

FW

# Skyus™ 3G

Quick Start Guide  
Verizon



## Preface

### Copyright

Copyright © 2013 Feeney Wireless LLC. All rights reserved.

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

### Disclaimer

The information in this document is subject to change without notice. Feeney Wireless ("Feeney") 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.feeneywireless.com](http://www.feeneywireless.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

Feeney and the Feeney logo are trademarks of Feeney Wireless LLC.

Skyus, Skyus 3G, Skyus 4G, CIRA, CIRA X, CIRA X2, Axiom are trademarks of Feeney Wireless LLC. VaraSight and the VaraSight logo are trademarks of Feeney Wireless LLC.

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.feeneywireless.com](http://www.feeneywireless.com).

## Table of Contents

<b>Overview .....</b>	<b>1</b>
Intended Audience .....	1
Scope .....	1
Environmental Specifications .....	2
Power Consumption .....	2
<b>Installation Steps.....</b>	<b>2</b>
Packing List: Package Contents.....	2
Operating Systems.....	3
<b>Installation of Sierra Wireless Driver.....</b>	<b>3</b>
<b>Connecting the Antenna .....</b>	<b>4</b>
<b>Connecting to Computer or Router.....</b>	<b>5</b>
<b>Activation .....</b>	<b>5</b>
<b>Provisioning .....</b>	<b>5</b>
<b>Connection Manager.....</b>	<b>8</b>
Skyus Watcher Utility .....	8
Sierra Wireless.....	9
<b>Contacting Feeney Wireless.....</b>	<b>10</b>
Online Library .....	10
Return and Warranty .....	10
Further Specifications.....	10
<b>FCC compliance .....</b>	<b>11</b>

## 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 3G 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. For information necessary above and beyond this level of operation, please refer to the User's Manual.

Feeney Wireless 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.



Fig 1. Skyus Product Photo

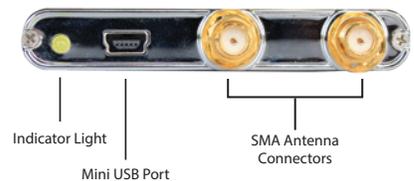


Fig 2. Skyus Ports



Fig 3. Skyus Top View

### Environmental Specifications

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

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

### Power Consumption

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

## Installation Steps

1. Inspect package contents and compare against packing list.
2. Install Sierra Wireless Driver.
3. Connect antenna.
4. Connect to computer or router.
5. Verify activation.
6. Install connection manager.
7. Verify a connection to the internet.

### Packing List: Package Contents

Item	Description
Skyus	Skyus 3G Device
Cable	USB 2.0 Type A Male to Mini B Male
Documentation	Quick Start Guide

If, during inspection of package contents, it is determined that you are missing an item, please contact your Feeney Wireless Service Representative.

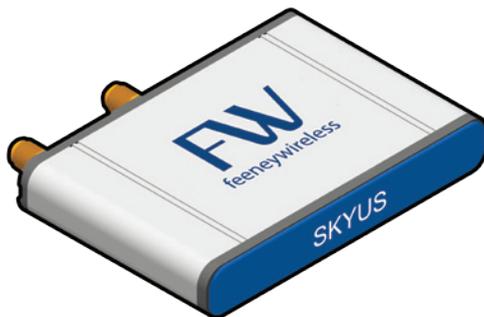


Fig 4. Skyus Skyus 3G

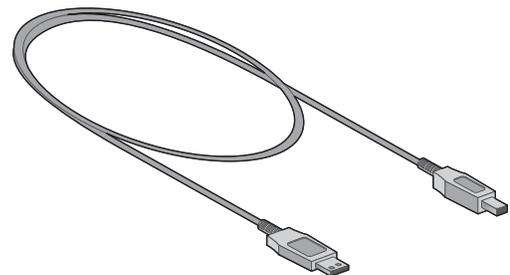


Fig 5. USB Cable USB 2.0 Type A Male to Mini B Male

## 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 Feeney Wireless for guidance that is specific to your environment.

