TCL LINKPORT

IK511

Contents

Please read this first

- Thank you for choosing the TCL LINKPORT IK511. In order to maintain your device in optimal condition, please read this manual and keep it for future reference.

- Before using this document and the device it supports, ensure you read and understand the "Important safety information" on page 16.

- Illustrations in this document might look different from your device.

- Instructions in this document may vary depending on your device model and software version.

- Some apps and features are not available in all countries or regions. App and feature availability is subject to change.

- Document content is subject to change without notice. We make constant improvements on the document for your device, including this user manual.

- TCL Communication Ltd. does not assume any liability that may occur due to the use or application of the product described herein. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information and recommendations in this document do not constitute the warranty of any kind, expressed or implied.

1. Meet your TCL LINKPORT IK511

1.1 Product introduction

TCL LINKPORT IK511 is a 5G capable USB dongle. With its lightweight and compact design, it can be used to provide one-to-one data access for the connected host device on-the-go, as well as at home. You can connect your laptops, tablets, desktops, TVs etc. through USB, and directly access the internet according to the type of OS.

1.2 Product LED, Interface, & Reset Button
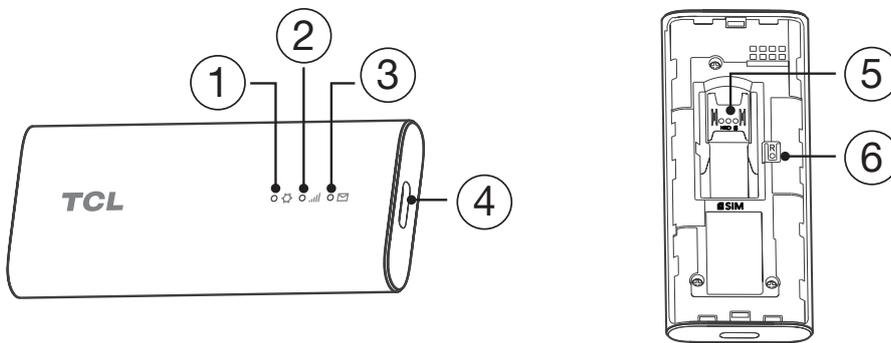
① System LED Indicator

② Signal LED Indicator

③ SMS LED Indicator

④ USB-C Port

⑤ SIM Card Slot

⑥ Reset Button

LED indicator:

Indicator description	LED indicator status
Powering up	System LED Indicator: Solid yellow
Error (for example, SIM card is not recognized, or PIN, PUK or SIM lock protected)	System LED Indicator: Solid red
Network searching	System LED Indicator: Solid green Signal LED Indicator: Blinking blue
Registered on 4G or 5G (but no EPS bearer established)	System LED Indicator: Solid green Signal LED Indicator: •Solid green: Strong signal strength •Solid yellow: Acceptable signal strength •Solid red: No signal

Indicator description	LED indicator status
Connected on 4G or 5G*	System LED Indicator: Solid green Signal LED Indicator: •Solid green: Strong signal strength •Solid yellow: Acceptable signal strength •Solid red: No signal
Firmware upgrading	System LED Indicator: Blinking blue Signal LED Indicator: Off SMS LED Indicator: Off
Unread SMS	SMS LED Indicator: Blinking green
SMS Inbox is full	SMS LED Indicator: Solid green
No unread SMS and inbox is not full	SMS LED Indicator: Off
Reset	When the Reset button is pressed for 3 seconds, the System & Signal & SMS LEDs will turn solid green at the same time, and the device will be restored to factory settings and then restart.

* 5G requires capable device.

Reset button

Press and hold the reset button for 3 seconds to reset your TCL LINKPORT IK511.

You can also reset the device via the Web UI (See "Restart & reset" on page 15).
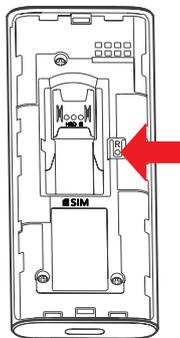
2. Get started with your TCL LINKPORT IK511

2.1 Insert a nano SIM card

Prerequisite: Select the correct SIM card for your TCL LINKPORT IK511.

