Manuals+ — User Manuals Simplified.

infomark IML-C6400W LTE Mobile WiFi User Guide

Contents

infomark IML-C6400W LTE Mobile WiFi

Product Information

The IML-C6400W is a portable wireless router used both indoors and outdoors to provide Internet services to wireless Internet terminals using the government's own network. It features LED indicators for displaying various statuses and comes with a USB Type-C cable, a user manual, and a USIM pin.

Thank you for purchasing our product.

Use the information in this quick start guide to learn about your product's components and features, and how to install and set up the device.

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※ Firefox is a trademark or a registered trademark of US Mozilla Corporation for USA or other regions.

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※ In order to use this product, the user is required to make a separate access line contract with the service provider.

※ When using service, be sure to check the service area. In regions other than the service area, it is not available.
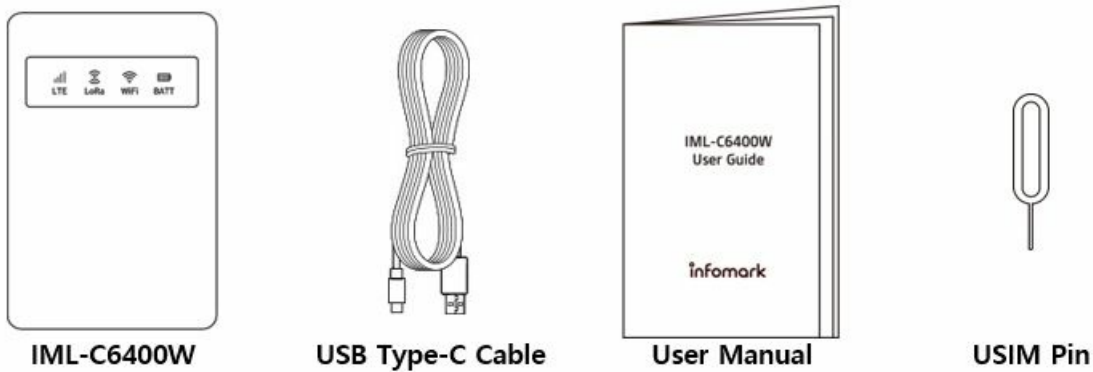
※ This quick start guide is explained using Windows 10 screens as examples.

This product is a portable wireless router used in indoors and outdoors to provide Internet services to wireless Internet terminals using the government's own network.
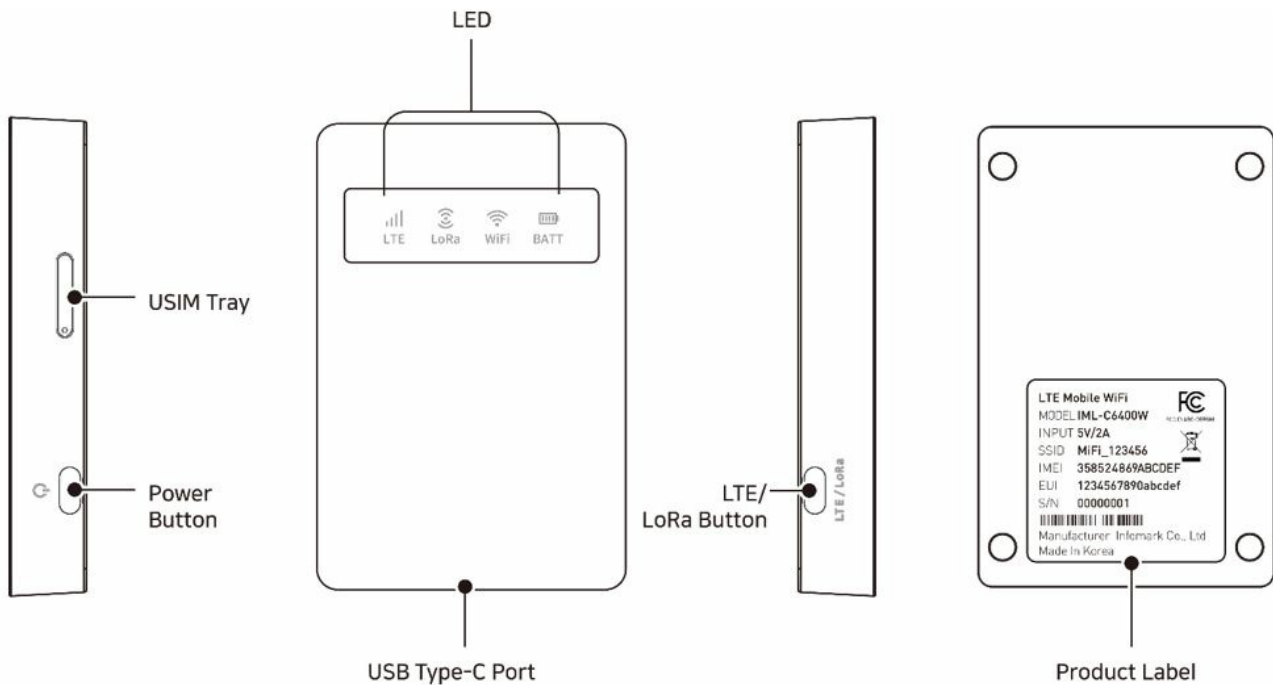
Package Contents

