G 2.45G 5.0G	WPT 2.45G 2.45G 5.0G
BS	BS Bluetooth	BS2 2402-2480 MHz
BS	BS G&G	BS2 1755-1785 MHz BS2 1765-1787 MHz

Indicator	Status	Description
PWR	Green	Power on
	Off	No power supply
NET	Green	Registered to network
	Off	Not register to network
	Blinking	Searching network
RSSI	Green	Signal strong
	Blue	Signal good
	Red	Signal weak
	Off	No signal
	Red blinking	No SIM or SIM error

[Log in to the Web management page](#)

1. Launch the web browser, enter `https://192.168.1.1` in the address bar, and press Enter.
- 
2. Enter the username and password, and click Login.
 3. After the password is verified, you can login to the web management page.



The default username and password are both admin. If you want to view or configure the router, you should use the super account to login to the web management page. The default super username is superadmin, and the password is admin.

[illegible]

NOKIA

2. Choose Advanced Settings > Network > WAN Default Route Priority. You can set ETS, WAN Cellular Cellular 2WAN_3TA.

Advanced Settings

Network

WAN Default Route Priority

Priority	Route	Priority	Route
1	WAN Cellular Cellular 2WAN_3TA	2	WAN Cellular Cellular 2WAN_3TA
3	WAN Cellular Cellular 2WAN_3TA	4	WAN Cellular Cellular 2WAN_3TA

OK

Cancel

NOKIA

3. Choose Advanced Settings > System > T1069, you can view/set Device management/T1069 parameters.

Advanced Settings

System

T1069

Parameter	Value
Device management	Device management

OK

Cancel

NOKIA

Upgrade

1. You can upgrade Software Version and Module Version via WebUI.

Advanced Settings

System

Upgrade

Parameter	Value
Software version	Software version
Module version	Module version

OK

Cancel

NOKIA

Cellular Network

1. Choose Cellular Network > Cellular Network 1 and Cellular Network 2.
2. On APN Management, you can set the configuration of 4G/5G network information.

Cellular Network

Cellular Network 1

APN Management

APN	APN Type	APN	APN Type
APN	APN Type	APN	APN Type

OK

Cancel

NOKIA

3. On Scan Mode, you can lock the 4G/5G bands.

Cellular Network

Cellular Network 1

Scan Mode

Band	Band	Band	Band
Band	Band	Band	Band

OK

Cancel

NOKIA

4. On Cellular Status, you can view the 4G/5G status, such as Frequency, RSSI, RSRP, RSRQ, CQI, SINR, Cell ID and etc.

Cellular Network

Cellular Network 1

Cellular Status

Parameter	Value
Frequency	Frequency
RSSI	RSSI
RSRP	RSRP
RSRQ	RSRQ
CQI	CQI
SINR	SINR
Cell ID	Cell ID

OK

Cancel

NOKIA

WLAN Settings

1. Choose WLAN > WLAN 1 and WLAN 2.
2. On Radio Settings, set WLAN 1/2 to enable or disabled.
3. On WLAN Settings, change the SSID and other parameters, such as SSID, SSID, SSID, SSID.
4. To ensure data security, it is recommended that you change the WLAN password.
5. Click Submit to save the settings.

WLAN Settings

WLAN 1

Radio Settings

Parameter	Value
WLAN 1	WLAN 1

OK

Cancel

NOKIA

Troubleshooting

1. Choose Advanced settings > System > Settings.
2. Select Debug Level and Process Name, click Save button and Download Log.

Advanced Settings

System

Settings

Parameter	Value
Debug Level	Debug Level
Process Name	Process Name

OK

Cancel

NOKIA

3. Choose Advanced settings > System > Debug Log.
4. Select Debug Level and Process Name, click Save button and Download Log.

Advanced Settings

System

Debug Log

Parameter	Value
Debug Level	Debug Level
Process Name	Process Name

OK

Cancel

NOKIA

FAQs

The POWER indicator does not turn on.
1. Make sure that the power cable is connected properly and the router is powered on.
2. Make sure that the power supply is compatible with the router.

Fails to login the web management page.
1. Make sure that the router is powered on.
2. Verify that the router is correctly connected to the computer through WLAN or a network cable.
3. If the problem persists, please contact the authorized local service supplier.

The router fails to search for the wireless network.
1. Check if the power supply is connected properly.
2. Check if the router is placed in an open area that is far away from obstacles, such as concrete or wooden walls.
3. If the problem persists, please contact the authorized local service supplier.

The parameters are returned to default values.
1. If the router is powered off unexpectedly while being configured, the parameters may be returned to the default settings.
2. After configure the parameters, download the configuration file and reconfigure the desired settings quickly.

The router does not support SIM card hot-plug, please confirm that the device is powered off when the SIM card is inserted or removed.

NOKIA

FCC Statement

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, may cause harmful interference to 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.

FCC Radiation Exposure Statement
This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with part 15 of the FCC RF Rules. The equipment must be installed and operated in accordance with provided instructions and the antenna used for this transmitter must be installed to provide a separation distance of at least 55 cm from all persons

NOKIA

and must not be co-located or operating in conjunction with any other antenna or transmitter. End-user and installers must be provided with antenna installation instructions and consider removing the co-location 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 interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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ISED Canada Statement

This device conforms to the essential requirements (essentials) that apply to 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, may cause harmful interference to 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.

ISED Radiation Exposure Statement
This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with part 15 of the FCC RF Rules. The equipment must be installed and operated in accordance with provided instructions and the antenna used for this transmitter must be installed to provide a separation distance of at least 55 cm from all persons

NOKIA

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. End-user and installers must be provided with antenna installation instructions and consider removing the co-location 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 interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.