

USB8

4G LTE Global Modem



INSEEGO COPYRIGHT STATEMENT

© 2024 Inseego Corp. All rights reserved. Complying with all copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in, or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise), or for any purpose without the expressed written permission of Inseego Corp.

SOFTWARE LICENSE

Proprietary Rights Provisions:

Any software drivers provided with this product are copyrighted by Inseego Corp. and/or Inseego Corp.'s suppliers. Although copyrighted, the software drivers are unpublished and embody valuable trade secrets proprietary to Inseego Corp. and/or Inseego Corp. suppliers. The disassembly, decompilation, and/or Reverse Engineering of the software drivers for any purpose is strictly prohibited by international law. The copying of the software drivers, except for a reasonable number of back-up copies is strictly prohibited by international law. It is forbidden by international law to provide access to the software drivers to any person for any purpose other than processing the internal data for the intended use of the software drivers.

U.S. Government Restricted Rights Clause:

The software drivers are classified as "Commercial Computing device Software" and the U.S. Government is acquiring only "Restricted Rights" in the software drivers and their Documentation.

U.S. Government Export Administration Act Compliance Clause:

It is forbidden by US law to export, license or otherwise transfer the software drivers or Derivative Works to any country where such transfer is prohibited by the United States Export Administration Act, or any successor legislation, or in violation of the laws of any other country.

TRADEMARKS AND SERVICE MARKS

Inseego Corp. is a trademark of Inseego Corp., and the other trademarks, logos, and service marks (collectively the "Trademarks") used in this user manual are the property of Inseego Corp. or their respective owners. Nothing contained in this user manual should be construed as granting by implication, estoppel, or otherwise, a license or right of use of Inseego Corp. or any other Trademark displayed in this user manual without the written permission of Inseego Corp. or its respective owners.

- MiFi® and the MiFi logo are registered trademarks of Inseego Corp.
- Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

The names of actual companies and products mentioned in this user manual may be the trademarks of their respective owners.

Document Number: 90029529 Rev 5



Contents

Getting started	5
Overview	6
Package contents.....	6
System requirements.....	6
Components	7
Status indicators	8
Installing a SIM card	9
Getting connected.....	11
Properly removing the USB8 modem.....	12
Caring for Your Modem	12
Configuring your USB8 modem.....	13
Overview	14
Home page.....	14
Navigation tips	15
Viewing messages	15
Messages page.....	15
Managing settings	16
Networks tab.....	17
SIM tab	18
GPS tab.....	19
Software Update tab.....	21
Preferences tab	22
Viewing info about your USB8 modem.....	23
Internet Status tab	24
Internet Sessions tab.....	25
Diagnostics tab	26
Device Info tab	27
Logs tab	28
Getting help.....	29
FAQ tab.....	30
Customer Support tab.....	30
Troubleshooting and support	31
Overview	32
First troubleshooting steps	32
Common problems and solutions	32
My device does not start when the device is inserted.....	32
Technical support	32
Product specifications and regulatory information.....	33
Product specifications	34
Device.....	34
Environmental.....	34
Technology/Bands.....	34
Regulatory information.....	35
Federal Communications Commission Notice (FCC – United States).....	35
Innovation, Science and Economic Development Notice (ISED – Canada)	36
ISED Canada ICES-003 Compliance	36
FCC and ISED RF Exposure Guidance Statement.....	36
Product Certifications and Supplier’s Declarations of Conformity	37
Wireless communications.....	38

Limited warranty and liability.....	38
Safety hazards	39
Glossary	40
Glossary	41

1

Getting started

Overview

Components

Status indicators

Installing a SIM card

Getting connected

Caring for your modem

Overview

Congratulations on purchasing your Modem USB8 from Inseego.

This modem enables you to connect at high speeds to the internet, your corporate intranet, and access your email while you're away from the office.

Package contents

The USB8 package includes:

- USB8 **NOTE:** The USB8 is not a handheld device.
- Literature Kit containing:
 - Quick Start Guide
 - Important Customer Safety Information

System requirements

Supported platforms:

- Windows® 7 or higher
- Mac OS® 10.8 or higher
- Linux OS
- Chrome OS

Compatible browsers:

- Microsoft Internet Explorer 7 or higher
- Mozilla Firefox 3.6 or higher
- Google Chrome 9 or higher
- Apple Safari 5 or higher
- Opera 9 or higher

You will also need the following:

- USB Port 2.0 or higher
- Wireless data plan
- 4FF nano SIM card

Components



- ❶ **Status LED indicator** — indicates the network and traffic status; it also indicates when there is no SIM or a SIM error, and when a software update is in progress.
- ❷ **USB connector** — connects to your computer through a type A USB port.
- ❸ **USB Swivel connector**— allows the USB connector to rotate, making it easier to connect to computers.
- ❹ **USB folding hinge** — folds the USB connector into your modem and allows the USB connector to be extended and plugged into your computer.
- ❺ **Back panel (removable)** — covers the SIM card slot. Press gently on the cover with your thumb and slide the panel off. The manual reset button can be found under this panel.
- ❻ **SIM card slot** — inside under the back panel.

Status indicators

LED color		Operation	Meaning
WHEN NOT CONNECTED			
Green		Blinking	Modem starting up
Red		Solid	No network available No SIM, SIM locked, SIM error
WHEN CONNECTED			
Green		Solid	Modem ready to use Home network No data being transferred
		Blinking	Home network available Data being transferred
Amber		Solid	Roaming network available No data being transferred
		Blinking	Roaming Data being transferred Software update in progress

Installing a SIM card

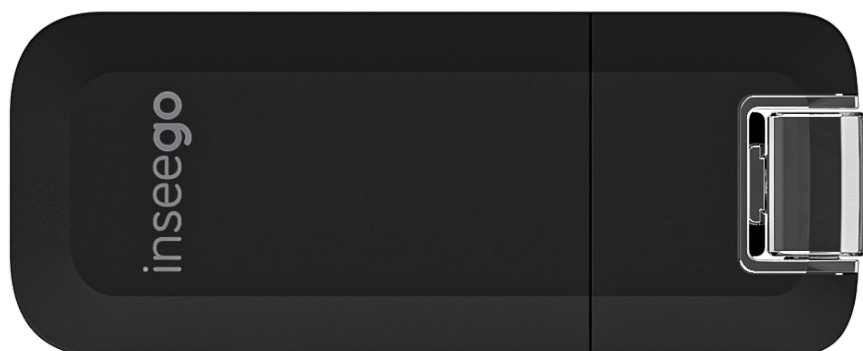
Your SIM card is a small rectangular plastic card that stores your phone number and important information about your wireless service. The USB8 supports only nano SIM cards. To prevent damage to the SIM slot, please select the correct SIM for this device.



CAUTION: Always use a factory-made SIM card supplied by the service provider. Do not bend or scratch your SIM card. Avoid exposing your SIM card to static electricity, water, or dirt.