- IML-C6400W

- USB Type-C Cable
- User Manual
- USIM Pin

IML-C6400W   USB Type-C Cable   User Manual   USIM Pin

Appearance

LED Status:

The device has four LEDs that indicate different statuses:

- **LTE:** Green (Strong signal), Yellow (Mediumsignal), Red (Weak signal), Red Blinking (Network connectionfailure), Yellow Blinking (LTE is connecting)
- **LoRa WiFi:** Green (Strong signal), Yellow(Medium signal), Red (Weak signal), Red Blinking (Connecting andAuthenticating), Yellow Blinking (Network connection failure)
- **BATT:** Yellow (No device connected), Green(Device connected), Green Blinking (Interval 1 sec – Battery level50-100% at Power on state), Yellow Blinking (Interval 1 sec -Battery level 15-49% at Power on state), Red Blinking (Interval 1sec – Battery level 0-14% at Power on state)

LTE	

Green	Signal strength (Strong)
Yellow	Signal strength (Medium)
Red	Signal strength (Weak)
Red (Blinking)	Network connection failure
Yellow (Blinking)	LTE is connecting
LoRa	
Green	Signal strength (Strong)
Yellow	Signal strength (Medium)
Red	Signal strength (Weak)
Red (Blinking)	Connecting and Authenticating
Yellow (Blinking)	Network connection failure
WiFi	
Green	A device has been connected
Yellow	No device has been connected
BATT	
Green	50~100% battery level at Power on state Charging complete at Power on/off/Sleep state Charging stops as charging temperature exceeds at Power off state.
Green (Blinking) Interval 1 sec. Interval 0.5 sec.	Recharging battery to 50~99% at Power on state Charging stops as charging temperature exceeds
Yellow	15~49% battery level at Power on state
Yellow (Blinking) Interval 1 sec. Interval 0.5 sec.	Recharging battery to 15~49% at Power on state Charging stops as charging temperature exceeds

Red	0~14% battery level at Power on state Charging at Power off/Sleep state
Red (Blinking) Interval 1 sec. Interval 0.5 sec.	Recharging battery to 0~14% at Power on state Charging stops as charging temperature exceeds

Inserting the SIM Card:

To insert the SIM card, use the provided USIM PIN to remove the USIM cover and insert the USIM as shown in the shape. Using the USIM PIN provided , remove the USIM cover and insert the USIM in the shape as shown.
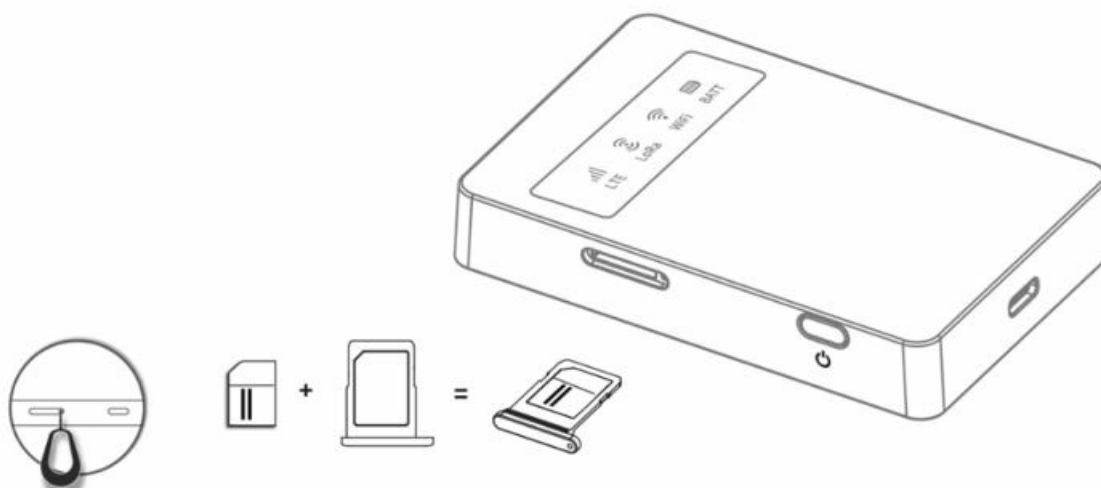
Button Operation

