



## Vodafone USB Connect 5G (IK512US) Safety Manual



Read the safety information section of this safety manual below



Do not use hand-held devices while driving



Small parts may cause a choking hazard



Keep away from pacemakers and other personal medical devices



Switch off when instructed in hospitals and medical facilities



Switch off when instructed in aircrafts and airports



Switch off in explosive environments



Do not use while re-fuelling



For body-worn operation maintain a distance of 5 mm from your body



Do not dispose of in a fire



Avoid contact with magnetic media



Avoid Extreme Temperatures



Avoid contact with liquid, keep dry



Do not try and disassemble



Do not rely on this device for emergency communications



Only use approved accessories

### WEEE approval

This device is in compliance with the essential requirements and other relevant provisions of the Waste Electrical and Electronic Equipment Directive 2012/19/EU (WEEE Directive).



This symbol on this device means that these products must be taken to collection points at the end of their life:

- Municipal waste disposal centers with specific bins for these types of equipment.
- Collection bins at points of sale.

They will then be recycled, so that their components can be reused, and to prevent substances being disposed of in the environment.

#### In European Union countries:

These collection points are accessible free of charge. All products with this symbol must be brought to these collection points.

#### In non-European Union jurisdictions:

Items of equipment with this symbol are not to be thrown into ordinary bins if your jurisdiction or your region has suitable recycling and collection facilities; instead they are to be taken to collection points for recycling.

### SAR and radio waves

This device meets international guidelines for exposure to radio waves.

The radio wave exposure guidelines use a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit for wireless devices is 2.0 watts/kilogram (W/kg) for body-worn SAR and 4.0 watts/kilogram (W/kg) for limb SAR. The highest SAR value for this device when tested complied with this limit.

When carrying the product or using it while worn on your body, maintain a distance of 5 mm from the body to ensure compliance with RF exposure requirements.

Maximum SAR for this model and conditions under which it was recorded.		
Body-Worn SAR (10 mm)	LTE Band 7	0.54 W/kg
Limb SAR (0mm)	5G n77/n78	1.21 W/kg

### Radio equipment directive declaration of conformity



Hereby, Vodafone declares that USB Connect 5G (IK512US) is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <https://www.vodafone.com/business/iot/iot-devices/integrated-terminals>

### FCC statement

#### FCC compliance (when US bands are supported)

Federal Communications Commission Notice (United States): Before a wireless device model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the

government-adopted requirement for safe exposure.

The SAR limit for USB Modems adopted by the USA is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The highest SAR value reported to the FCC for this device type was compliant with this limit.

IK512US	FCC ID: 2ACCJSCD002 The highest SAR value for this device when tested is 0.99 W/kg for use close to the body.
---------	--

For body-worn operation, the USB modem 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

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 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.

### Distraction

#### Driving

Full attention must be given to driving at all times in order to reduce the risk of an accident. Using this device while driving causes distraction and can lead to an accident. You must comply with local laws and regulations restricting the use of wireless devices while driving.

#### Operating machinery

Full attention must be given to operating the machinery in order to reduce the risk of an accident.

### Product handling

You alone are responsible for how you use your device and any consequences of its use.

You must always switch off your device wherever the

use of a USB Stick is prohibited. If your device has clip-on covers, do not use it without the covers attached and do not remove or change them while using the device. Use of your device is subject to safety measures designed to protect users and their environment.

- Always treat your device and its accessories with care and keep it in a clean and dust-free place.
- Do not expose your device or its accessories to open flames or lit tobacco products.
- Do not expose your device or its accessories to 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 or its accessories: only authorised personnel must do so.
- Do not expose your device or its accessories to extreme temperatures, minimum  $-20^{\circ}\text{C}$  and maximum  $+55^{\circ}\text{C}$ .
- Do not use your device in an enclosed environment or where heat dissipation is poor. Prolonged use in such space may cause excessive heat and raise ambient temperature, which will lead to automatic shutdown of your device or the disconnection of the mobile network connection for your safety. To use your device normally again after such shutdown, cool it in a well-ventilated place before turning it on.
- Please check local regulations for disposal of electronic products.
- Do not carry your device in your back pocket as it could break when you sit down.
- Do not operate the device where ventilation is restricted - for example, do not operate inside a jacket pocket, inside a handbag or in any confined space.

### Small children

Do not leave your device and its accessories within the reach of small children or allow them to play with it. They could hurt themselves or others, or could accidentally damage the device.

Your device contains small parts with sharp edges that may cause an injury or which could become detached and create a choking hazard.

### Air bags

Do not place this device in the area over an air bag or in the air bag deployment area. Store the device safely before driving your vehicle.

### Emergency situations

This device, like any wireless 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.

### Device heating

Your device may become warm during charging and during normal use.