To open the case and install the 4G SIM Card:

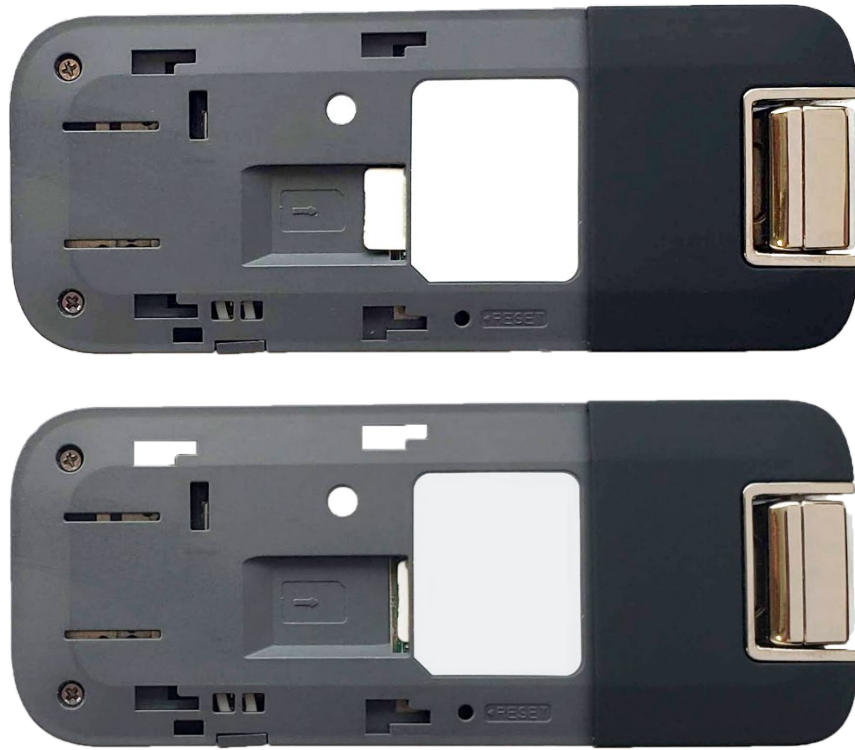
1. Open the protective cover on the back of the modem by pressing gently on the cover with your thumb and sliding the door off.



2. Insert the SIM Card with the gold-colored contact points facing down (toward the USB modem). Position the card with the notched corner as shown.



3. Gently slide the card into the SIM slot until the spring catches and the card remains securely in the slot.



4. Replace the back cover and snap into place.

NOTE: Should your SIM card be lost or damaged, contact your network operator.

Getting connected

Important: Do not connect the modem to a USB hub, as it might not provide sufficient power.

To properly insert the USB8 into a device:

1. Use your thumb to gently flip open the USB connector on your modem.

NOTE: Be sure to avoid over-extending the USB connector past its resistance point and DO NOT open the USB connector with a metal object as this might damage the pins.



2. Hold the modem along the side edges and gently insert it into your device's USB port. On most devices, the modem will insert with the label facing up. It should fit easily into the port. Some devices might orient the USB port so that the modem label faces down or sideways.

NOTE: Do not force the modem into the port as this might damage both the modem and the port.

3. Position the modem as indicated to maintain SAR compliance and to ensure proper performance. This modem has been designed and tested to meet SAR compliance as outlined by the FCC. If the modem is connected to USB ports other than those shown, ensure that the modem maintains a separation distance of at least 5 mm.



Important: The USB8 modem must be positioned at 120° for optimal functionality. Failure to maintain a position between the normal operating range of 110° - 130° will cause the modem to stop functioning.

NOTE: If you are having difficulty inserting the modem into your device's USB port, verify that you are inserting the modem in the correct orientation and that you are using a Type A USB port.

While starting up, the Status LED will slowly blink green. Once the status light turns solid green, you are connected to the internet.

Properly removing the USB8 modem

Important: Be sure to disconnect from the network and close the Admin web UI before you remove the modem from your device. Disconnecting from the network and closing browser, email, VPN, and other communication apps avoids potential problems such as automatic shutdown or screen freezing.

The USB8 modem's USB technology allows you to safely remove the modem at any time when you are not connected to the network.

1. End your data session by selecting **Disconnect** from the web UI Home page.
2. Exit and close the web UI.

3. **With Windows:**

Gently grip the modem on both sides and pull straight out to avoid damaging the USB connectors.

With Mac OS X:

Click the **eject** icon to the right of the modem icon in the left column of the Finder window to eject the modem.

Then, gently grip the modem on both sides and pull straight out to avoid damaging the USB connectors

Caring for Your Modem

Like any electronic device, the modem must be handled with care to ensure reliable operation.

Inseego Wireless recommends the following guidelines:

- Protect the modem from liquids, dust, and excessive temperatures.
- Do not apply adhesive labels to the modem; they might cause the modem to overheat or alter antenna performance.
- The USB connector should plug easily into your device's standard type A USB port. Forcing the modem into a port might damage the connector.
- Remove the modem from your device before transporting it.
- Store the modem in a safe place when not in use.

2

Configuring your USB8 modem

Overview

Viewing messages

Managing settings

Viewing info about your USB8 modem

Getting help

Overview

You can manage, monitor, and customize your wireless network activity using an easy-to-use web User Interface (UI). To access the web UI, plug the USB8 into a USB port on your computer and go to <http://my.usb> or <http://192.168.1.1>.

You'll also be able to:

- Check messages
- Manage device settings, including GPS and software updates
- Access device information, including internet status/sessions and modem/network specifications
- Access FAQs and customer support

Home page

The Home page is the gateway to configuring and managing your USB8. It allows you to quickly access commonly used links and menu options for your modem.



**4G LTE**

Internet Status <table><tr><td>Status</td><td>Connected</td></tr><tr><td>Network name</td><td></td></tr><tr><td>Technology</td><td>4G LTE</td></tr><tr><td>Time connected</td><td>00:00:08:53 (dd:hh:mm:ss)</td></tr><tr><td>Received</td><td>246.96 MB</td></tr><tr><td>Transmitted</td><td>37.55 MB</td></tr><tr><td>IPv4 address</td><td></td></tr><tr><td>Mask</td><td></td></tr><tr><td>Gateway</td><td></td></tr><tr><td>DNS</td><td></td></tr></table>	Status	Connected	Network name		Technology	4G LTE	Time connected	00:00:08:53 (dd:hh:mm:ss)	Received	246.96 MB	Transmitted	37.55 MB	IPv4 address		Mask		Gateway		DNS		Diagnostics <table><tr><td>IMEI</td><td></td></tr><tr><td>IMEISV</td><td></td></tr><tr><td>FW version</td><td>SDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]</td></tr><tr><td>Mobile number</td><td></td></tr><tr><td>SIM status</td><td>Ready</td></tr><tr><td>ICCID</td><td></td></tr></table> Settings GPS (OFF) The GPS receiver can determine your current location. This location can be provided to connected devices. Software update Last software update No updates applied.	IMEI		IMEISV		FW version	SDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]	Mobile number		SIM status	Ready	ICCID		Device Info <table><tr><td>Modem firmware version</td><td>SDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]</td></tr><tr><td>PRI version</td><td>102</td></tr><tr><td>Software version</td><td>1A</td></tr><tr><td>Embedded OS version</td><td>2.114.0.18.1</td></tr></table> Customer Support URL: inseego.com/support Email: technicalsupportus@inseego.com Phone: 877-698-6481	Modem firmware version	SDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]	PRI version	102	Software version	1A	Embedded OS version	2.114.0.18.1
Status	Connected																																									
Network name																																										
Technology	4G LTE																																									
Time connected	00:00:08:53 (dd:hh:mm:ss)																																									
Received	246.96 MB																																									
Transmitted	37.55 MB																																									
IPv4 address																																										
Mask																																										
Gateway																																										
DNS																																										
IMEI																																										
IMEISV																																										
FW version	SDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]																																									
Mobile number																																										
SIM status	Ready																																									
ICCID																																										
Modem firmware version	SDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]																																									
PRI version	102																																									
Software version	1A																																									
Embedded OS version	2.114.0.18.1																																									

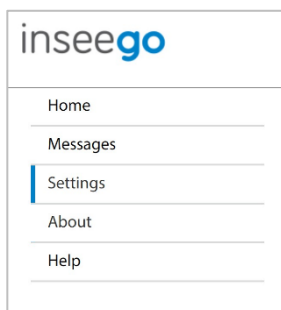


© 2024 All rights reserved.

www.inseego.com

Navigation tips

- You can click ➤ in the bottom-right corner of a panel on the Home page to access screens with further information and options.
- More menu options are available **from the navigation panel** on the left of each web UI page. The current page is indicated by a blue bar.