Mini-SIM (2FF) ✗   Micro-SIM (3FF) ✗   Nano-SIM (4FF) ✓

1. Remove the back cover.

Hold the TCL LINKPORT IK511 in one hand and pull the back cover outwards from the slot using the index finger of your other hand.
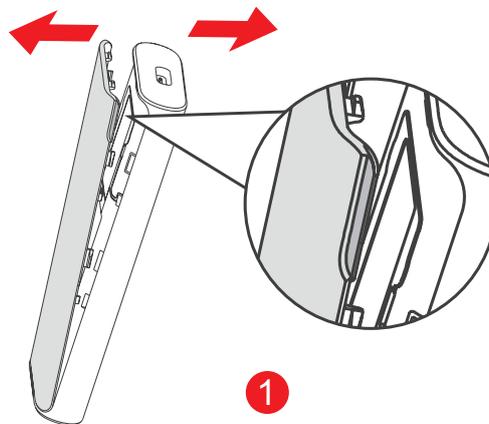
2. Align the SIM card cutout tab as seen in the diagram and gently slide the card into the slot with the gold metal contacts facing down.

3. Make sure the Nano SIM card clicks into place. Put the back cover on.
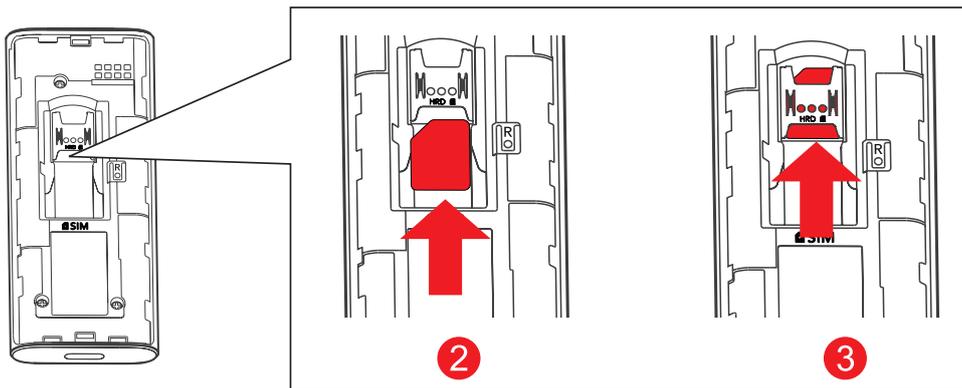
Notes:

- Note the orientation of the Nano SIM card. If the Nano SIM card is inserted incorrectly, it may get jammed.

- Do not remove the Nano SIM card when your TCL LINKPORT IK511 is in use. Otherwise, it may cause your TCL LINKPORT IK511 to malfunction or data loss of your SIM card.

2.2 Plug the TCL LINKPORT IK511 into your host device

TCL LINKPORT IK511 uses a USB-C to USB-C cable to link the dongle to your device.

USB-C to USB-C Cable[1]
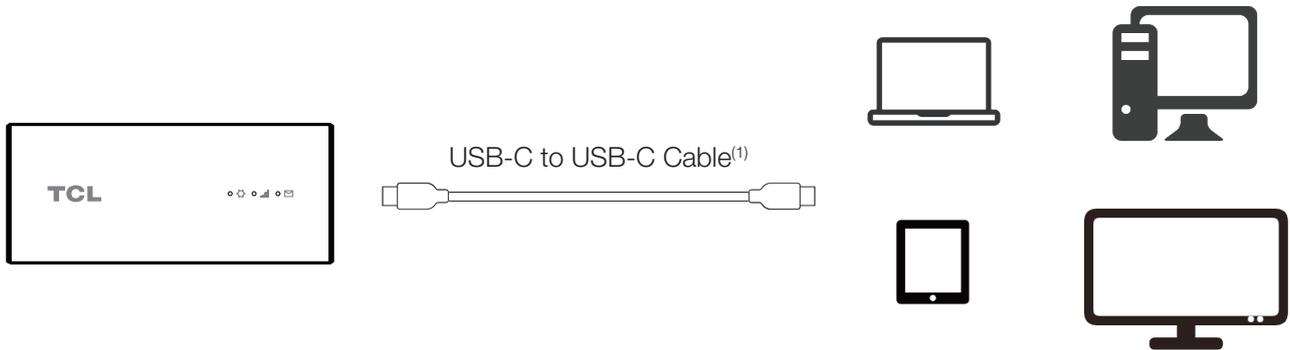
Software will auto-install. Once installation is complete, the network is ready for use.

NOTE: Connecting to the network may take up to 1 minute.

