

insee**go**

# Skyus 3G Global

## Quick Start Guide



## Preface

### Copyright

© 2017 Inseego Corp. All rights reserved.

This document may not be copied in part or otherwise reproduced without prior written consent from Inseego Corp. except where specifically permitted under US and International copyright law.

### Disclaimer

The information in this document is subject to change without notice. Inseego Corp. assumes no responsibility for inaccuracies or omissions and specifically disclaims any liabilities, losses, or risks, personal or otherwise, incurred as a consequence, directly or indirectly, of the use or application of any of the contents of this document. For the latest documentation, contact your local supplier or visit us online at [www.inseego.com](http://www.inseego.com).

This publication may contain examples of screen captures and reports used in daily operations. Examples may include fictitious names or individuals and companies. Any similarity to names and addresses of actual businesses or persons is entirely coincidental.

### Trademarks and Patents

Inseego Corp. and the Inseego logo are trademarks of Inseego Corp. Skyus, Skyus 3G, Skyus 4G, Skyus Global, CIRA, CIRA X, CIRA X2, and Axiom are trademarks of Inseego Corp. VaraSight and the VaraSight logo are trademarks of Inseego Corp.

Other trade names used in this document may be trademarks or registered trademarks of the manufacturers or vendors of the respective products.

### Intended Use

Use this product only for the purpose it was designed for; refer to the datasheet and user documentation. For the latest product information, visit us online at [www.inseego.com](http://www.inseego.com).

*Document number 25-52-002-05 Rev C*

# Contents

- Overview .....3
  - Intended Audience .....3
  - Scope.....3
  - Environmental Specifications.....3
  - Power Consumption .....3
  - LED States.....4
- Installation Steps.....4
  - Packing List: Package Contents .....4
  - Operating Systems .....4
- Installation of Sierra Wireless Driver.....5
- Connecting the Antenna .....7
- Connecting to Computer or Router .....7
- Activation.....8
- Provisioning .....8
- Connection Manager .....8
  - Sierra Wireless Watcher .....8
- Contacting Inseego.....9
  - Online Library .....9
  - Return and Warranty.....9
  - Further Specifications.....9
- FCC Compliance ..... 10

## Overview

The Skyus platform is a rugged, low-cost, self-contained modem kit. The Skyus platform simplifies the integration efforts of adding mobile connectivity in M2M solutions and accelerates time-to-market for creating connected devices. In contrast to standalone radio modules, the Skyus uses a standard USB connection interface, making it readily compatible with the largest choice of host devices.

Integration of the Skyus into a Windows based system requires at a minimum two high level components, the **driver** and a mechanism to provide **connection management**. This document is intended to guide you through the process of connecting the hardware and setting up these two components.

### Intended Audience

This document is intended for users responsible for the initial set-up of the Skyus and assumes the installer possesses a basic working knowledge of computer networking, wireless routing and network administration.

### Scope

This Quick Start Guide focuses on the installation and configuration of the Skyus.

Inseego recommends initial set-up of the Skyus should be performed on a bench with a computer to gain some familiarity with the hardware and software of your system.

### Environmental Specifications

The Skyus 3G Global is designed to operate in a minimum ambient environment of -30 °C or -22 °F.

The Skyus 3G Global is designed to operate in maximum ambient environment of 60 °C or 140 °F.

### Power Consumption

The Skyus 3G Global power consumption is specified as: 500 mA at 5 VDC typical, 1 A peak.



Figure 1: Skyus Top View

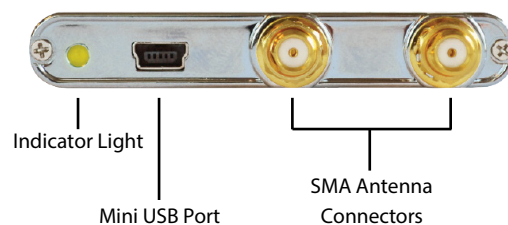


Figure 2: Skyus Ports

### LED States

| State      | Indicates   |
|------------|---|
| Off        | Module is not powered.  |
| On         | Module is powered and connected, but not transmitting or receiving. |
| Slow Blink | Module is powered and searching for a connection.                   |
| Fast Blink | Module is transmitting or receiving                                 |

### Installation Steps

- Inspect the package contents and compare against the packing list.
- Install the Sierra Wireless Driver.
- Connect the antenna.
- Connect the Skyus to a computer or router.
- Verify activation.
- Install the connection manager.
- Verify a connection to the internet.