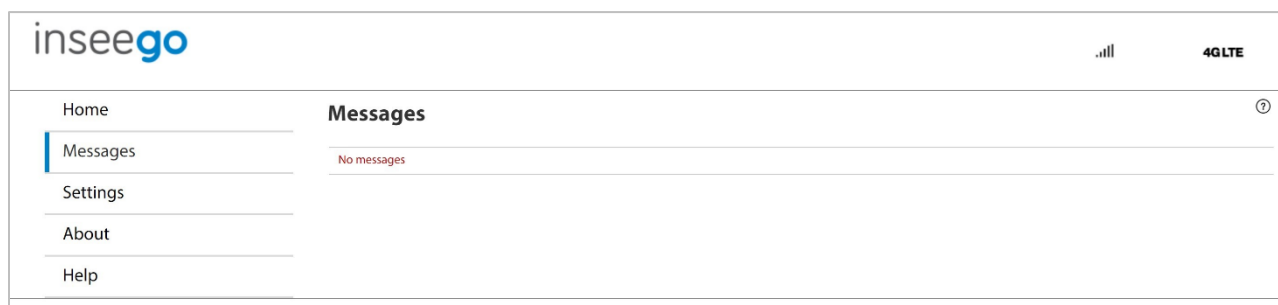


- Select the question mark (?) in the upper right-hand corner of a page to view Help on that topic.

Viewing messages

Messages page

The Messages page displays all existing system messages and allows you to delete messages individually or all messages at one time. To delete existing messages, click the trash can icon for each message you want to delete.



Managing settings

On the web UI Home page, the Settings panel shows whether GPS is on. It also provides the date and time of the last software update.

inseego

4G LTE

Internet Status

StatusConnected

Network name

Technology4G LTE

Time connected00 : 00 : 08 : 53 (dd:hh:mm:ss)

Received246.96 MB

Transmitted37.55 MB

IPv4 address

Mask

Gateway

DNS

Diagnostics

IMEI

IMEISV

FW versionSDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]

Mobile number

SIM statusReady

ICCID

Device Info

Modem firmware versionSDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]

PRI version102

Software version1A

Embedded OS version2.114.0.18.1

Settings

GPS (OFF)

The GPS receiver can determine your current location. This location can be provided to connected devices.

Software update

Last software update No updates applied.

Customer Support

URL: inseego.com/support

Email: technicalsupportus@inseego.com

Phone: 877-698-6481

inseego

© 2024 All rights reserved.

www.inseego.com

To change system settings, select ➤ from the Home page Settings panel or select **Settings** from the web UI side menu.

The Settings page includes the following tabs:

- Networks
- SIM
- GPS
- Software Update
- Preferences

Networks tab

Use this tab to set options for the network, including enabling international roaming and setting the APN if you are on a private network.

insee go

Home Messages Settings About Help

Settings

Networks SIM GPS Software Update Preferences

Network Selection

Allow USB Modem to connect to the mobile network ☒

Enable international roaming ☐

APN

broadband

Caution: Changing the USB Modem's default APN setting may cause loss of data connectivity.

Save Changes

Allow USB Modem to connect to the mobile network: Use the on/off slider when necessary to turn off cellular data and prevent all internet traffic from using your USB8 modem's mobile data plan. For normal operation, this setting must be left on.

Enable international roaming: Use the on/off slider to turn international on or off as needed. Additional data charges may apply when roaming.

In most configurations, the USB8 is used with a dynamic IP and SIM, and the Access Point Name (APN) is available from the network. However, if you are on a private network, you may need to set the APN on this tab for the network to communicate with the USB8.

CAUTION: Changing the APN may cause a loss of data connectivity and disconnect you from the web UI.

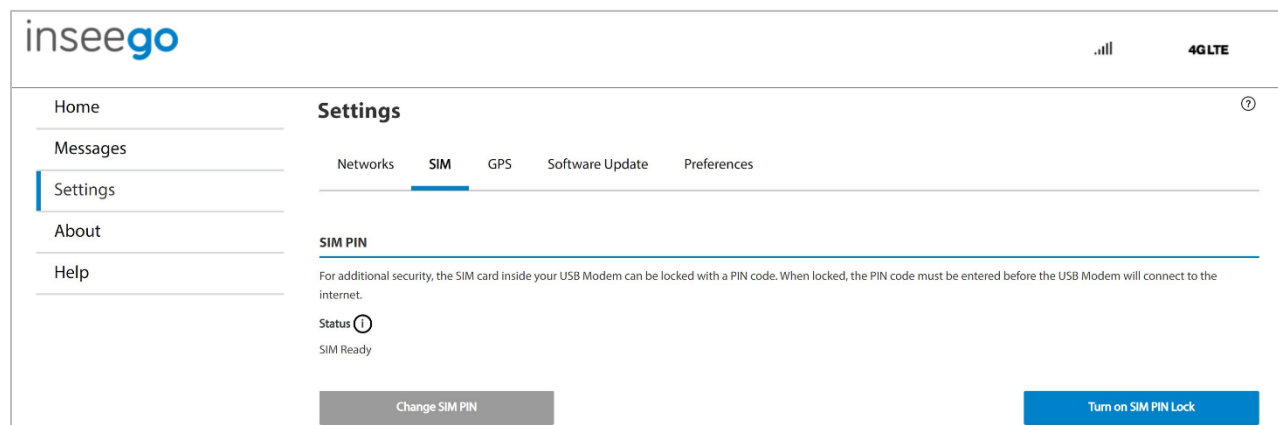
APN: Enter the APN for your private network.

Click **Save Changes**. The USB8 will reboot for changes to take effect.

SIM tab

The SIM card in your USB8 can be locked using a PIN. If the SIM card is locked, you must enter the PIN before the modem can connect to the internet. The default PIN is available from your service provider.

Use this page to lock or unlock your SIM or enter a SIM PIN.



Status — Indicates the current status of the SIM card. Possible values include:

- **Ready** — This is the normal state. The SIM PIN is not used.
- **PIN Locked** — The SIM PIN must be entered before you can use the mobile network.
- **PUK Locked** — The PUK for the SIM must be entered in order to continue. The PUK can be obtained from your service provider.
- **Unlocked** — The SIM PIN is needed but has already been entered.
- **No SIM** — No SIM was detected. If you do have a SIM, check that it is inserted correctly.
- **SIM Error** — A SIM was detected, but it did not respond as expected and cannot be used.

Use the **Change SIM PIN** button to assign a new PIN.

The **Turn on SIM PIN Lock** button indicates whether or not the PIN lock feature is in use. If ON, the PIN lock has been turned on, and the SIM PIN must be entered in order to connect to the mobile network. If OFF, the PIN lock feature is not turned on, and the SIM PIN is not required.