- **Power On:** Press and hold the Power button for3 seconds at Power off state. All LEDs will turn onsequentially.
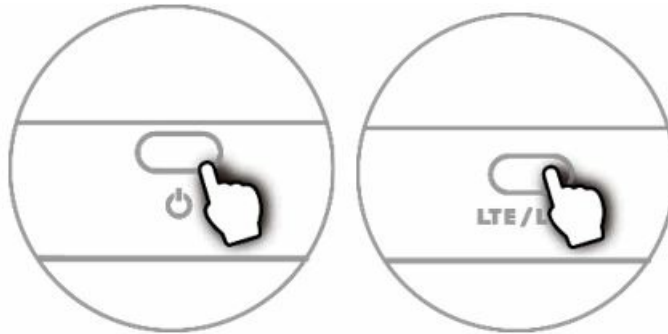- **Power Off:** Press and hold the Power button for3 seconds at Power on state. All LEDs will turn off.

- **Mode Change (LTE/LoRa):** Press and hold theLTE/LoRa button for about 3-7 seconds at Power on state. The

LTE& LoRa LED will blink yellow before switching to the designatedmode.

The end state is a steady LED for LTE or LoRa.

Change Hibernation↔Wake up : Press & hold the LTE/LoRa button for about 7~10 seconds at Power on state, the LoRa & WiFi LED will show a blinking yellow, before showing the LTE / WiFi / Battery LED.

- **Hibernation Wake up:** Press and hold theLTE/LoRa button for about 7-10 seconds at Power on state. The LoRa& WiFi LED will blink yellow before showing theLTE/WiFi/Battery LED.

- **Hibernation Check:** Press and hold the LTE/LoRabutton for about 1 second at hibernation on state. The LoRa &WiFi LED will blink yellow. An interval of 15 seconds is requiredto check the hibernation mode repeatedly.
- **Factory Reset:** Press & hold the Power button and LTE/LoRa button for about 10 seconds at Power on state, and all LED will show a blinking red.

Charging before use

Please fully charge the product before using.

Charging with USB cable
Connect the MiFi to the Power Adapter or PC using a USB cable.

Network Settings

How to connect to WiFi

- Identify the SSID on the back of the product and PASSWOR D to connect
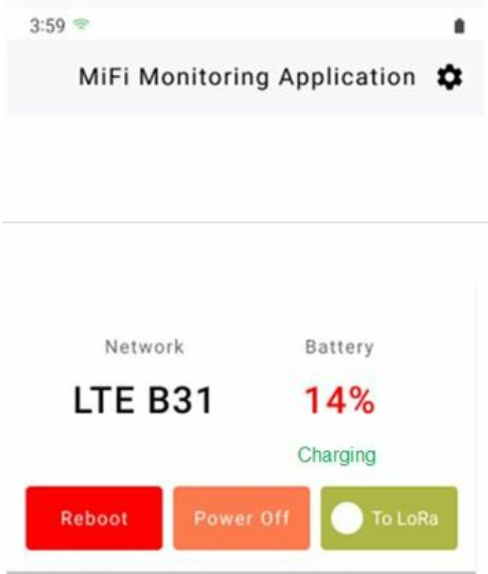- The default credential s are used to connect t he external device to the MiFi

SSID	PASSWORD
MiFi_XXXXXX	12345678

SSID : XXXXX is last 6 characters of MAC

- This product can be used and controlled with a monitoring app and Web
- Enter **http://192.168.233.1** in the addresss bar of web browser to access the Web Portal

MiFi Monitoring App – How to use

Launch MiFi Monitoring App on the handset.

	• Header section – MiFi Monitoring Application (app title) – Setting icon (button) – LTE connection status and signal level(indicator)
3:59 🛜 🔋 MiFi Monitoring Application ⚙ Network Battery **LTE B31** **14%** Charging Reboot Power Off ⚪ To LoRa	• Upper section – Network mode and status – Battery status – Charging status – [Reboot] (button) – [Power Off] (button) – [To LoRa] or [To LTE] (button)
LTE Network Status • MCC/MNC : 525/05 • eNB ID : 12345678 • RSRP/RSRQ : -118.3/102 • RSSI/SINR : 12/2 • Data Rate : 2Kbps • TAC : 123456 • PCI : 376	• Lower section – Network status : LTE, LoRa, WiFi Disconnected – Network information LTE : MCC/MNC, eNB ID , SRSP/RSRQ, RSSI/SINR, Data Rate, TAC, PCI LoRa : RSSI, SNR, Class, Channel, Activation Mode

For details, please refer to the MiFi Monitoring App User Manual

MiFi Web Portal – How to use

Web Portal

The WEB server connection is necessary to change the WiFi settings or to set its detailed functions. Go to **http://192.168.233.1** to access the MiFi Web Portal, and then the login screen will appear upon connected.