2.3 Plug and Play for host devices

Host Device OS	Version
Windows	7, 8, 10, 11
Linux	Ubuntu v22.04, Ubuntu 16.04 LTS, Mint 21.1, Fedora 37, openSUSE Leap 15.4
macOS	10.15.x Catalina, 11.x Big Sur, 12.x Monterey, 13.x Ventura, 14.x Sonoma
iPadOS	15, 16, 17 or above
Android	11, 12, 13, 14

NOTE: Some products may not be compatible with your TCL LINKPORT IK511 due to OEM specific customization.

(1) Only use the USB-C cable included with your device. Using the wrong cable may damage the device or reduce performance.

3. Access the Web UI

You can access the dongle's Web UI through a browser. You can manage and configure the dongle through the Web UI. The supported browsers and versions are as follows: Microsoft Edge, Chrome 60 and above, Firefox 58 and above, Safari 12 and above, Opera 50 and above.

3.1 Log in to the Web UI

To log in to the Web UI, follow these steps:

1. Open a web browser on the device connected to the TCL LINKPORT IK511 network.
2. Go to http://192.168.0.1 and follow the on-screen instructions to finish the login process.

   For the default login information, refer to the Important Information Leaflet or the label on the inside of the device when you remove the back cover..

TCL   Language ∨ Help

Welcome to IK511U

Enter password

Log in

Notes:

• Click **Language** at the upper right of the screen to change the language setting.

• Click **Help** at the upper right of the screen to access user manual.

3.2 Explore Web UI features

Home page features

The Web UI is mainly comprised of the following sections: Home, Status, Services, Settings, and System. Click on each section to display more information about your TCL LINKPORT IK511.

Commonly used status icons are displayed in the Web UI, which give you information about your TCL LINKPORT IK511.

Status icon	What it means
LTE / 5G	It is the network your TCL LINKPORT IK511 connects to. **No Service** will be displayed when there is no network available.
	The number of the signal bar indicates the signal strength. The more signal bars it shows, the stronger the signal is.
	The TCL LINKPORT IK511 is connected to WAN network.
	The TCL LINKPORT IK511 is disconnected from WAN network.
	New messages or unread messages.
	The SMS inbox is full.
	Click to log out of the Web UI.

4. Configure your TCL LINKPORT IK511

In this chapter, we will show you how to get the most out of your TCL LINKPORT IK511 using the Web UI, which allows you to configure network settings, check messages, view connected devices, and more.

4.1 Home

This section allows you to quickly check connection status, network information, device information, and connected devices.

4.1.1 Network overview

The network overview panel shows network connection status, download and upload speed, and the number of connected devices.

Click **Disable mobile data** to disconnect your TCL LINKPORT IK511 from the network.

Click **Enable mobile data** to connect your TCL LINKPORT IK511 to the network.
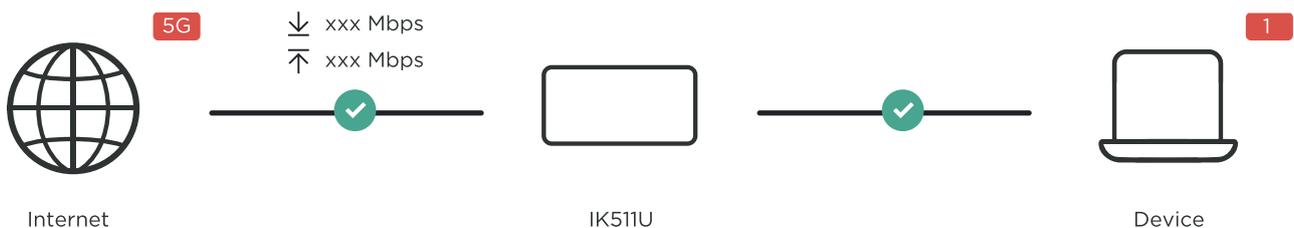
Network

The Network panel displays network name, network type, and network connection status. Click Network to access the internet setting page.

Device information

The Device information panel shows device model name, software version, and running time. Click Device information to get more information on your device.

Diagnostics

You can test network up-and-down and view the band.

4.2 Status

This section allows you to view your network information, connection status, internet information, and more.

4.2.1 Internet

Check your internet information, such as SIM status, Connection status, Network name, Network type, Profile name, and IP address.

4.2.2 Diagnostics

View the diagnostics data of the network, including Cell ID, RSRP, SINR and Band.

4.3 Services

Navigate to Services, and click the SMS tab to display the information you want or change SMS settings as desired.

Refer to the following table for the description of each folder under the SMS tab.

Inbox	Incoming messages are stored in this folder.
Outbox	Outgoing messages are stored in this folder.
Draft	Draft messages are stored in this folder.
New message	Write a new message in this folder.
SMS settings	Configure SMS settings in this folder.