GPS tab

The USB8 modem incorporates a GPS receiver. The GPS receiver can determine your current location. Use this tab to enable GPS and view current location information.

The screenshot shows the inseeGO web interface. At the top, the 'inseeGO' logo is on the left, and signal strength and '4G LTE' status are on the right. A left sidebar contains links: Home, Messages, Settings (highlighted with a blue bar), About, and Help. The main content area is titled 'Settings' with a help icon. Below this is a sub-header with tabs: Networks, SIM, GPS (selected with a blue underline), Software Update, and Preferences. The 'GPS Settings' section includes a descriptive text: 'The GPS receiver can determine your current location. This location can be provided to connected devices.' It features three toggle switches: 'Enable GPS' (turned on), 'Turn off GPS when the USB Modem restarts' (turned off), and 'Enable NMEA over LAN' (turned on). Below these is a 'Port number' input field containing '11010'. A blue 'Save Changes' button is positioned below the input field. The 'Current Location' section shows the status 'Searching'. The 'GPS Driver' section contains explanatory text about NMEA text streams and a blue 'Download driver' button.

Enable GPS: This setting enables or disables the GPS radio on your USB8 modem. When the on/off slider is on, the device acquires GPS and makes GPS location data available on this page. A GPS Agreement appears, click **Yes** to proceed. When off, no GPS data is available.

Turn off GPS when the USB8 Modem Restarts: This setting determines when the GPS receiver will turn off, once it is on. When the on/off slider is on, the GPS receiver turns off when the USB8 modem is shut down. You will need to turn it on again the next time the GPS receiver is needed.

Enable NMEA over LAN: This setting determines whether location information can be shared with connected devices. When the on/off slider is on, location information can be shared. Raw GPS data is provided in the form of a National Marine Electronics Association (NMEA) text stream. You can use third-party applications to utilize or forward the GPS data to a remote server.

Port Number: The TCP port number is used to establish a connection to the USB8 and obtain raw GPS data for NMEA over LAN feature. Unless there is a good reason to do so, you should not change the port number. Acceptable port values are between 1024 and 65535.

Current Location

Latitude: Latitude for the last location fix.

Longitude: Longitude for the last location fix.

Altitude: Altitude for the last location fix.

Accuracy: A measure of the accuracy of the horizontal position obtained by the GPS receiver.

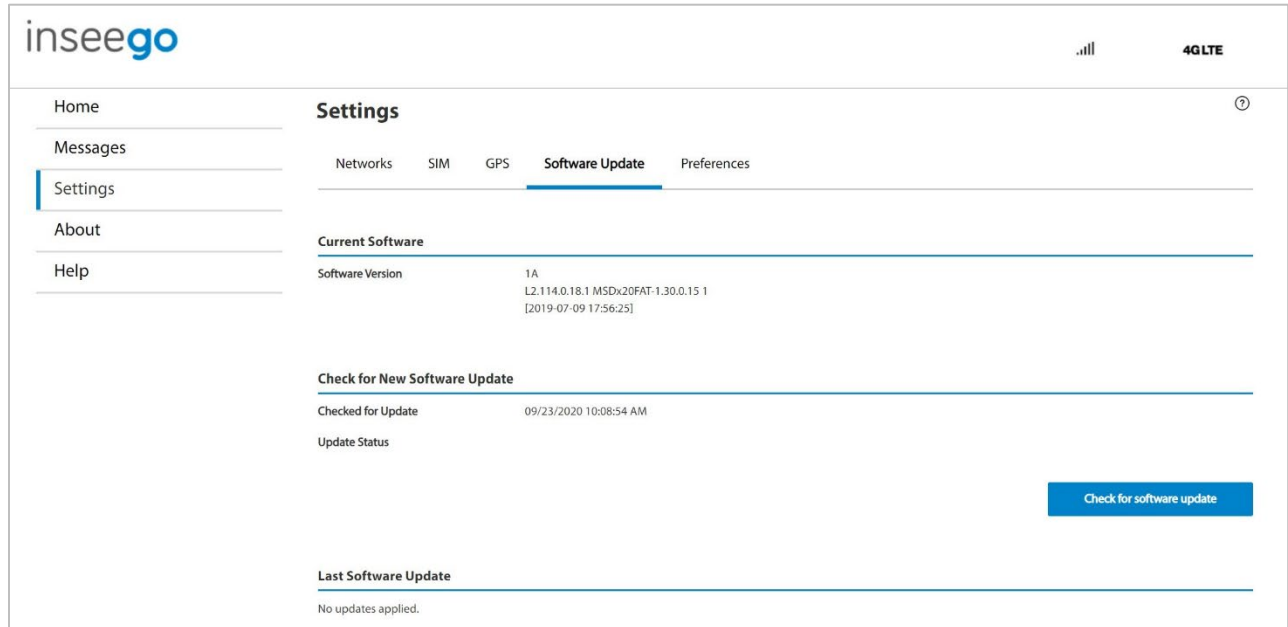
GPS Drive

Click **Download driver** to download and install the drivers.

Click **Save Changes** to update settings.

Software Update tab

This tab displays your current software version and last software update information and allows you to check for updates.



Current Software

Displays information on the current software version on your USB8 modem

Check for New Software Update

Checked for update: The date and time the USB8 last checked to see if an update was available.

Update status: This area is usually blank. If you check for an update, the result of that check, or the download progress of an update displays.

Check for software update: Click this button to check for available software updates. If a new software update is available, it is automatically downloaded.

Last Software Update

This section displays details about the last software update.

Preferences tab

Use this page to set options for the USB8 modem.

The screenshot shows the 'inseeego' app interface. On the left is a sidebar menu with 'Home', 'Messages', 'Settings' (highlighted), 'About', and 'Help'. The main area is titled 'Settings' and has sub-tabs: 'Networks', 'SIM', 'GPS', 'Software Update', and 'Preferences' (highlighted). Under the 'Preferences' tab, there is a 'General' section. It contains two toggle switches: 'Turn off LEDs' and 'Turn on AT port', both currently unchecked. Below these is a blue button labeled 'Download AT port driver'. Further down is a dropdown menu labeled 'Select operating system for USB Modem' with 'Automatic' selected. At the bottom are two buttons: 'Restore Factory Defaults' and 'Save Changes'.

Turn off LEDs: Check this box to turn off the LED status light.

Tun on AT port: Check this box to turn on the external antenna port.

Download AT port driver: Click the button to download the external antenna port driver.

Select operating system for USB Modem: The operating system for your USB8 is automatically selected by default. Use the drop-down if you want to select a specific operating system.

Restore factory defaults: This button resets all settings to their factory default values.

CAUTION: Restoring factory settings means all of your custom settings will be lost.

Viewing info about your USB8 modem

On the web UI Home page, the **Internet Status** panel shows current internet status information, the **Diagnostics** panel displays information used for troubleshooting, and the **Device Info** panel provides details about your USB8 modem

The screenshot shows the inseeego web UI Home page. At the top, the inseeego logo is on the left, and signal strength bars and '4G LTE' are on the right. The main content area is divided into three columns. The first column, 'Internet Status', shows: Status (Connected), Network name, Technology (4G LTE), Time connected (00:00:08:53 (dd:hh:mm:ss)), Received (246.96 MB), Transmitted (37.55 MB), IPv4 address, Mask, Gateway, and DNS. The second column, 'Diagnostics', shows: IMEI, IMEISV, FW version (SDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]), Mobile number, SIM status (Ready), and ICCID. The third column, 'Device Info', shows: Modem firmware version (SDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]), PRI version (102), Software version (1A), and Embedded OS version (2.114.0.18.1). Below these are 'Settings' (GPS (OFF), Software update) and 'Customer Support' (URL, Email, Phone). Each panel has a right arrow icon. The footer contains the inseeego logo, copyright notice, and website URL.