- PC must be connected to the MiFi through USB Tethering or WiFi before accessing the MiFi Web
- After executing the web browser, enter **"http://192.168.233.1"** in the address

ID	user
Password	admin

- **How to change the Web Portal Password:**

  Web Log-in → Device Settings → Change Password

- **Web Portal Layout**

  Displays basic MiFi device status information and operation menu.

Item	Description
Logout	Web Portal Log out button
1 / 1	The current number of connected devices / Maximum number of allowed devices for connection
100%	Display of battery status Discharging Charging Stop charging (Beyond charging temperature)
LTE	Network mode (LTE/LoRa) and signal strength
	Switch network mode between LTE and LoRa
	Reboot button
	Power off button

Summary

Displays summary information for each network serviced by the MiFi device.
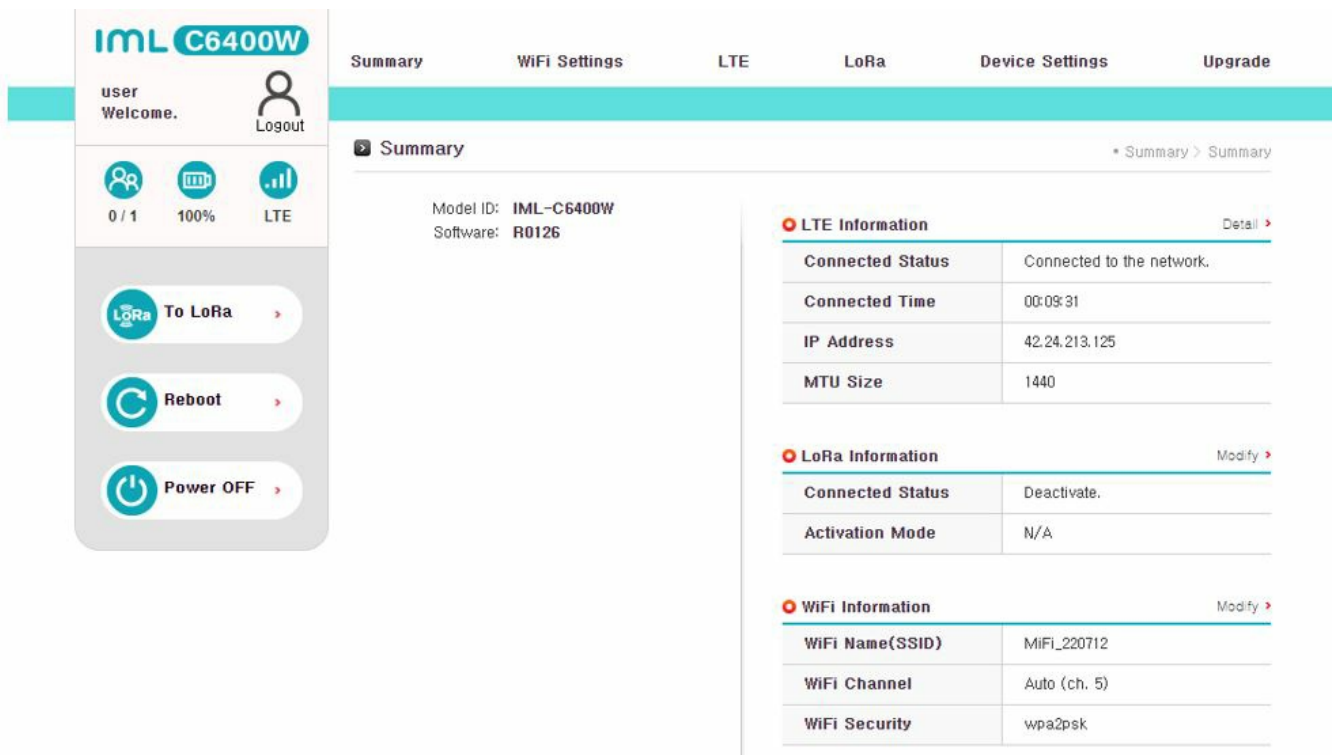
Item	Subordinate Item	Description
LTE Information	Connected Status	Connection status of LTE.
	Connected Time	LTE Service Time.
	IP Address	LTE IP Address.
	MTU Size	Maximum transmission unit.
LoRa Information	Connected Status	Connection status of LoRa.
	Activation Mode	Current Activation Mode.
WiFi Information	WiFi Name(SSID)	Device Name of WiFi Network.
	WiFi Channel	Wireless Frequency (Channel).
	WiFi Security	Security Mode of Network.