## Installation of Sierra Wireless Driver

The Skyus 3G 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 Feeney Wireless website. For quick connection, download driver only package directly from Feeney Wireless. This package is available here:

<http://www.feeneywireless.com/downloads/Skyus3GVZW>

This link will activate/prompt the user to begin downloading the “SWUSBDRIVER\_SKY3GVZW.exe” file for installation.

*If you are working on the device you intend to use the Skyus Device with proceed with installation on the local drive.*

*If you are working on a separate device from the one you intend to use the Skyus Device with, save the file to a portable media device which will be used to install the drivers on the separate device.*

Begin the installation of the Sierra Wireless drivers by clicking on **SWUSBDRIVER\_SKY3GVZW.exe** driver installation file.



Fig 6. Sierra Wireless Driver Installation

Follow the necessary steps to finish the installation until the screenshot matches the image shown in Figure 7.



Fig 7. Sierra Wireless Installation Completed

## Connecting the Antenna

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

**Band:** CDMA 1xRTT/EV-DO RevA 850/1900 MHz

Connect the cellular antenna to the device. The connection will be made to the outer-most antenna connection shown in the image below. The interior antenna connection is primarily used for 4G devices.

The inner-most antenna is used to receive diversity and is optional.



Fig 8. 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.



Fig 9. Type A Male USB



Fig 10. Type Mini B Male USB

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

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 and/or IP address for your device. Once you have an account associated with your device, activation will be performed when connecting to the cellular network for the first time. If you are not sure if your device has an account, contact your sales representative or Feeney Wireless technical support.

## Provisioning

Once your device is activated and you connect to the cellular carrier for the first time, your device will perform over the air provisioning. (If required)

*If the Sierra Wireless Connection Utility has not been installed please refer to the Connection Manager section of this document for instructions.*

After validating the Sierra Wireless drivers and Connection Utility (Watcher) have been installed connect the Skyus 3G to a laptop via the USB cable. Ensure that an antenna is connected to the outermost port on the Skyus 3G modem.

The system will install the appropriate drivers when the Skyus is connected and the Sierra Wireless Watcher should auto-launch. If the Sierra Wireless Watcher does not launch, start it manually under *Program Files > Sierra Wireless > Watcher*.

The Watcher utility should detect the Skyus and may prompt to activate the device.



Fig 11. Activation Wizard Automated Activation

If prompted select "Automated Activation" and click **Next**.

Keep the \*22899 selected default option and click **Next**.



Fig 12. Activation Wizard Automated Activation Service

The activation process will begin.

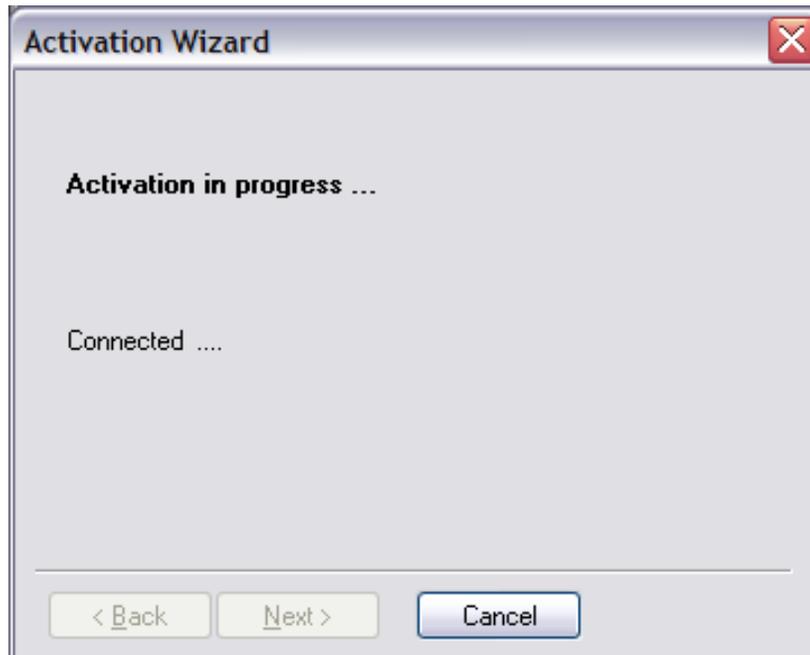


Fig 13. Activation Wizard Connected

The user will be notified if the activation failed or succeeded.