Internet Status	Diagnostics	Device Info
Status: Connected	IMEI	Modem firmware version: SDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]
Network name	IMEISV	PRI version: 102
Technology: 4G LTE	FW version: SDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]	Software version: 1A
Time connected: 00:00:08:53 (dd:hh:mm:ss)	Mobile number	Embedded OS version: 2.114.0.18.1
Received: 246.96 MB	SIM status: Ready	
Transmitted: 37.55 MB	ICCID	
IPv4 address		
Mask		
Gateway		
DNS		

Settings	Customer Support
GPS (OFF) The GPS receiver can determine your current location. This location can be provided to connected devices.	URL: inseeego.com/support
Software update Last software update No updates applied.	Email: technicalsupportus@inseeego.com
	Phone: 877-698-6481

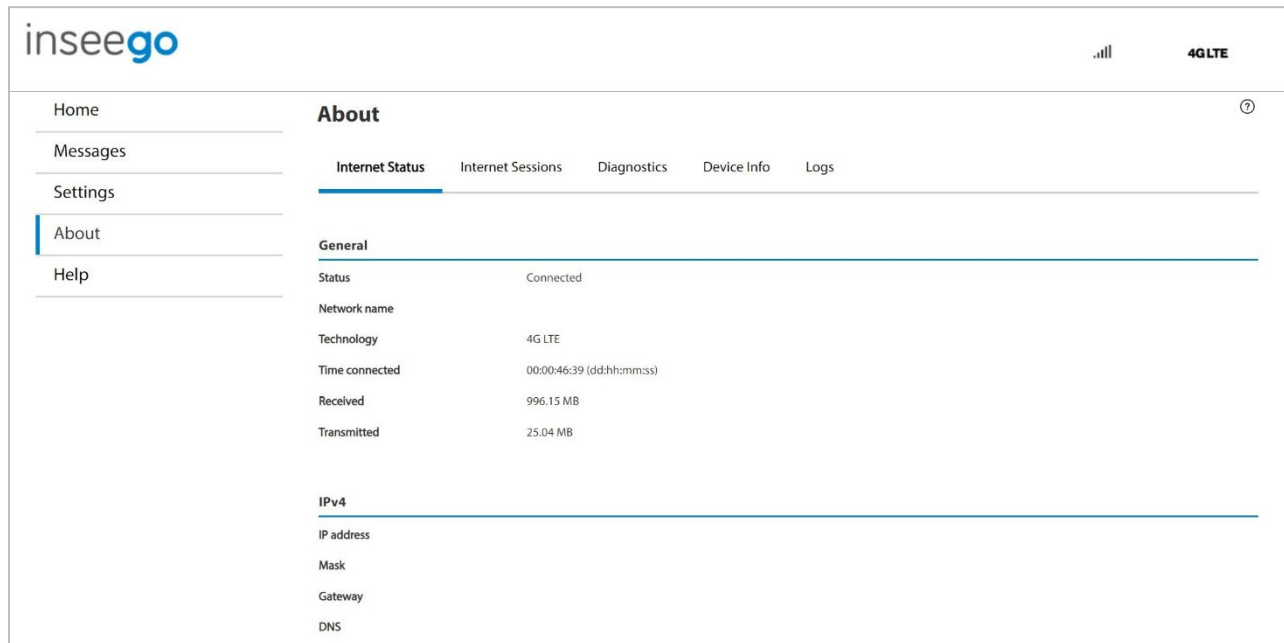
To view more detailed information about any of these topics, select ➤ from the panel. Select **About** from the web UI side menu for access to more tabs.

The About page includes the following tabs:

- Internet Status
- Internet Sessions
- Diagnostics
- Device Info
- Logs

Internet Status tab

Use the Internet Status tab to view general internet connection and system information.



General

Status: The current status of the USB8 modem internet connection.

Network Name: The name of the network for the current internet session established.

Technology: Indicates the current cellular data connection, for example, 4G LTE.

Time Connected: The amount of time that has elapsed since the connection for the current internet session was established.

Received: The amount of data received for the current internet session. This counter starts at zero when the connection is established.

Transmitted: The amount of data transmitted for the current internet session. This counter starts at zero when the connection is established.

IPv4

IP Address: The internet IP address assigned to the USB8 modem.

Mask: The network mask associated with the IPv4 address.

Gateway: The gateway IP address associated with the IPv4 address.

DNS: The Domain Name Server currently used by the USB8 modem.

Internet Sessions tab

Use the Internet Sessions tab to export and view internet session data.

The screenshot shows the insee-go app interface. At the top, there's a status bar with signal strength and '4G LTE'. Below that, the app header includes the 'insee-go' logo and a help icon. A sidebar on the left contains navigation links: Home, Messages, Settings, About (highlighted), and Help. The main content area is titled 'About' and has sub-tabs: Internet Status, Internet Sessions (selected), Diagnostics, Device Info, and Logs. Under the 'Internet Sessions' tab, there's a section 'Export Internet Sessions Information' with a note: 'Note: The sessions information should not be used to estimate or monitor data usage during your billing cycle.' Below this is a blue 'Export' button. At the bottom, a table titled 'Internet Sessions from 08/05/2020 6:50:05 AM to 09/24/2020 3:57:57 PM' displays session data.

Date & time	Duration	Rx Data	Tx Data	Total data	IPv4 address
08/05/2020 6:50:05 AM	49:10:06:14:14	4.25 MB	7.91 MB	12.16 MB	10.206.22.133
08/27/2020 6:37:47 AM	00:04:29:39	8.55 GB	5.72 GB	14.26 GB	10.216.37.187
09/23/2020 5:08:51 PM	00:14:15:20	418.91 MB	56.27 MB	475.18 MB	10.102.142.182
09/24/2020 3:57:57 PM	00:00:44:29	995.53 MB	24.18 MB	1019.71 MB	10.43.184.39

Export Internet Sessions Information

Click the **Export** button to export internet session data.

Internet Sessions

NOTE: Internet Sessions are presented in date order.

Date/Time: The date and time the internet session began.

Duration: The total amount of time for the internet session.

Rx Data: The amount of data received for the internet session. This counter starts at zero when the connection is established.