WiFi Settings

Provides device's WiFi and security settings.

Item	Subordinate Item	Description	
WiFi Settings	Channel	WiFi Frequency (Channel).	
	Max Connected Device	Set the maximum numbers of WiFi devices connecting to MiFi	
	WiFi Name(SSID)	Device Name of WiFi Network.	
	SSID Show/Hide	If set to Hide, the device name will not be displayed on other WiFi devices.	
	WiFi Range	Change the WiFi signal coverage of the device.	
WiFi Security	Autentication	WiFi authentication method setting.	
	Encryption	WiFi Security Algorithm.	
	WPA Password	Set the password required for WiFi connection.	
Access Control Setting	WiFi Access Control	Allow (Whitelist) or Deny (blacklist) setting.	
	MAC Address	Register the MAC address to be applied.	

The changed WiFi settings take effect after a robot.

LTE Information

LTE LTE Information

Provides device's LTE Network Status Information.

Item	Subordinate Item	Description
Basic Infomation	Link Status	LTE network connection status.
	Connected Time	Elapsed time after connecting to LTE network.
	Phone Number	Device's phone number.
	IMEI	Device's IMEI.
	APN NAME	The APN name used to access the LTE network.
	MCC/MNC	Mobile Country Code and Network Code.
	RF Status	LTE network radio signal information.
	MTU Size	Maximum data packet size that a networked device can accept.
	IP Address	IP address the device is using.
	Subnet Mask	LTE network IP address the device is using.
	Default Gateway	LTE network Gateway address the device is using.
	Primary DNS	LTE network Primary DNS address the device is using.
	Secondary DNS	LTE network Secondary DNS address the device is using.

USIM Management

LTE USIM Management Provides device's USIM Management.

Item	Subordinate Item	Description
USIM Card Lock	USIM Card Lock	Set to enter a PIN code when connecting to an LTE network.
	Input PIN Code	Enter Device's PIN code.
PIN Code Change	Input Code is Entered	Number of times entered incorrectly.
	Existing PIN Code	PIN code currently in use.
	New PIN Code	New PIN code to change.
	New PIN Code Retry	Enter the new PIN code again.

- PIN code is only numeric 4~8
- The PIN code will be blocked, if user keys in the incorrect PIN for 3
- If the PIN block state is reached, you should input the correct
- Entering PUK incorrectly too many times (normally ten) can get your SIM disabled

APN Setting

LTE APN Setting

The APN name is to be defined by the user or Administrator. The MNC, MCC information should be included with the APN name to match the SIM card inserted.

A maximum of 4 APNs can be provisioned.

Item	Subordinate Item	Description
APN Settings	MCC	Mobile Country Code
	MNC	Mobile Network Code
	APN Name	The APN name used to access the LTE network.

The changed APN settings take effect after a reboot.

LoRa Setting

LoRa   LoRa Setting

Provides device's LoRa Activation Setting.

IML C6400W

user
Welcome.
Logout

0 / 1   100%   LoRa

Summary   WiFi Settings   LTE   LoRa   Device Settings   Upgrade

LoRa Setting

LTE To LTE ›

Reboot ›

Power OFF ›

▶ LoRa Setting

* LoRa › LoRa Setting

○ Activation Mode Setting

Activation Mode	OTAA ⌄

○ Activation Info Setting

Device EUI	0080E115051FD8EB
Application EUI	F000000000000001
Application Key	F0000000000000000000000000000001
Device Address	F0000001
Application Session Key	F0000000000000000000000000000001
Network Session Key	F0000000000000000000000000000001

Save

Activation Mode Setting

Change the setting of the device's LoRa Activation Mode ('OTAA' or 'ABP').

Item	Subordinate Item	Description
Activation Mode Setting	Activation Mode	Activation mode setting.
Activation Info Setting	Device EUI	Device classification. Requires pre-provisioning of N/W server and device when operation.
	Application EUI	Service division. Requires pre-provisioning for N/W server and device when opening operation.
	Application Key	Main Root-Key for Encryption/Decryption Key Generation.
	Device Address	Assigned to LoRa device during the opening call processing procedure.
	Application Session Key	Key value for encrypting and decrypting application data in device and N/W server.
	Network Session Key	Key value for encrypting and decrypting application data and checking data integrity in device and N/W server.