Refer to the following table for commonly used operations of SMS messages.

Read a message	Click the message you want to read.
Send a message	1. Click **SMS** > **New message**. 2. Input the recipient's number and message content. 3. Click **Send**. **NOTE:** A message can be sent to up to five recipients simultaneously.
Reply to a message	1. Click the message you want to reply to. 2. Click **Reply**. 3. Input the message content, then click **Send**.
Delete a message	1. Locate the message you want to delete in the **Inbox** or **Outbox** folder. 2. Tick the checkbox beside the message you want to delete. 3. Click **Delete**.
Delete all messages	1. Click at the top of the checkbox column to select all messages. 2. Click **Delete**.
Forward all messages	1. Click **SMS settings**. 2. Enable **SMS forwarding to mobile phone**. 3. Input the recipient's number. 4. Click **Apply**.

Enable SMS delivery reports	Click **SMS settings**, then enable **SMS report**.
Disable SMS delivery reports	Click **SMS settings**, then disable **SMS report**.

4.4 Settings

Prioritize the network connection, router, firewall and advanced settings.

4.4.1 Quick setup

Configure network mode, enable or disable data roaming and internet profile name.

4.4.2 Mobile network

Network connection

Configure and manage connection mode, enable or disable mobile data, and data roaming.

Profile management

Set up a new APN profile, and edit or delete existing profiles.

Add a new profile	1. Click **New**. 2. Input the correct parameters (such as profile name, APN and IP type) for your network operator. 3. Click **Save**.
Edit a profile	1. Select the profile from the profile management list. 2. Click **Edit** to set the parameters. 3. Click **Save**.
Delete a profile	1. Select the profile from the profile management list. 2. Click **Delete**. **NOTE:** The default profile cannot be deleted.
Set as default	1. Select the profile from the profile management list. 2. Click **Set as default**.

Mobile network settings

You can set the network search mode to either Auto or Manual. Ensure that you click Apply after making any changes.

SIM PIN management

Enable SIM PIN	1. When the SIM PIN feature is disabled, click ⬜. 2. Set a SIM PIN code. 3. Click **Apply**.

Disable SIM PIN	1. When the SIM PIN feature is enabled, click ⬤◯ . 2. Enter the current SIM PIN code. 3. Click **Apply**.
Change SIM PIN	1. When the SIM PIN feature is enabled, click **Change SIM PIN**. 2. Enter the previous and new SIM PIN. 3. Click **Apply**.

Note: When the SIM PIN code is entered incorrectly 3 times, a PUK code is required. You can obtain the PUK code from your internet service provider.

4.4.3 Router

DHCP

Dynamic Host Configuration Protocol (DHCP) is a client or server protocol that automatically provides you with an Internet Protocol (IP) host. The IP address and related configuration settings such as subnet mask and default gateway address are all automatically assigned.

- DHCP Server: DHCP Server will automatically assign IP addresses to devices on the network. The default setting is enable.

- Gateway address: It is the router's IP address on the LAN. The default setting is "192.168.0.1".

- Subnet mask: The router's internal LAN subnet mask. The default setting is "255.255.255.0".

- Start IP address: Set the start IP address available to access.

- End IP address: Set the end IP address available to access.

- DHCP Lease Time: Amount of time that a Wi-Fi enabled device can use its assigned IP address before it is required to renew the lease.

DDNS

WAN IP address is needed when some functions of your TCL LINKPORT IK511 are enabled. If the WAN IP address of your TCL LINKPORT IK511 changes, these functions may not work properly. The Dynamic Domain Name Server (DDNS) function allows you to map a dynamic WAN IP address (public IP address) to a static domain name, helping internet users (WAN side) access the TCL LINKPORT IK511 network by static domain name.

VPN

Virtual Private Network (VPN) is a dedicated network across the shared or public network (usually the internet). The VPN technology allows employees at a branch of an enterprise and employees at the headquarters to exchange resources conveniently without exposing these resources to other internet users.

VPN passthrough

A VPN allows you to create a secure link between private networks through the internet.

You can choose the different protocols that you can use when setting up a VPN, such as IPSec Passthrough, PPTP Passthrough and L2TP Passthrough.

IP passthrough

IP Passthrough enables a client on the LAN to acquire the router's IP address assigned from an ISP. When IP passthrough is enabled, the router bridges all traffic to the device connected to it.