### WEEE approval

The wireless device is approved to be used in the member states of the EU. The manufacturer declares that the wireless device is in compliance with the essential requirements and other relevant provisions of the Waste Electrical and Electronic Equipment Directive 2012/19/EU (WEEE Directive).

## Electrical Safety

### Accessories

Only use approved accessories.

Do not connect with incompatible products or accessories.

### Faulty and damaged products

Do not attempt to disassemble the device or its accessory.

Only qualified personnel must service or repair the device or its accessory.

If your device or its accessory has been submerged in water, punctured, or subjected to a severe fall, do not use it until you have taken it to be checked at an authorised service centre.



## Interference

Care must be taken when using the device in close proximity to personal medical devices, such as pacemakers and hearing aids.

### Pacemakers

Pacemaker manufacturers recommend that a minimum separation of 15 cm be maintained between a device and a pacemaker to avoid potential interference with the pacemaker.

### Hearing aids

People with hearing aids or other cochlear implants may experience interfering noises when using wireless devices or when one is nearby.

The level of interference will depend on the type of hearing device and the distance from the interference source, increasing the separation between them may reduce the interference. You may also consult your hearing aid manufacturer to discuss alternatives.

### Medical devices

Please consult your doctor and the device manufacturer to determine if operation of your device may interfere with the operation of your medical device.

### Hospitals

Switch off your wireless device when requested to do so in hospitals, clinics or health care facilities. These requests are designed to prevent possible interference with sensitive medical equipment.

### Aircraft

Switch off your wireless device whenever you are instructed to do so by airport or airline staff.

Consult the airline staff about the use of wireless devices on board the aircraft. If your device offers a 'flight mode' this must be enabled prior to boarding an aircraft.

### Interference in cars

Please note that because of possible interference to electronic equipment, some vehicle manufacturers forbid the use of devices in their vehicles unless an external antenna is included in the installation.

## Explosive environments

### Petrol stations and explosive atmospheres

In locations with potentially explosive atmospheres, obey all posted signs to turn off wireless devices such as your device or other radio equipment.

Areas with potentially explosive atmospheres include fuelling areas, below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grain, dust, or metal powders.

Consult the airline staff about the use of wireless devices on board the aircraft. If your device offers a 'flight mode' this must be enabled prior to boarding an aircraft.

### Blasting caps and areas

Turn off your device or wireless device when in a blasting area or in areas posted turn off "two-way radios" or "electronic devices" to avoid interfering with blasting operations.

### Software information

The product software version is VDF\_IK512 UO\_01.00\_32 or later. Software updates will be released to enhance usability of the product.

### Software update

By continuing to use this device, you indicate that you have read and agree to the following content:

In order to provide better service, this device can be configured to automatically obtain software update information from Vodafone or our suppliers after connecting to the Internet.

This process will use mobile data, and requires access to your device's unique identifier (IMEI/ Serial Number) and the service provider network ID (PLMN) to check whether your device needs to be updated.

In addition, this device supports the automatic downloading and installation of important updates from Vodafone or our suppliers e.g. to provide security updates.

Scan the QR code below to download the Quick Start Guide, and learn more about the Vodafone USB Connect 5G modem.



## Supplementary Notice for the User manual

The antenna gain for the External Antennas which are allowed to be used are as below:

Ant1:

Band	Maximum Gain(dBi)
LTE-FDD B2	$\leq 2.3$
LTE-FDD B4	$\leq 4.0$
LTE-FDD B5	$\leq 0.3$
LTE-FDD B7	$\leq 0.3$
LTE-FDD B12	$\leq 2.7$
LTE-FDD B14	$\leq 2.4$
LTE-FDD B17	$\leq 2.7$
LTE-FDD B25	$\leq 2.6$
LTE-FDD B26	$\leq 0.3$
LTE-FDD B30	$\leq 1.8$
LTE-FDD B66	$\leq 4.0$
LTE-FDD B71	$\leq 1.8$
NR-FDD B2	$\leq 2.3$
NR-FDD B5	$\leq 0.3$
NR-FDD B12	$\leq 2.7$
NR-FDD B14	$\leq 2.4$
NR-FDD B25	$\leq 2.6$
NR-FDD B30	$\leq 1.8$
NR-FDD B66	$\leq 4.0$
NR-FDD B70	$\leq 4.0$
NR-FDD B71	$\leq 1.8$

ANT2:

Band	Maximum Gain(dBi)
LTE-FDD B2	$\leq 2.0$
LTE-FDD B4	$\leq 3.0$
LTE-FDD B7	$\leq 2.7$
LTE-FDD B30	$\leq -0.6$
LTE-TDD B38	$\leq 1.7$
LTE-TDD B41	$\leq 2.7$
LTE-FDD B66	$\leq 3.0$
NR-FDD B2	$\leq 2.0$
NR-FDD B25	$\leq 2.0$
NR-TDD B38	$\leq 1.7$
NR-TDD B41	$\leq 2.7$
NR-FDD B66	$\leq 3.0$