### Packing List: Package Contents

| Item  | Description                        |
|-------|------------------------------------|
| Skyus | Skyus 3G Global Device             |
| Cable | USB 2.0 Type A Male to Mini B Male |

If, during inspection of package contents, you determine that you are missing an item, please contact your Inseego Service Representative.

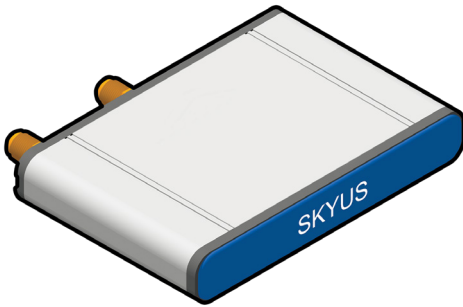


Figure 3: Package Contents: Skyus Global 3G

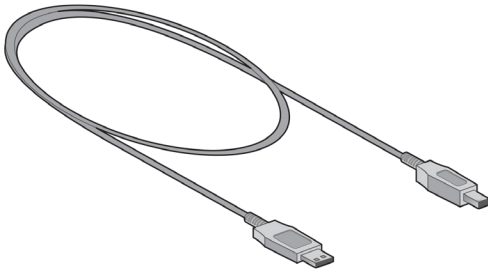


Figure 4: Package Contents: USB 2.0 Type A Male to Mini B Male

### Operating Systems

The information contained in this guide is focused on operating your device in a Windows environment. If your system is operating with a non-Windows application, please contact Inseego for guidance that is specific to your environment.

# Installation of Sierra Wireless Driver

The Skyus 3G Global utilizes an internal Sierra Wireless radio module. Drivers for Windows based platforms are provided in binary form by Sierra Wireless and are available for download on the Inseego website. For quick connection, download the driver only package directly from Inseego. This package is available here:

[www.inseego.com/downloads](http://www.inseego.com/downloads)

Under 'Skyus 3G Global Drivers' click the 'Download Files' button to begin downloading the driver file for installation.

To install the drivers for the Skyus 3G Global, you must first launch the *Command Prompt* application as an Administrator.

1. Open your start menu and navigate to accessories. (Not all desktops are the same, so you may need to navigate to another location.)
2. Once you have located the link for your *Command Prompt* application right-click on the option called 'Command Prompt' and select 'Run as administrator'.

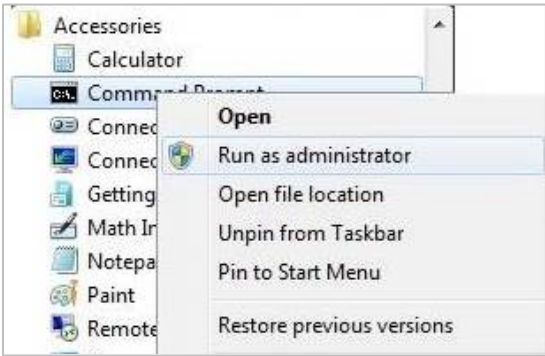


Figure 5: Command Prompt: Run as administrator

3. After your *Command Prompt* application has launched, navigate to the directory that contains the installer package.

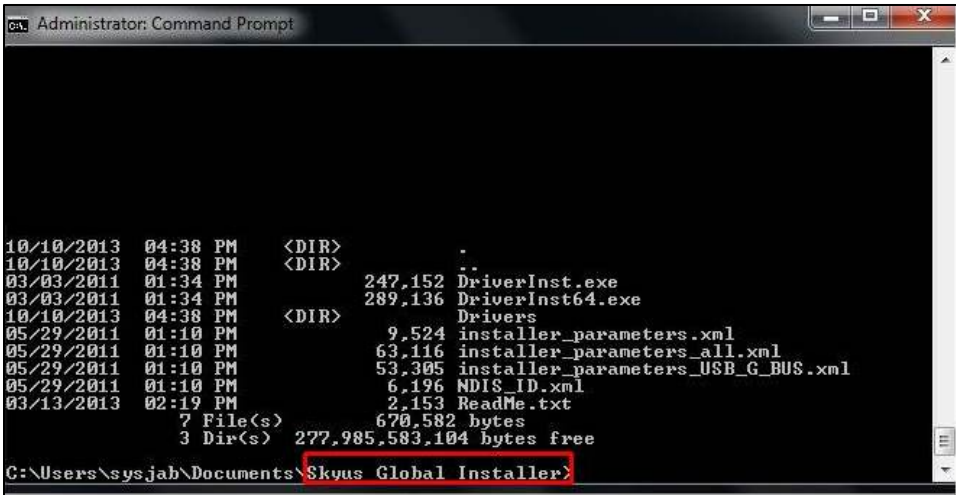


Figure 6: Command Directory

You can do this by using the CD (Command Directory) command to navigate. For example, Figure 6 was arrived at by entering the following:

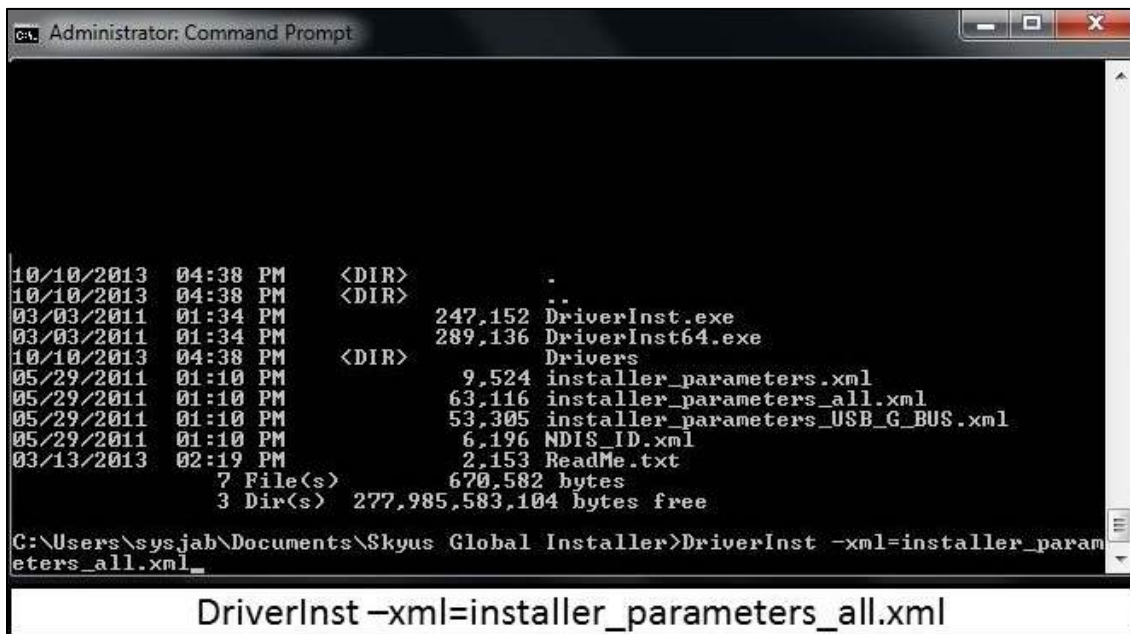
**NOTE:** Your directories and folder names will most likely be different than shown in Figure 6.

- Type **C:** (colon included) and press **Enter**.
  - This will establish the corresponding directory to be the one you are working in.
- Type **CD Users** (space between the two entries) and press **Enter**.
  - This will navigate to the 'Users' folder in this example.
- Type **CD sysjab** and press **Enter**.
  - This will navigate to the 'sysjab' folder in this example.
- Type **CD Documents** and press **Enter**.
  - This will navigate to the 'Documents' folder in this example.
- Type **CD Skyus Global Installer** and press **Enter**.
  - This will navigate to the Skyus Global Installer package that you downloaded earlier.

At this point, you can enter the command **DIR** followed by **Enter**, and you should see a window similar to the image shown in Figure 6.

4. Once you have navigated to the proper directory, enter the command shown at the bottom of Figure 7 and press **Enter**.