4.4.4 Firewall

IP filter

By default, any device connected to your TCL LINKPORT IK511 is allowed to access the internet.

You can use the IP filter to allow or block specific devices from accessing IP addresses on the internet.

Create a Blocklist rule for IP addresses you do not want a device to access. If you enable it, then only IP addresses that match the rules will be accessible, all other addresses will be blocked.

A maximum of 32 rules can be created.

Port forwarding

Port forwarding allows external users to connect to services inside the local network (LAN).

Click + to create a new Port forwarding rule, and specify the LAN IP address, LAN ports, WAN ports and Protocol type for traffic to be forwarded.

4.4.5 Advanced settings

AT port

You can enter an AT command to configure your TCL LINKPORT IK511.

By default, AT port is disabled, click ⬤ to enable, and then click **Apply**.

The use of AT port requires synchronous installation of driver kits. Please consult the merchant for specific driver kits.

How to send AT Command in Windows PC for TCL LINKPORT IK511?

1. Open the AT Command tool. Select the language you want and configure the port via the port's drop-down menu, select the correct port.
2. Send AT Command in the input window, and then click **SEND**, the result is displayed in the window of AT Command tool.

M2M

The M2M (Machine to Machine) mode is only applicable for technology professionals. Use with caution.

Click **M2M status** to enable M2M mode, and then click **Apply**. At this time, the Web UI will be unavailable.

Connect your TCL LINKPORT IK511 to the terminal you want to use it in M2M mode.

* When your TCL LINKPORT IK511 is working, press the Reset button for 3 seconds or through AT commands[1] to reset your TCL LINKPORT IK511 back to the Web UI.

[1] AT commands (AT meaning attention) are instructions used to control a modem. The command set consists of a series of short text strings which can be combined to produce commands for operations such as dialing, managing SMS functions, and changing the parameters of the connection.

4.5 System

4.5.1 Device information

You can view your device information here such as device name, model name, IMEI, SIM card number, IP address, LAN Domain, software version and hardware version.

4.5.2 Login password

Enter your current password and confirm a new password. Your chosen password must be between 4-16 characters long.

The default password can be found on the label located on the rear of the TCL LINKPORT IK511 when you removed the back cover and also on the Important Information Leaflet included with your device.

4.5.3 System time

Time zone: Change the local time zone here.

Current date and time: This will show your current time according to the selected time zone.

4.5.4 Backup & restore

How to backup the TCL LINKPORT IK511 configuration:

1. Click **Backup** to save the configuration file.
2. On Windows OS and macOS these will be saved in the Downloads folder by default and the file name will be configure.bin.

How to restore the configuration:

1. Click Browse to select the previously backed up configuration file.
2. Click Restore.

Note: Do not disconnect the TCL LINKPORT IK511 during the configuration restoration process.

4.5.5 Restart & reset

Restart: Click Restart to reboot the TCL LINKPORT IK511. Current settings will be maintained.

Reset: Click Reset to reset all settings back to factory default settings. Note that any custom settings you have applied will be reset, so backup a device configuration file as instructed above if you want to restore settings later.

You can also reset the device by holding the reset button on the back of the device down for more than 3 seconds.

Note: Do not disconnect the TCL LINKPORT IK511 during the reset or restart process.

4.5.6 Firmware update

Click **Check for updates**. Your TCL LINKPORT IK511 will check if there is an update available.

If one is found, you may click Download. Once the file has downloaded successfully, the

device will update automatically.

Enable Allow automatic updates to automatically update the device when a new update is available. If this option is disabled, you can still update the device via Check for updates.

Note: Do not disconnect the TCL LINKPORT IK511 during the update process. Your internet connection may be unavailable during the update process.

Important safety information

Read all the safety information before using your product. Failure to follow these safety instructions could result in injury, damage to your product, or other property.

Important safety instructions

- Observe signs and notices that prohibit or restrict the use of wireless devices.

- Always handle your device with care. It contains sensitive electronic components inside. The device can be damaged if dropped, burned, punctured, or crushed, or if it comes in contact with liquid.

- Do not disassemble or attempt to repair your device yourself. Disassembling the device may damage it, or cause injury to you.

- The device and its accessories may present a choking hazard to small children. Do not let children use the device and its accessories without supervision.

Operating temperature

Your device is designed to work best in ambient temperatures between 0°C and 55°C (32°F and 131°F), and should be stored between ambient temperatures of –20°C and 70°C (-4°F and 158°F). Your device may malfunction if operated or stored outside of these temperature ranges. Avoid exposing the device to dramatic changes in temperature or humidity.