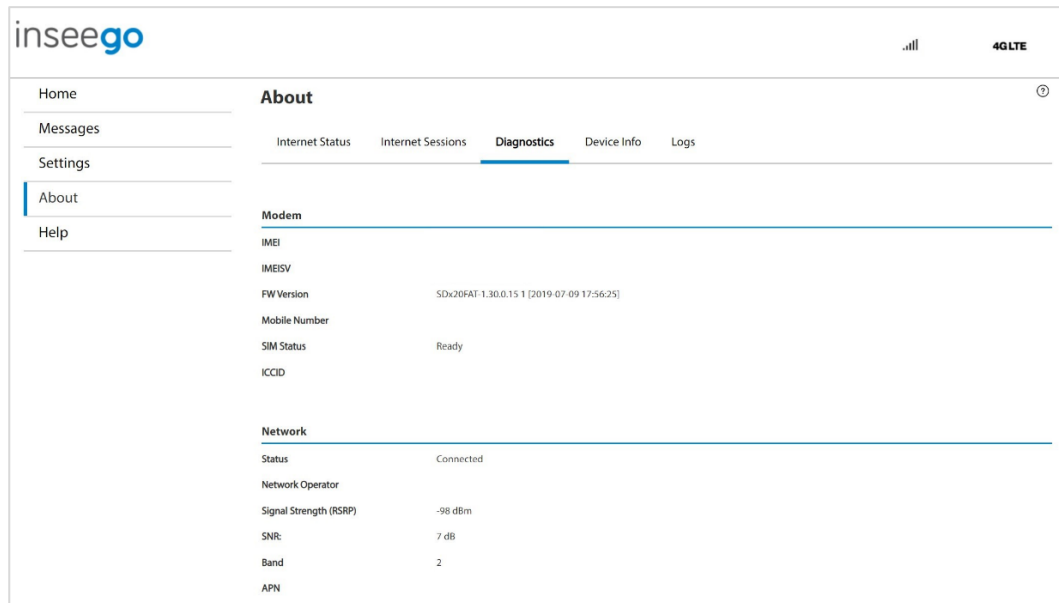
Tx Data: The amount of data transmitted for the internet session. This counter starts at zero when the connection is established.

Total Data: The total amount of data for the internet session. This is the sum of Received Data and Transmitted Data.

IPv4 Address: The IP address for the session.

Diagnostics tab

This tab displays detailed information used solely for troubleshooting or technical support.



Modem

IMEI: The International Mobile Equipment Identity (IMEI) for your USB8 modem. This is a 15-digit code used to uniquely identify an individual mobile station. The IMEI does not change when the SIM is changed.

IMEISV: A combination of the IMEI and an approval number for this type of device.

FW Version: The version of the firmware (software) currently installed on your USB8 modem.

SIM Status: Indicates the status of the SIM card. If the SIM card is missing, or there is some form of SIM error, connection to the mobile network is not possible.

ICCID: The unique ID number assigned to the SIM card. This field is blank if there is no SIM card installed, or a SIM error condition exists.

Network

Status: The status of the network.

Network Operator: The name of the Mobile Network Operator (MNO).

Signal Strength (RSRP): The strength of the cellular signal, measured in dBm. Higher absolute values indicate a stronger signal, for example: -80 dBm is a stronger signal than -90 dBm.

SNR: Signal to Noise Ratio. A measure of the ratio between signal strength and noise level. SNR values are positive, and higher numbers are better.

Band: The band in use for the current connection.

APN: The Access Point Name (APN) available from the network.

Device Info tab

Use this tab to view details about your USB8 modem.

The screenshot shows the Inseego web interface for a USB8 modem. The top bar includes the Inseego logo, signal strength indicators, and '4G LTE' status. A left sidebar contains navigation links: Home, Messages, Settings, About (highlighted), and Help. The main content area is titled 'About' and features a sub-tab bar with 'Internet Status', 'Internet Sessions', 'Diagnostics', 'Device Info' (selected), and 'Logs'. Below the sub-tab bar, the 'General' section lists the following details:

Manufacturer	Inseego
Model Name	USB8
Model Number	MC800
Hardware version	1
Software version	1A

Below the General section is the 'Software Components' section, which lists:

Embedded OS version	2.114.0.18.1
Modem firmware version	SDx20FAT-1.30.0.15.1 [2019-07-09 17:56:25]
PRI version	102

General

Manufacturer: Inseego.

Model Name: The model of your modem.

Model Number: The model number of your modem.

Hardware version: The hardware version of your modem.

Software version: The software version currently installed on your modem.

Software Components

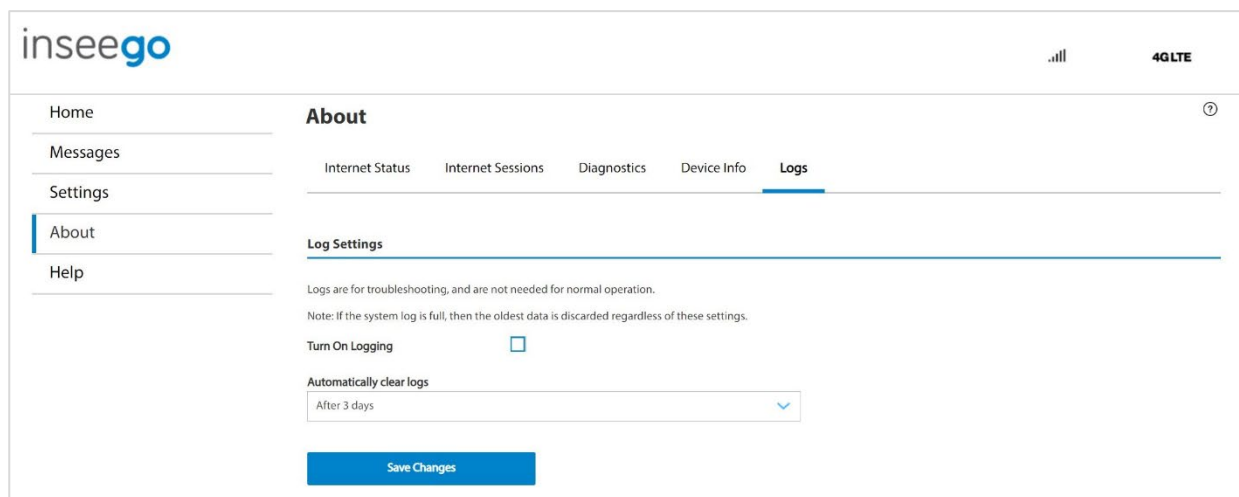
Embedded OS Version: The version number for the operating system and its components.

Modem Software Version: The version of software currently installed for the modem component.

PRI Version: The configuration version currently applied to the USB8 modem.

Logs tab

Use this tab to view log information for troubleshooting.



Log Settings

Turn On Logging: Check this box to turn on logs as needed.

Automatically clear logs: Use the drop-down list to select when you want system log data deleted.

NOTE: If the log is full, the oldest data is deleted regardless of this setting.

Click **Save Changes** to enact changes.

If logs are turned on, the following are visible:

Mobile Network Log: This tab displays the log data of connections to the mobile network.

Device Log: This tab displays the log data of events other than mobile data connections that occurred on this device.

Export Log: Allows you to download log data.

Refresh: Updates the displayed log data.

Clear log: Deletes all existing log data. This makes new data easier to read.

Getting help

On the web UI Home page, the Help panel provides support information.

NOTE: It is best to contact your service provider or reseller for customer support.

inseego

4G LTE

Internet Status

StatusConnected

Network name

Technology4G LTE

Time connected00:00:08:53 (dd:hh:mm:ss)

Received246.96 MB

Transmitted37.55 MB

IPv4 address

Mask

Gateway

DNS

Diagnostics

IMEI

IMEISV

FW versionSDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]

Mobile number

SIM statusReady

ICCID

Device Info

Modem firmware versionSDx20FAT-1.30.0.15 1 [2019-07-09 17:56:25]

PRI version102

Software version1A

Embedded OS version2.114.0.18.1

Settings

GPS (OFF)
The GPS receiver can determine your current location. This location can be provided to connected devices.

Software update
Last software update No updates applied.