**NOTE:** There is a space necessary between the 't' in DriverInst and the hyphen in 'xml'.



```

Administrator: Command Prompt

10/10/2013 04:38 PM <DIR> .
10/10/2013 04:38 PM <DIR> ..
03/03/2011 01:34 PM          247,152 DriverInst.exe
03/03/2011 01:34 PM          289,136 DriverInst64.exe
10/10/2013 04:38 PM <DIR> Drivers
05/29/2011 01:10 PM          9,524 installer_parameters.xml
05/29/2011 01:10 PM         63,116 installer_parameters_all.xml
05/29/2011 01:10 PM        53,305 installer_parameters_USB_G_BUS.xml
05/29/2011 01:10 PM          6,196 NDIS_ID.xml
03/13/2013 02:19 PM          2,153 ReadMe.txt
              7 File(s)          670,582 bytes
              3 Dir(s)      277,985,583,104 bytes free

C:\Users\sysjab\Documents\Skyus Global Installer>DriverInst -xml=installer_param
eters_all.xml
DriverInst -xml=installer_parameters_all.xml
  
```

Figure 7: Command Prompt: Driver Installation Command

After you press **Enter**, you should see the window shown in Figure 8 appear in the lower right portion of the desktop.

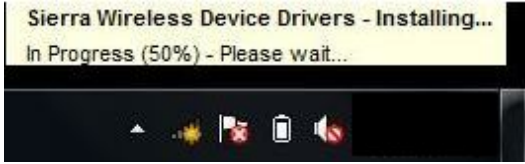


Figure 8: Sierra Wireless Device Drivers Installing

Once this window is removed, the installer has completed its installation.

## Connecting the Antenna

To ensure that you are using the appropriate cellular antenna, please contact your Inseego representative to provide the proper service to your installation.

**Band:** GSM/GPRS/EGPRS 850 / 900 / 1800 / 1900 MHz WCDMA/HSDPA 800 / 850 / 900 / 1900 / 2100 MHz

Connect the cellular antenna to the outermost antenna connection of the Skyus, as shown in Figure 9. The innermost antenna connection is primarily used for 4G devices. It is used to receive diversity and is optional.



Figure 9: 3G Antenna Connection

## Connecting to Computer or Router

Connect the Type A Male side of the enclosed USB cable to your computer or alternate host device.

Connect the Mini B Male side of the enclosed USB cable to the Skyus.



Figure 10: Type A Male USB



Figure 11: Type Mini B Male USB

Power is provided by the USB cable. Once connected, your Skyus will power up and attempt to register to the carrier.



## Activation

Your device is ready to be activated only after the cellular carrier sets up an account and provides a phone number, APN (Access Point Name), and/or IP address for your device. If you are not sure if your device has an account, contact your sales representative or Inseego technical support.

## Provisioning

Once your device is activated provisioning for the Skyus 3G Global is typically limited only to ensuring the proper APN (Access Point Name) has been selected. Configuration of this parameter is typically done via connection manager software or alternatively the *at+cgdcont* AT command. Contact Inseego technical support for more details.

## Connection Manager

### **Sierra Wireless Watcher**

Sierra Wireless provides a connection utility compatible with the Skyus 3G Global that can manage connections and display network coverage indication. For more information on Sierra Wireless Watcher go to [www.sierrawireless.com](http://www.sierrawireless.com) or contact your Inseego sales representative to obtain the Sierra Wireless Watcher installation package.

## Contacting Inseego

For help with installing, operating, maintaining, and troubleshooting this product, refer to this document and any other documentation provided.

If you still have questions, contact us during business hours:

Monday through Friday, excluding holidays, between 8 a.m. and 5 p.m. Pacific Time.

**Telephone: 800.683.4818**

When contacting technical support, please have the following information on-hand:

1. Serial Number
2. Date that you received your device
3. Brief description of the problem

### Online Library

For other documentation, see our online document library at:

[www.inseego.com/documents](http://www.inseego.com/documents)

### Return and Warranty

Inseego offers a standard one-year warranty on all hardware. For returns or warranty information, call our toll free number: 800.683.4818.

### Further Specifications

For more specifications please see the Skyus Technical Specifications sheet at [www.inseego.com/documents](http://www.inseego.com/documents).

## FCC Compliance

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 when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communication. Inseego does not guarantee that interference will not occur in a particular installation.

Operation is subject to the following conditions:

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

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

If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- a. Reorient or relocate the receiving antenna.
- b. Increase the distance between the equipment and the receiver.
- c. Connect the equipment to outlet on a circuit different from that to which the receiver is connected.
- d. Consult the dealer or an experienced radio/TV technician for help.

**Exposure to RF radiation** - To comply with FCC RF exposure compliance requirements, for mobile configurations, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons. Do not collocate or operate this device in conjunction with any other antenna or transmitter.

Contains TX module FCC ID: N7NMC8795