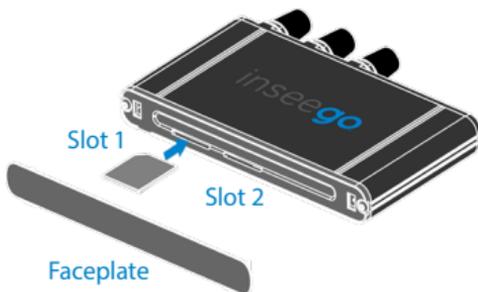# inseego

Skyus DS2
by Inseego

Quick Start Guide

before you **start**

SIM Install

1. Install a Micro 3FF SIM into Slot 1 of your device.

    (Note: It is not recommended to use a combo SIM or SIM adapter)

2. Activate the SIM with your carrier.

3. Follow the basic setup instructions on the next page to connect to your device.

Slot 1

Slot 2

Faceplate

## SIM Type

Mini 2FF

Micro 3FF

Nano 4FF

initial **setup**

System Requirments

1.   Windows 8 or newer, Linux 2.6.32 or later, or Ubuntu 14.04 or later required.

2.   Install the appropriate drivers onto your system from
     https://www.inseego.com/software-downloads/.

3.   Drivers and SDK integration is required for use with Linux-based systems, files
     can be accessed from the link above.

4.   USB 2.0 port (5VDC @ 1A) required.

Connect your Device

1.   Connect antennas to both of the
     outer SMA connectors for cellular
     connection.

2.   Connect an antenna to the middle
     SMA connector for GNSS connection.

3.   Connect the device to your system
     with the provided USB cable.
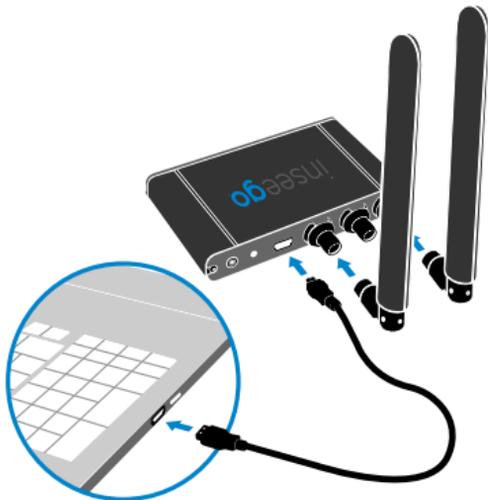
switch **carriers**

Skyus DS2

The Skyus DS2 is capable of supporting all major carriers, but is capable of storing up to four carrier firmware images on the device at the same time to simplify deployment. When loaded with the appropriate firmware, switching carriers is as simple as loading the appropriate SIM card.

Install

1. Download the Skyus Support Tool (SST) from:
   https://www.inseego.com/software-downloads/

2. Run the SST and connect your device to your PC using the provided USB cable.

3. The SST will automatically display your current device information on the 'Home' tab.

4. After the device information is loaded, proceed to the 'Config' tab.

5. Select the firmware you wish to load onto your device, and click the 'Load Firmware' button.

regulatory statements

$$C\epsilon$$

The statements below are applicable to the following Models:
- SKYUS DS EU
- SKYUS DS2 APAC
- SKYUS DS2

Inseego Corp. declares that SKYUS product is in compliance with the Radio Equipment Directive 2014/53/EU, its essential requirements and other relevant provisions of the directive.

The Declaration of Conformity may be consulted at Inseego Corp., 9710 Scranton Rd., Suite 200 San Diego , USA.

A full copy of the declaration of conformity can be found at https://www.inseego.com/support/

regulatory **statements cont.**

Radio Frequency and Transmitted Output Power Information:

Model	Frequency Band	Tranmitted Power
SKYUS DS EU	LTE Band 1,3,8,20	23 dBm ±1dB
	LTE Band 7	22 dBm ±1dB
	UMTS Band 1, 2, 5, 8	23 dBm ±1dB
	GSM850 CS	32 dBm ±1dB
	EGSM900 CS	27 dBm ±1dB
SKYUS DS2 APAC	LTE Band 1,3,5,8,18,19,21,28,39	23 dBm ±1dB
	LTE Band 7, 38, 40, 41	22 dBm ±1dB
	UMTS Band 1, 5, 6, 8, 9, 19	23 dBm ±1dB
	TD-SCDMA Band 39	23 dBm ±1dB
SKYUS DS2	LTE Band 1,2,3,4,5,8,12,13,20,25,26	23 dBm ±1dB
	LTE Band 7,30,41	22 dBm ±1dB
	UMTS Band 1, 2, 3, 4, 5, 8	23 dBm ±1dB

Installed Software or Firmware are not relevant for the compliance with the essential requirements and do not influence the power, frequency and modulation of the radio module.