Customer Support

URL: inseego.com/support

Email: technicalsupportus@inseego.com

Phone: 877-698-6481

inseego

© 2024 All rights reserved.

www.inseego.com

To view more detailed help information, select ➤ from the Home page Help panel (or select **Help** from the web UI side menu).

The Help page includes two tabs:

- FAQ
- Customer Support

USB8 USER GUIDE

29

FAQ tab

This tab provides links to help topics for every page of the web UI and general topics useful for getting started with your USB8 modem.

Customer Support tab

Use the Customer Support tab for support information.

The screenshot shows the Inseego web UI. At the top left is the 'inseego' logo. At the top right are signal strength bars and '4G LTE' text. On the left is a navigation menu with links: Home, Messages, Settings, About, and Help (which is highlighted with a blue bar). The main content area is titled 'Help' and has two sub-tabs: 'FAQ' and 'Customer Support' (which is selected and underlined in blue). Under the 'Customer Support' tab, there is a section titled 'Your USB Modem' with a blue underline. This section contains a table with the following information:

Model Name	USB8
Model Number	MC8
Your Wireless Number	
User Guide	USB Modem 8 User Guide
Manufacturer	www.inseego.com

Below this table is another section titled 'Customer Support' with a blue underline. It contains the following contact information:

URL: inseego.com/support
Email: technicalsupportus@inseego.com
Phone: 877-698-6481

Your USB Modem

Model: The model of your USB8 modem.

Model Number: The model number of your modem.

Your Wireless Number: The phone number associated with your USB8 modem.

User Guide: A link to this guide.

Manufacturer: A link to the Inseego website.

Customer Support

Contact your service provider or reseller for customer support.

3

Troubleshooting and support

Overview

Common problems and solutions

Technical support

Overview

When properly installed, the USB8 is a highly reliable product. Most problems are caused by one of these issues:

- System resources required by the modem are being used by other devices.
- Network coverage is unavailable due to coverage area, an account problem, or a network problem.

First troubleshooting steps

The following tips can help solve many common problems encountered while using the USB8:

- Make sure you are using the device in the correct geographic region. Be sure you have 4G Mobile Broadband and service with the USB8 in the U.S.
- Ensure that your wireless coverage extends to your current location.
- Ensure you have an active subscription plan.
- Restarting your device and your modem can resolve many issues.

IMPORTANT: Before contacting Support, remove your USB8 modem and restart your connected device. Ensure that your SIM card is inserted correctly before reconnecting.

Common problems and solutions

The solutions in this section can help solve many common problems encountered while using the USB8 modem.

My device does not start when the device is inserted

If you encounter an error or get a blank screen, remove the USB8, restart the device, then reconnect.

Technical support

IMPORTANT: Before contacting Support, remove your USB8 modem and restart your connected device. Ensure that your SIM card is inserted correctly before reconnecting.

Customer service and troubleshooting

Contact your service provider or reseller for assistance.

More information

Documentation for your USB8 modem is available online. Go to <https://go.inseego.com/usb8>.

4

Product specifications and regulatory information

Product specifications

Regulatory information

Product Certifications and Supplier's Declarations of Conformity

Wireless communications

Limited warranty and liability

Safety hazards

Product specifications

Device

Name:	USB800L, USB800, USB800G, USB8L, USB8
Model:	MC800
Approvals:	FCC (US), ISED (CAN), CE (EU), RCM (AUS), RSM (NZ), PTCRB; GCF
Dimensions:	3.58" x 1.45" x 0.45" (91.1 x 37 x 11.4 mm)
Weight:	2.4 oz (68 g)
Chip set:	QUALCOMM® SDX20
Interface type:	Fold-away, rotating USB
SIM:	4FF nano SIM

Environmental

Operating temperature:	-10°C to 55°C (14° F to 113° F)
Storage temperature:	-20° C to +65° C (-4° F to 149° F)
Relative humidity:	5% to 90% over operating temperature
Drop:	1 meter drop, no damage – fully operational
Vibration stability:	5 Hz to 500 Hz, 0.1 octave/second

Technology/Bands

Technology:	LTE CAT 18, 480 Mbps LTE Max Throughput, Carrier Aggregation (5CC download CA), 2x2 MIMO
Band Designation:	Bands: B1/B2/B3/B4/B5/B7/B12/B13/B14/B17/B18/B20/B28/B29/B30/B66 HSPA+/UMTS: B1/B2/B4/B5/B8
Localization Services:	GNSS: GPS/GLONASS/Galileo/Beidou

Regulatory information

Federal Communications Commission Notice (FCC – United States)

FCC ID: PKRISGMC800

Electronic devices, including computers and wireless modems, generate RF energy incidental to their intended function and are therefore subject to FCC rules and regulations.

This equipment has been tested to, and found to be within, the acceptable 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 radio frequency energy and is designed for use in accordance with the manufacturer's user manual. However, there is no guarantee that interference will not occur in any particular installation. If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are 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 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 experienced radio/television technician for help.

This device complies with Part 15 of the Federal Communications Commission (FCC) Rules. Operation is subject to the following two conditions.

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

WARNING: DO NOT ATTEMPT TO SERVICE THE WIRELESS COMMUNICATION DEVICE YOURSELF. SUCH ACTION MAY VOID THE WARRANTY. THIS DEVICE IS FACTORY TUNED. NO CUSTOMER CALIBRATION OR TUNING IS REQUIRED. CONTACT INSEEGO CORP TECHNICAL SUPPORT FOR INFORMATION ABOUT SERVICING YOUR WIRELESS COMMUNICATION DEVICE.

FCC CAUTION: Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

MODIFICATIONS: The FCC requires that you be notified that any changes or modifications made to this device that are not expressly approved by Inseego Corp. may void your authority to operate the equipment.

NOTE: The Radio Frequency (RF) emitter installed in your modem must not be located or operated in conjunction with any other antenna or transmitter, unless specifically authorized by INSEEGO CORP.

Innovation, Science and Economic Development Notice (ISED – Canada)

IC: 3229A-MC800

ISED RSS-Gen Notice

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Les dispositifs fonctionnant dans la bande de 5 150 à 5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

ISED Canada ICES-003 Compliance

CAN ICES-3 (B)/NMB-3(B)

FCC and ISED RF Exposure Guidance Statement

In order to comply with FCC RF Exposure requirements, this device must be installed to provide at least 5 mm 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 5 mm de séparation du corps humain en tout temps.



Inseego Corp. declares that MC800 is in Compliance with the Radio Equipment Directive 2014/53/EU, its essential requirements and other relevant provisions of the directive.

A full copy of the EU declaration of conformity is available at the following internet address:
<https://www.inseego.com/support/>.

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

EU RF Radiation Exposure Guidance Statement:

This device must be installed to provide at least 5 mm separation from the human body at all times.

EU Radio Frequency and Transmitted Output Power Information

Band	Max Power	Frequency
WCDMA-BAND I	24 dBm	1920-1980 MHz
WCDMA-BAND VIII	24 dBm	880-915 MHz
LTE BAND 1	24 dBm	1920-1980 MHz
LTE BAND 3	24 dBm	1710-1785 MHz
LTE BAND 7	24 dBm	2500-2570 MHz
LTE BAND 20	24 dBm	832-862 MHz
LTE BAND 28	24 dBm	703-748 MHz

Product Certifications and Supplier's Declarations of Conformity

Product Certifications and Supplier's Declarations of Conformity documentation may be consulted at Inseego Corp., 9710 Scranton Road Suite 200, San Diego CA 92121, USA.

