## BPC100 Home and Business Phone Connect



#### INSEEGO COPYRIGHT STATEMENT

© 2023 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 Although copyrighted, the software drivers are unpublished and embody valuable trade secrets proprietary to Inseego Corp.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<sup>®</sup> 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: 14965400 Rev 3

## Contents

Introduction and Getting Started	5
Overview	6
Key Features	6
System Requirements	6
Description	6
Top View	7
Back View	8
Status Indicators	9
Getting Started	10
Installing the Batteries	10
Installing the External Antennas	11
Powering On	12
Connecting a Phone	13
Connecting a Security System Alarm	14
Connecting to the Internet	
Activating your BPC100	15
Caring for your BPC100	16
Resetting the BPC100	
Using your BPC100	
Making Calls	
Restrictions	18
Receiving Calls	
Call Waiting	
Missed Calls	
Using Voicemail	
Accessing Voicemail with a Shortcut	
Using Call Forwarding	
Using the Web Interface	
Introduction	
Banner	
Side Menu	
Getting Help	
Overview Page	
System & Network Status Tab	
GPS Tab	
Managing Settings	
LAN Tab	
Network Tab	
Backup and Restore Tab	
Software Update Page	
Viewing Info About the BPC100	
Internet Status Tab	
Device Info Tab	
Logs Tab	
Getting Help	
Help Tab	
Customer Support Tab	
Troubleshooting and Support	
Overview	

Common Problems and Solutions	38
No Dial Tone	38
Calling 911	38
Power Outage/Backup Battery	39
Caller ID	39
Adjusting Volume	39
Call Cannot be Completed as Dialed	39
Technical Support	39
Product Specifications and Regulatory Information	
Product Specifications	41
Device	41
Environmental	41
Technology and Bands	41
Regulatory Information	42
Product Certifications and Supplier's Declarations of Conformity	42
Wireless Communications	43
Limited Warranty and Liability	43
Safety Hazards	44
Proper Battery Use and Disposal	45

1

# Introduction and Getting Started

Overview

Description

**Status Indicators** 

**Getting Started** 

**Caring for your BPC100** 

## Overview

The BPC100 delivers clear HD Voice over LTE (VoLTE) with multiple connectivity options, providing an excellent replacement to local phone service.

## **Key Features**

- HD VoLTE allows you to hear inbound and outbound calls in high-definition with clear, natural sounding audio.
- Multiple plug-and-play connectivity options, including: an Ethernet port that supports data connectivity for light applications if your main internet connection is lost, an RJ11 port that can be used for phones, and a dedicated RJ31 port for alarm systems.
- Backup battery support with 3 AA batteries in case of a power outage.
- Easily portable.
- External antennas that provide improved performance in areas of low signal strength.

## System Requirements

The BPC100 provides voice and data service. You can connect a wired phone, security alarm, and a data device.

To use the BPC100, you must subscribe to an eligible voice plan.

## Description

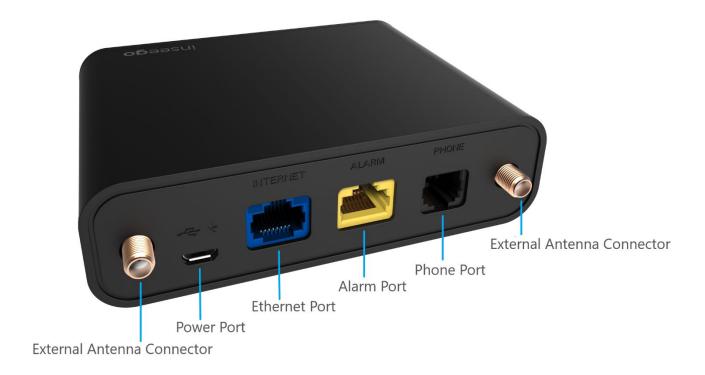
The BPC100 package includes:

- BPC100
- Pre-installed SIM card
- Micro USB 2.0 cable
- Power adapter
- 2 external antennas
- 3 non-rechargeable AA batteries
- Ouick Start Guide
- Important Customer Safety Information

## Top View



## **Back View**



**WARNING!** Do not connect a phone to the yellow port labeled **ALARM**. This port is intended for connecting a security system only. Inserting a phone line into this port will cause the phone to stop working. Using a phone port splitter may not be supported and could impact device performance.

## Status Indicators

The Power button on the front of the device has a light that indicates the status of your BPC100.



LED Color	State	Meaning
Green	Solid	LTE is available BPC100 Running on Backup Batteries with LTE available
Blue	Solid	Incoming/Outgoing Call (including 911)*  Call Waiting  Conference Call  Call Forwarding Enabled  Software Update in Progress  *LED turns green once call is established and LTE is available again.
Blue	Blinking	Voicemail Available Missed Call Software Update Complete
Red 21	Blinking	No Service SIM Error SIM Locked Low Battery

Before making a call, listen for a dial tone on your telephone. If the indicator light on your BPC100 is blinking red, ensure that the external antennas are connected and move the BPC100 to a location that receives a better signal.

## **Getting Started**

This section provides instructions for getting your BP100 up and running.

To set up your BPC100 for the first time:

- 1. Make sure you are subscribed to an eligible voice plan.
- 2. Install the supplied AA batteries.
- 3. Install the external antennas.
- 4. Power on the BPC100 unit.
- 5. Connect your phone.
- 6. Connect any security system.
- 7. Connect to the internet.
- 8. Activate your BPC100.

