

FW

Skyus™ 4G LTE

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 (“FW”) 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.

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

Contents

- Overview3
 - Intended Audience3
 - Scope.....3
 - Environmental Specifications.....3
 - Power Consumption3
- Installation Steps.....4
 - Packing List: Package Contents4
 - Operating Systems4
- Installation of Sierra Wireless Driver.....4
- Connecting the Antennas6
- Connecting to Computer or Router6
- Activation.....6
- Provisioning7
- Connection Manager7
 - Skyus Watcher Utility7
 - Verizon VZAccess Manager8
 - Sierra Wireless Watcher8
- Contacting FW9
 - Online Library9
 - Return and Warranty.....9
 - Further Specifications.....9
- FCC Compliance10

Overview

The Skyus 4G LTE 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. For information necessary above and beyond this level of operation, please refer to the User's Manual.

FW 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 4G LTE is designed to operate in a minimum ambient environment of -25°C or -13°F.

The Skyus 4G LTE is designed to operate in maximum ambient environment of 60°C or 122°F.

Power Consumption

The Skyus 4G LTE power consumption is specified as: 500mA at 5VDC typical, 1 A peak.



Figure 1: Skyus Top View

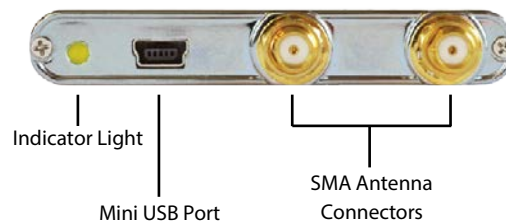


Figure 2: Skyus Ports

Installation Steps

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

Packing List: Package Contents

Item	Description
Skyus	Skyus 4G LTE 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 FW Service Representative.



Figure 3: Package Contents: Skyus 4G LTE

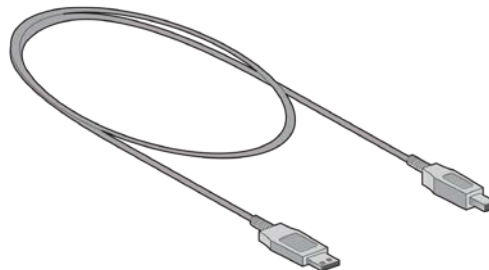


Figure 4: Package Contents: USB 2.0 Type A Male to Mini B Male

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 FW 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 FW website. For quick connection, download driver only package directly from FW. This package is available here:

<http://feeneywireless.com/downloads>

Under 'Skyus 4G Drivers' click the 'Download Files' button to begin downloading the driver file for installation.

If you are working on the device you intend to use the Skyus 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 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 the executable driver installation file.



Figure 5: Sierra Wireless Driver Installation

Follow the necessary steps to finish the installation until the screenshot matches the image shown in Figure 6.



Figure 6: Sierra Wireless Installation Completed

Connecting the Antennas

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

Frequency Bands:

- LTE 700 (B13) MHz; (TX 777-787, RX 746-756)
- CDMA 1xRTT/EV-DO Rev A 800/1900 MHz

Connect the cellular antennas to the device. For the Skyus 4G LTE, an antenna is necessary for both of the connections on the device.



Figure 7: 4G Antenna Connections

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 8: Type A Male USB



Figure 9: 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 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 FW 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)

The Skyus 4G LTE will provision over the air automatically upon initial power up. Please connect it to a host and wait 45 minutes to allow this process time to complete prior to attempting to connect or unplugging the device.

Connection Manager

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

Skyus Watcher Utility

In some installation applications FW can provide a connection management and watchdog utility entitled "Skyus Watcher". The Skyus Watcher utility is designed to provide connection management for the Skyus 4G LTE customers to ensure reliable connectivity in unattended M2M applications.



Figure 10: Skyus Watcher

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

<http://www.feeneywireless.com/downloads/SkyusWatcher4G>

For information on the installation of the Skyus Watcher application, please reference the "Skyus Watcher 4G User Guide".

Verizon VZAccess Manager

As VZAccess Manager is available for consumer and enterprise downloads, your organization may provide a specific version for installation. If a custom VZAccess build has not been provided to you for installation, a download is available by following the link below:

<http://www.vzam.net/default.aspx>

Sierra Wireless Watcher

Sierra Wireless provides a connection utility compatible with Skyus devices that can manage connections and display network coverage indication. For more information on Sierra Wireless Watcher go to www.sierrawireless.com or contact your FW sales representative.

Contacting FW

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

FW 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 Skyus 4G LTE Spec Sheet.

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. FW 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 20cm 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