Device Settings

Provides device's IP lease status, Auto Power Saving Setup, Web Password Setup, Factory Reset, USB Tethering Setup.

- **IP Lease Status**
    - The client connected to the MiFi (IML-C6400W) currently is
- **Auto power saving setting**
    - Automatic power saving time
- **Change Password**
    - Please enter your current
    - Type in new password to use from now on.
    - Type in the same password twice to confirm the new password and then click on 'Save' Button.
- **Reset Settings**
    - Reset to the default configuration. The device will restart when the factory reset button is selected.
- USB Tethering
    - USB Tethering can be set to 'Active' or 'Deactive'.

Upgrade

System can be updated by firmware files downloaded from the manufacturer's homepage. System shall be rebooted after updating.
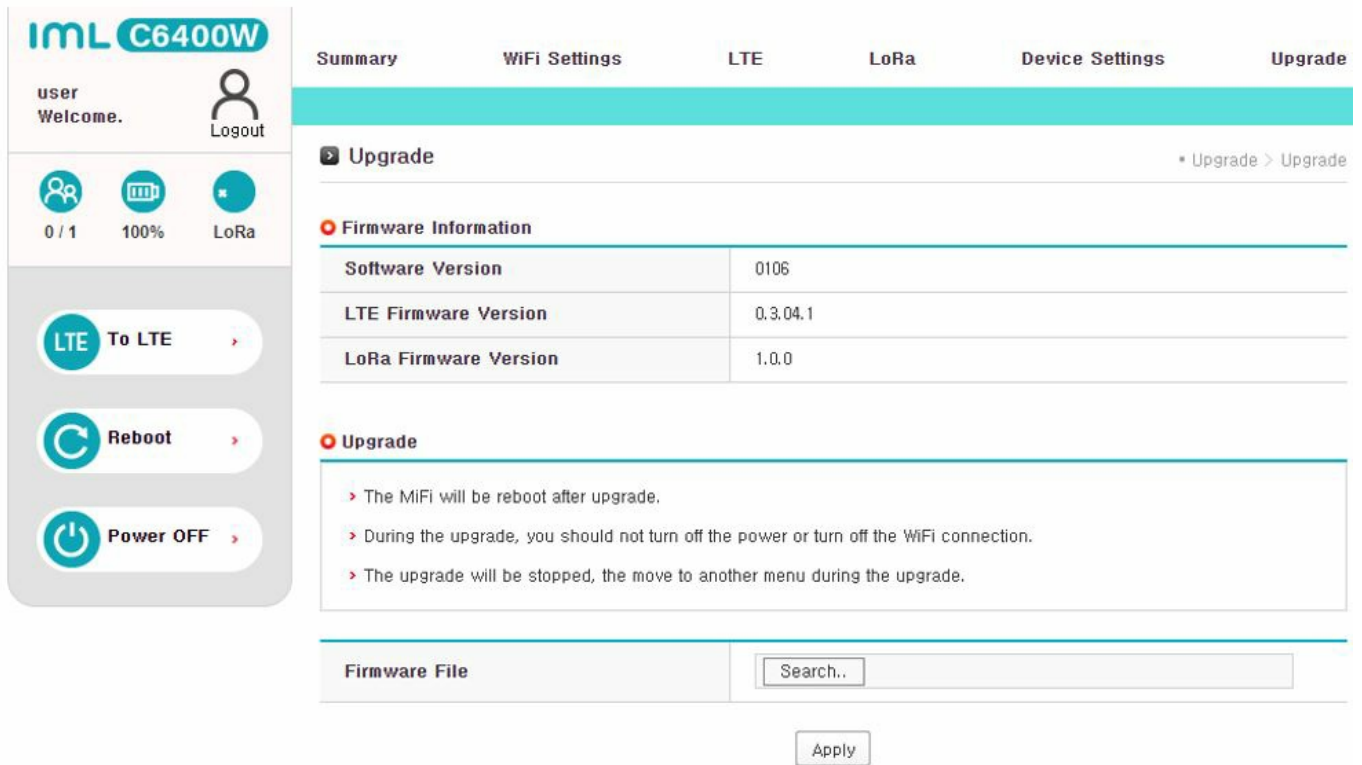
- **Firmware Information**
  - Shows the current software version for MiFi device, including the LTE and LoRa firmware version.

Upgrade

1. Download the latest version into your computer.
2. Select the file downloaded in the file selection window, and click the 'Search..' button.
3. Click the 'Apply' button, then update will start.
4. Software update takes about 3 minutes, and the device will restart after finishing the update.