RF Radiation Exposure Content:

- This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- This equipment is authorized only for Mobile applications and is required to be installed as such.
- This equipment must be installed and operated with a minimum separation of 20 cm (8 in.) between the equipment and users/bystanders at all times.

Cellular External Antenna Considerations:

- To comply with EN 62311 RF Exposure Requirements, the Maximum Antenna Gain Must Not Exceed:
1. SKYUS DS EU = 9dBi.
2. SKYUS DS APAC = 8dBi
3. SKYUS DS2 = 9 dBi

regulatory information USA

This FCC statement is applicable to the following model: SKYUS DS2. Contains FCC ID: N7NMC7455.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the auser's authority to operate the equipment. 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 environment. 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: Re-orient or re-locate the receiving antenna. Increase the separation between the equipment and the receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experience radio/television technician for help.

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.
2. This device must accept any interference received, including interference that may cause undesired operation of the device.

FCC RF radiation exposure content:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter,
2. except in accordance with FCC multi-transmitter product procedures.
3. This equipment is authorized only for Fixed or Mobile applications and is required to be installed as such.
4. This equipment must be installed and operated with and operated with a minimum separation of 20 cm (8 in.) between the equipment and users/bystanders at all times

Cellular external antenna considerations:

1. External Antenna(s) Included: There are no included external antennas.
2. To comply with FCC RF exposure requirements, the maximum cellular antenna gain must not exceed:

Model	Cellular Bands	Antenna Gain (including cable loss)
N7NMC7455	WCDMA B2, B4, B5	6dBi
	LTE B2, B4, B12, B13, B25	6dBi
	LTE B30	1dBi
	LTE B7, B41	9dBi

regulatory information Canada

This ISED Canada statement is applicable to the following models:
SKYUS DS2   Contains IC: 2417C-MC7455

ISED RSS-Gen Notice:
This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:
1. This device may not cause interference; and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
1. l'appareil ne doit pas produire de brouillage;
2. l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

ISED RF Exposure Guidance:
In order to comply with FCC/ISED RF Exposure requirements, this device must be installed to provide at least 20 cm separation from the human body at all times.

Afin de se conformer aux exigences d'exposition RF FCC / ISED, cet appareil doit être installé pour fournir au moins 20 cm de séparation du corps humain en tout temps.

ISED ICES-003 Notice: CAN ICES-3 (B)/NMB-3(B)

regulatory information Republic of Korea

Applicant company name:
Inseego Corp.

This statement is applicable to the following models:
SKYUS DS2 APAC   KC ID: R-R-iSg-SKYUSDS2APAC

This device contains a certified cellular module:
Manufacturer: Sierra Wireless, Inc.
Model: MC7430
KC ID: MSIP-CRM-SWK-MC7430

Power rating:
5 volts, 1 ampere, 5 watts

Korean service provider contact:
Enel X Korea Limited (Tax ID: 120 88 08323)
7F AIA Tower 7th floor Tongil-ro 2-gil Jung-Gu
Seoul, 100-130
South Korea
+82-10-7142-2729

Manufacturer, country of origin:
Asiatelco Technologies Co., China

Manufacture date:

additional **information**

APN - Access Point Name
For your Skyus DS2 to successfully connect to the internet, it needs to have the correct carrier-specified APN selected. If you do not know the correct APN for your device, please contact your cellular carrier. Download and use the Skyus Support Tool (SST) from the product web page to confirm and/or set the correct APN.

Drivers
Drivers are required to use the Skyus USB device with Windows or Linux-based systems. Windows drivers, Linux SDKs, and integration guides are available on our website at: https://www.inseego.com/software-downloads/

Connection Manager
A connection manager from the host device is required to manage the cellular connection of the Skyus device (establish and maintain the connection) in both Windows and Linux-based systems. For Windows, Skyus USB modems are managed by Windows Mobile Broadband. For Linux, a connection manager must be integrated with the SDKs provided on the software download page.

Activation
SIM activation is required to use the device. To complete or verify activations, contact your carrier representative. PLEASE NOTE: It will take at least 30 minutes to connect with your device after the activations process has been completed.

frequently asked questions

Q: What hardware/operating systems support the Skyus USB Modem?

A: Drivers and connection management files are available for Windows 8 or newer, Linux kernel 2.6.32 or later, and Ubuntu 14.04 or later.

Q: How do I set up port forwarding or other routing rules on the Skyus USB modem?

A: The Skyus USB modem provides a WAN interface to the host system (similar to an Ethernet card or a Wi-Fi module), and does not manage the flow of any IP traffic. Any routing functions are handled by the host system.

Q: How do I use GPS?

A: With an appropriate antenna installed on the central port, the device will obtain a GPS fix. To access the GPS data, a separate application or SSH connection to the device is required on the host system to make use of the GPS data.

Q: Do I need to have antennas connected?

A: Yes. Unlike consumer-grade USB modems, appropriate cellular antennas are required on both the Primary and Diversity antenna connectors (outer connectors).