After the "Activation is Successful" message you will now be able to test the connection.



Fig 14. Sierra Wireless Watcher Test Connection

Click the green **Connect** button.

The connection process will be started.



Fig 15. Sierra Wireless Watcher Connecting to Internet

## Connection Manager

There are multiple options for connection management. The following sections will provide a brief description of relevant connection managers. Please contact Feeney Wireless Support for guidance regarding the correct manager for your installation.

### Skyus Watcher Utility

In some installation applications Feeney Wireless can provide a connection management and watchdog utility entitled “Skyus Watcher”. The Skyus Watcher utility is designed to provide connection management for the Skyus Verizon 3G Cellular customers to ensure reliable connectivity in unattended M2M applications.

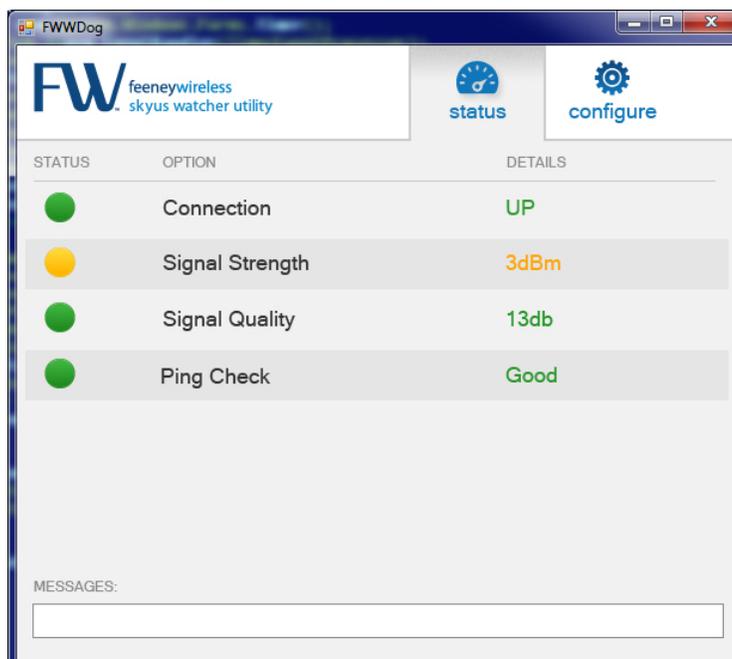


Fig 16. Skyus Watcher

Skyus Watcher is available after signing an End User Licensing Agreement (EULA) with Feeney Wireless. Skyus watcher can be downloaded from the Feeney Wireless website. The Skyus Watcher installation package is available at:

<http://www.feeneywireless.com/downloads/SkyusWatcher3GVZW>

For information on the installation of the Skyus Watcher application, please reference the "Skyus Watcher User Guide".

### **Sierra Wireless**

Sierra Wireless provides a connection utility compatible with Skyus devices that can manage connections. It also displays network coverage indication. More information about Sierra Wireless Connection Management Software is available at:

[http://www.sierrawireless.com/en/productsandservices/AirPrime/Software\\_Interfaces/Connection\\_Manager.aspx](http://www.sierrawireless.com/en/productsandservices/AirPrime/Software_Interfaces/Connection_Manager.aspx)

## Contacting Feeney Wireless

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.

Support E-mail	support@feeneywireless.com
Telephone	(800) 683-4818
Website	www.feeneywireless.com
Mailing Address	P.O. Box 2549, Eugene, OR 97402

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:

<http://feeneywireless.com/documents>

### Return and Warranty

Feeney Wireless offers a standard one-year warranty on all hardware. For returns or warranty information, call our 800 number.

### Further Specifications

For more specifications please see the 3G Sprint Skyus Datasheet.



## 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. Feeney Wireless 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: N7N-MC5728