Caution

- Do not move to other menu in the web site, disconnect, or turn off power.
- Malfunction may result.
- The device may malfunction is the wrong firmware file is applied

Troubleshooting Guide

Unable to connect to the network

- Check the power of the MiFi device
- If there is no light on the LED, press & hold the Power button for 3 seconds to turn on the Mifi device
- Check the network signal strength through the LTE/LoRa signal strength
- Reboot the MiFi device

How to Factory Reset MiFi
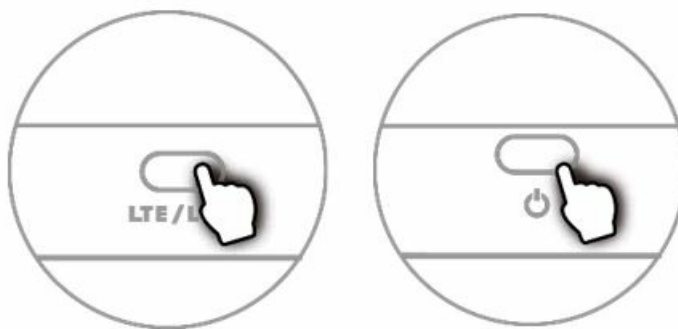
Initialize the MiFi settings

- If you have changed your Login Password and forgotten it, reset your MiFi device to the factory default settings as follows.
    - **Initialization method using buttons**

      Press & hold Power button and LTE/LoRa button for about 10 seconds at Power on state.
    - **Initialization method using Web Portal**

      After logging in to the Web Portal à Click [Device Settings] menu à Click [Factory Reset(Default Setting)] – [Apply]

Note: LoRa setting is initialized after factory reset. Please contact the Administrator for the LoRa settings.

Product Specification

Model Name		IML-C6400W
Product Name		LTE Mobile WiFi
FCC ID		YCO-IML-C6400W
LTE	Standard	3GPP E-UTRA LTE-FDD UE Category 4
	Frequency	B26
Size / Weight		61x91x15mm / 105±5g
Battery Capacity		3300mAh
Charging Current Rating		DC 5V 2A
Charging Time		3 Hr 30m
Charging Temperature		0 ~ +45℃
Operating Temperature		-20 ~ +60℃
Manufacturer / Made in		Infomark Co., Ltd. / Republic of KOREA
Manufacturing Date		Refer to product label

For Safe and Proper Use

The followings are compliance matter in order to prevent hazard on the user or other persons or property damage and safely and properly use this product.

※ It includes matters on the main body, accessory AC Adaptor.

※ We are not responsible for any problems if unapproved accessories are used.

These basic accessories are subject to change without prior notice.

Meaning of Symbols

Symbols requiring warning and caution

Caution on Ignition

Caution on Electric Shock

Symbols prohibiting actions

General Prohibitions

Do not Wet

Do not Disassemble

Do not use with Wet Hands

Do not use fire

Symbols directing actions

General Direction

Separate Consent from Power Plug

Danger

A serious or fatal injury may result if instructions are not followed.

It may cause heating, explosion or ignition.

- For charging, never use other chargers other than the standard charger
- Do not make short circuit of battery terminals, expose the product to fire or water,

Warning

A serious or fatal injury may result if instructions are not followed

If the product generates abnormal sounds, a burning smell or smoke, disconnect the power cord immediately and contact the Administrator. A fire or electric shock may result.	
Do not submerge or wet this product in the water, etc. When using it outdoor, be careful not to make it wet with rain, etc. If any water permeates into the product, promptly turn OFF power of it. If it continues to be used, it may cause fire, electric shock or fault.	
Do not place objects containing liquid (vases, pots, bottles, etc) or metallic objects on top of the product. – Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Contact the Administrator. – Product failure, an electric shock or fire may result.	
Do not drop objects on the product or apply impact. – A fire, electric shock may result.	
There is a high voltage inside the product. Never disassemble, modify or repair the product yourself. – A fire or electric shock may result. – Contact your Adminstrator for repairs.	
Do not handle the product with wet hands. Otherwise, an electric shock may result.	
When mounting any implantable pacemaker or implantable cardioverter- defibrillator (ICD), carry and use the product away from mount 22cm or more. Radio wave may have effect on operation of the implantable pacemaker or implantable cardioverter-defibrillator (ICD).	
When inside the medical facilities, please use this product complying the followings: – Do not carry this product into the operation room, intensive care unit (ICU), or coronary care unit (CCU). – Within the ward, please turn OFF the product. Even on the lobby, etc. where medical instruments exist, please turn OFF the product.	