Regulatory compliance information

This section introduces regulatory information, certification, and compliance information specific to your product.

Electromagnetic fields (EMF)

This product complies with all applicable standards and regulations regarding exposure to electromagnetic fields.

Disposal and recycling information

At TCL, we continually strive to improve our operations and products, in order to minimize our impact on the environment.

	Your product is designed and manufactured with high quality materials and components, which can be recycled and reused. Please observe the local regulations regarding the disposal of packaging materials, exhausted batteries and old equipment.
	For recycling information, please visit www.tcl.com.

This symbol on your device and/or its accessories indicates that this device should not be disposed of with household waste. When this device reaches its end of life, take it to a collection point designated by local authorities. For more detailed information about device recycling, contact your local authorities, household waste disposal centers, or retail stores.

The separate collection and recycling of your device and/or its accessories at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

Radio waves

THIS DEVICE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

The exposure standard for devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by public authorities such as the Federal Communications Commission of the US Government (FCC), or by Innovation, Science and Economic Development Canada (ISEDC), is 1.6 W/kg averaged over 1 gram of body tissue. Tests for SAR are conducted using standard operating positions with the device transmitting at its highest certified power level in all tested frequency bands.

This device is complied with SAR for general population /uncontrolled exposure limits in ANSI/IEEE C95.1-1992 and had been tested in accordance with the measurement methods and procedures specified in IEEE1528.

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/oet/ea/fccid after searching on FCC ID: 2ACCJSCD005

The highest SAR value for this device when tested is 1.19 W/Kg for use close to the body.

While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement for RF exposure.

For body-worn operation, the device meets FCC RF exposure guidelines provided that it is used with a non-metallic accessory with the device at least 5 mm from the body.

Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

Additional information on SAR can be found on the Cellular Telecommunications & Internet Association (CTIA) Web site: http://www.ctia.org/

Note: 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 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.

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

For the receiver devices associated with the operation of a licensed radio service (e.g. FM broadcast), they bear the following statement:

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

• This device may not cause harmful interference.
• This device must accept any interference received, including interference that may cause undesired operation.

Your device is a transceiver that operates on 5G Frequency Bands n25/66/71, 4G Frequency Bands B2/4/5/12/25/26/66/71 or 4G Roaming Frequency Bands B7/13/38.

Troubleshooting

If you encounter problems while using the product, use the troubleshooting information to help determine the problem and find possible solutions.

General problems

Problem	Solution
How do I set a new PIN code for my SIM card?	1. Log in to the Web UI. 2. Go to Settings > Mobile network > SIM PIN management. 3. Enable **SIM PIN status** operation, and enter a new PIN code. 4. Click **Apply**.
Where can I find the device's model number and hardware version?	1. Log in to the Web UI. 2. Go to **System** > **Device information**.

Web UI problems

Problem	Solution
How can I access the Web UI?	1. Open the web browser, and go to http://192.168.0.1 2. Enter the login information as required. Find the default login information on the label located on the rear of the TCL LINKPORT IK511 when you removed the back cover.
I can't log in to the Web UI.	• Make sure 192.168.0.1 is entered correctly in the web browser. • Make sure the TCL LINKPORT IK511 is plugged into the computer correctly. • Make sure the system LED indicator is solid green.
How do I change the login password?	1. Log in to the Web UI. 2. Go to **System** > **Login password**.
"No SIM card" or "Invalid SIM card" is displayed on the Web UI.	• Make sure there is a SIM card in your TCL LINKPORT IK511. • Reinstall the SIM card, and log in to the Web UI again.

Connection problems

Problem	Solution
I can't access the internet.	• If no SIM card is detected, reinsert the SIM card, then try again. • If a PIN code is required, enter the PIN code, and try again. • If no network is available, place the TCL LINKPORT IK511 in an area with better signal (for example near a window), and try again. • Reboot your TCL LINKPORT IK511, and try again. • If the DHCP server is enabled, make sure your device MAC address is enabled on the DHCP Reservation list.
"PIN lock" or "PUK lock" is displayed on the screen of the device connected to the TCL LINKPORT IK511 network.	This indicates that the SIM card is locked. To unlock the SIM card, log in to the Web UI and enter the PIN code or PUK code. To obtain the PUK code, contact your internet service provider. **NOTE:** If the PIN code is entered incorrectly 3 times, you will be required to enter the PUK code. If the PUK code is entered incorrectly 10 times, the SIM card will be locked permanently.