<https://www.inseego.com/support/>.

Wireless communications

IMPORTANT: Due to the transmission and reception properties of wireless communications, data occasionally can be lost or delayed.

This can be due to the variation in radio signal strength that results from changes in the characteristics of the radio transmission path. Although data loss is rare, the environment where you operate the modem might adversely affect communications.

Variations in radio signal strength are referred to as fading. Fading is caused by several different factors including signal reflection, the ionosphere, and interference from other radio channels.

Inseego Corp. or its partners will not be held responsible for damages of any kind resulting from the delays or errors in data transmitted or received with the M3000 device, or failure of the M3000 device to transmit or receive such data.

Limited warranty and liability

Inseego Corp. warrants for the 12-month period immediately following receipt of the Product by Purchaser that the Product will be free from defects in material and workmanship under normal use. THESE WARRANTIES ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The exclusive remedy for a claim under this warranty shall be limited to the repair or replacement, at Inseego's option, of defective or non-conforming materials, parts or components. The foregoing warranties do not extend to (I) non-conformities, defects or errors in the Products due to accident, abuse, misuse or negligent use of the Products or use in other than a normal and customary manner, environmental conditions not conforming to Inseego's specification, of failure to follow prescribed installation, operating and maintenance procedures, (II) defects, errors or nonconformities in the Product due to modifications, alterations, additions or changes not made in accordance with Inseego's specifications or authorized by Inseego, (III) normal wear and tear, (IV) damage caused by force of nature or act of any third person, (V) shipping damage, (VI) service or repair of Product by the purchaser without prior written consent from Inseego, (VII) products designated by Inseego as beta site test samples, experimental, developmental, reproduction, sample, incomplete or out of specification Products, or (VIII) returned products if the original identification marks have been removed or altered.

Safety hazards

Do not operate the USB8 in an environment that might be susceptible to radio interference resulting in danger, specifically:

Areas where prohibited by the law

Follow any special rules and regulations and obey all signs and notices. Always turn off the host device when instructed to do so, or when you suspect that it might cause interference or danger.

Where explosive atmospheres might be present

Do not operate your device in any area where a potentially explosive atmosphere might exist. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Be aware and comply with all signs and instructions.

Users are advised not to operate the device while at a refueling point or service station. Users are reminded to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. Potential locations can include gas stations, below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

Near medical and life support equipment

Do not operate your device in any area where medical equipment, life support equipment, or near any equipment that might be susceptible to any form of radio interference. In such areas, the host communications device must be turned off. The device can transmit signals that could interfere with this equipment.

On an aircraft, either on the ground or airborne

In addition to FAA requirements, many airline regulations state that you must suspend wireless operations before boarding an airplane. Please ensure that the modem is turned off prior to boarding aircraft in order to comply with these regulations. The modem can transmit signals that could interfere with various onboard systems and controls.

While operating a vehicle

The driver or operator of any vehicle should not operate a wireless data device while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some countries, operating such communications devices while in control of a vehicle is an offense.

Electrostatic Discharge (ESD)

Electrical and electronic devices are sensitive to electrostatic discharge (ESD). Macintosh native connection software might attempt to reinitialize the device should a substantial electrostatic discharge reset the device. If the software is not operational after an ESD occurrence, then restart your computer.

5

Glossary

Glossary

- **4G LTE** —Fourth Generation Long Term Evolution. LTE is a standard for wireless data communications technology and an evolution of the GSM/UMTS standards. The goal of LTE is to increase the capacity and speed of wireless data networks using new DSP (digital signal processing) techniques and modulations that were developed around the turn of the millennium. A further goal is the redesign and simplification of the network architecture to an IP-based system with significantly reduced transfer latency compared to the 3G architecture. The LTE wireless interface is incompatible with 2G and 3G networks, so that it must be operated on a separate wireless spectrum
- **APN** — Access Point Name. The name of a gateway between a mobile network and another computer network, often the internet.
- **Broadband** — High-capacity high-speed transmission channel with a wider bandwidth than conventional modem lines. Broadband channels can carry video, voice, and data simultaneously.
- **CDMA** — Code Division Multiple Access. It is the underlying channel access method used by some mobile phone standards.
- **DNS** — Domain Name System. A system for converting host names and domain names into IP addresses on the internet or on local networks that use the TCP/IP protocol.
- **ESN** — Electronic Serial Number. A unique 32-bit number embedded in a wireless device that identifies the device.
- **Firmware** — A computer program embedded in an electronic device. Firmware usually contains operating code for the device.
- **GPS** — Global Positioning System. A radio-based navigation system that allows users to determine their location. The device uses satellite data to calculate its position. Commonly used in mapping and navigation systems.
- **HTTP** —Hypertext Transfer Protocol. An application-level protocol for accessing the World Wide web over the internet.
- **ICCID** — Integrated Circuit Card IDentification. A serial number stored in and engraved or printed on a SIM card that internationally identifies the card.
- **IP** — Internet Protocol. The mechanism by which packets are routed between computers on a network.
- **IMEI** — International Mobile Equipment Identity. Used in LTE networks to identify the device. It is usually printed on the device and can often be retrieved using a USSD code.
- **IP** — Internet Protocol. The mechanism by which packets are routed between computers on a network.
- **IP type** — The type of service provided over a network.

- **IP address**—Internet Protocol address. The address of a device attached to an IP network (TCP/IP network).
- **ISP**—Internet Service Provider. Also referred to as the service carrier, an ISP provides internet connection service (See Network Operator).
- **LAN** — Local Area Network. A type of network that lets a group of computers, all in close proximity (such as inside an office building), communicate with one another. It does not use common carrier circuits though it can have gateways or bridges to other public or private networks.
- **LTE** — Long Term Evolution. A set of enhancements to UMTS (moving toward 4G) that will provide high throughput, low latency, plug and play and seamless connection to existing networks such as GSM, cdmaOne, etc.
- **Network Operator**—The vendor that provides your wireless access. Known by different names in different regions, some examples are wireless provider, network provider, or cellular carrier.
- **Network Technology**—The technology on which a particular network provider's system is built, such as LTE or GSM.
- **Port** — A virtual data connection used by programs to exchange data. It is the endpoint in a logical connection. The port is specified by the port number.
- **PUK code (Pin Unlock Key)** — A PUK is required when you enter an incorrect PIN 3 times. After entering the wrong PIN 3 times, the SIM card is disabled.
- **SIM** — Subscriber Identification Module. Found in LTE and GSM network technology, the SIM is a card containing identification information for the subscriber and their account. The SIM card can be moved to different devices.
- **SNR** — Signal to Noise Ratio. The ratio of signal power to noise power expressed in decibels. SNR is a positive value, and higher numbers are better.
- **UI** — User Interface. The part of a software application or hardware device that a user sees and interacts with.
- **USB** — Universal Serial Bus. A connection type for computing device peripherals such as a printer, mobile modem, etc. USB connectors may be used for data transfer or charging.
- **USB Port Types** — The USB ports on computers and hubs have a rectangular Type A socket, and peripheral devices have a cable with a Type A plug. Peripherals that do not have an attached cable have a square Type B socket on the device and a separate cable with a Type A and Type B plug. Ports and connectors are available in different sizes (for example, standard, mini, and micro).
- **WCDMA** — Wideband Code-Division Multiple Access. A 3G mobile wireless technology that promises much higher data speeds to mobile and portable wireless devices. Another name for UMTS.