– In areas of prohibited use or carriage, please follow instructions from each medical institute.
In areas where the use of wireless equipment is restricted e.g. within airplane or hospital, etc., please turn OFF the product. –   Accidents may result due to possible effect on the electronic appliance or medical instrument.
If it may have effect on the automatic control equipment such as automobile, elevator or automatic door, etc., please turn OFF power of this product promptly. It may obstruct safe running or safe progress.
Do not keep containers with fluid such as flower vase, flower pot, cup, cosmetics, medicine, water, etc. or small metal piece near this product. Content spills to contact this product or enters into this product, please turn OFF power of this product promptly. – A fire, electric shock or fault may result if the product continues to be used.
Do not use or keep this product on the places with high humidity such as within bathroom, around humidifier, etc. It may cause fire, electric shock or fault.
Pay attention not to allow a child to handle with this product. If a child enters this product in the mouth, it may cause suffocation.

Caution

A serious or fatal injury may result if instructions are not followed

Do not expose the product to direct sunlight, heat, or a hot object such as a stove. – The product lifespan may be reduced or a fire may result.
Do not keep the product in a vehicle or a place exposed to dust, moisture (water drips, etc.), oil, or smoke. – A fire or electric shock may result.
Do not put the product on unstable places such as swinging base or inclined place, etc. In addition, do not place any heavy object on this product. – Product failure or personal injury may result
Do not put this product on the places with extreme temperature change such as around refrigerator, heater, etc. – A fire, electric shock or fault may result.
During a lightning or thunderstorm, power off the product and remove the power cable. When at outdoors, please evacuate to the safe area promptly.

– An electric shock or fire due to lightning may result.
This product may increase temperature even under normal state (during or after using). Extensive contact or body touch may cause cold burn.
Do not carry this product in the pocket. Any applied force may cause damage or fault.
Depending on physical habitude, paint or metal, etc. used in this product may result in symptoms such as itching or allergy, etc. Please stop using the product promptly and seek medical attention.
Keep this product at -10 to 60℃

Caution on Use

- For safe and proper use of this product, do not use it in the following
    - Places with vibration
    - Places where evaporated chemical is stacked or there is direct contact with the chemical
    - Around equipment with strong magnetic field such as microwave, oven or radio, TV,
    - Around electric welding machine or high frequency sewing machine with high frequency noise.
- Do not expose the product to hot temperature or direct sunlight. In addition, do not store or leave it at high temperature such as inside the car, etc. for a long time during the summer, but use it on the place with good
- When using this product around TV, radio, wireless phone, etc. and it results in receiving obstruction, etc., please use it away from the
- Do not clean this product with benzene, thinner, alcohol or detergent, etc. It may cause discoloration, damage or fault. Please clean with soft
- If the computer turns OFF during communication or this product is disconnected, communication may not operate or data may be damaged. Please check and compare important data with the original data after
- Though this product does not generate much heat, if it becomes too hot to touch with hand, please stop using it promptly and visit the customer support

Restrictions on use

- It is a pre-requisite to use this product within the country. It cannot be used in any foreign country.
- It cannot be used in other areas except for WiMAX service
- Where the WiMAX signal is difficult to be transmitted even within the service area (indoor, within a car, underground, within a tunnel, shadow area, mountainous area, etc.), it cannot be connected or communication speed becomes slow. In addition, please note that it may not be used in open area such as high-rise buildings,
- Propagation status or transmission speed of WiMAX may vary depending on building structure, or material, furniture arrangement, moving speed of the user,
- When propagation conditions become worsen under a certain level, communication may be suddenly disconnected. However, even under good propagation conditions, communication may be
- Though this product may be available for safe communication using authentication and encryption technology, as it uses RF wave, communication may be monitored by the third party. For safe communication security, please apply the security settings on the computer for use before using this
- When using the product in a pocket or a bag for a long time, it may increase
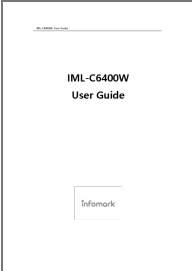
FCC Statements

- 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, and
- this device must accept any interference received, including interference that may cause undesired operation.
- 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

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
- Increase the separation between the equipment and
- 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
- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device must not be co-located or operating in conjunction with any other antenna or
- Your device is a radio transmitter and receiver. It is designed and manufactured not to exceed the exposure limits for Radio Frequency (RF) energy set by the Federal Communications Commision (FCC) of the U.S.
- The product complies with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual

Documents / Resources

IML-C6400W User Guide **IML-C6400W** **User Guide** Infomark	**infomark IML-C6400W LTE Mobile WiFi** [pdf] User Guide IML-C6400W, YCO-IML-C6400W, YCOIMLC6400W, IML-C6400W LTE Mobile WiFi, LTE Mobile WiFi, Mobile WiFi, WiFi