## Installing the Batteries

Your BPC100 comes with both an AC wall charger and three replaceable, non-rechargeable AA batteries in case of power failure.

During a power outage or if the wall charger is unplugged, the BPC100 continues to run off the batteries and the LED indicator is green. Data service will not be available in battery mode.

NOTE: During a power outage, only corded phones that do not require electric power can be used to make or receive calls (including calls to 911).

If the batteries' charge is low, the LED indicator light blinks red. To view the current strength of your BPC100 batteries, use a web browser to access the Web Interface (see Using the Web Interface on page 20). The battery strength is displayed on the banner at the top.

To install the batteries:

- 1. Carefully remove the battery cover from the BPC100 and set it aside.
- 2. Install the three AA batteries that came with the unit.
- 3. Replace the battery cover by setting it on the BPC100 where the notches align, then press on the cover until it clicks into place.







**IMPORTANT:** Whenever you remove or insert the batteries, make sure your BPC100 is not connected to any device or power source.

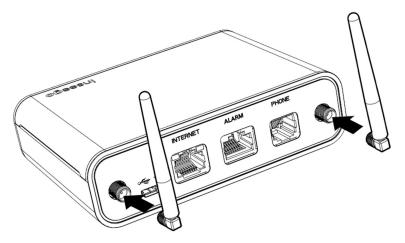
## **Backup Battery Tips**

- Battery life depends on the network, signal strength, temperature, features, and accessories you use.
- Generally, talk usage time on backup batteries is approximately three hours, and standby time is approximately 23 hours.
- Replacing batteries will extend the usage time during a power outage.
- When battery charge is low, the LED indicator on the Power button flashes red.
- To view the current strength of your BPC100 batteries, use a web browser to access the Web Interface (see Using the Web Interface on page 20). The battery strength is displayed on the banner at the top.
- Do not use sharp objects or excessive force or remove the battery, as this may damage the BPC100 and the batteries.
- Never expose batteries to temperatures below -20°C (4°F) or above 60°C (140°F).

## Installing the External Antennas

Two external antennas are included with the BPC100 to improve connection and increase signal strength. Inseego recommends installing both onto the antenna connectors on the BPC100:

1. Align each antenna with a connector and screw securely into place.



- 2. Use the following installation instructions to comply with FCC rules on RF exposure. Failure to follow these guidelines can result in operations that exceed RF exposure limits.
  - Maintain a minimum distance of at least 30 cm (12 in) from all persons.
  - Use only the antennas supplied by Inseego. Never use an antenna from another vendor or another source.

**NOTE:** If installing or removing antennas after the initial device setup, you must restart the BPC100. Press and hold the **Power** button for three seconds until the device is off. Once powered off, press the **Power** button to turn the device back on.

## Powering On

To power on your BPC100:

- 1. Position the BPC100 near an AC outlet.
- 2. Plug the AC power cord and USB cable into the USB port on the back of the BPC100.
- 3. Plug the other end of the power cord into an appropriate electrical outlet.
- 4. Press and hold the **Power** button on the front of the BPC100 to turn the system on.

**WARNING!** Use only the power cord that came with your BPC100 to avoid damage that may void the warranty.

The LED indicator is green when the device is turned on.



If the LED indicator blinks red, there might not be a strong enough signal. Make sure both antennas are properly installed. If necessary, move the BPC100 to an alternative location that provides a stronger signal.

To power off the unit, press and hold the **Power** button.

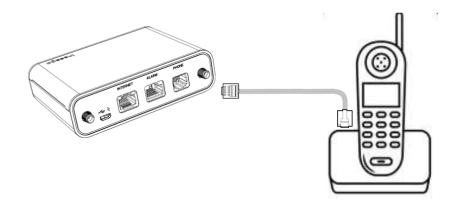
## Connecting a Phone

The BPC100 provides one phone port to connect to your home phone.

1. Unplug your phone from the wall port.

**WARNING!** Do NOT plug the BPC100 into your phone wall port.

2. Plug the end of the phone cord that was just removed from the wall port into the PHONE port on the back of the BPC100. The other end of the cord must remain plugged into the back of your phone's base unit.



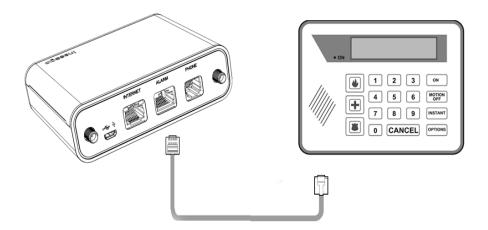
**WARNING!** Do NOT plug a phone into the yellow port labeled ALARM. Doing so will stop the device from working.

**NOTE:** The BPC100 does not support fax, Text Telephone (TTY), or Real Time Text (RTT).

## Connecting a Security System Alarm

The BPC100 provides an alarm port for connecting a security system. Contact your security system provider before connecting the BPC100 to your security system. In the event of an alarm, the security system will use the BPC100 to call authorities.

- 1. Plug the end of the alarm cable into the yellow port (labeled ALARM) on the BPC100. **NOTE:** An alarm cable is not included with the BPC100.
- 2. Plug the other end of the cable into the alarm port of the security system. **NOTE:** The BPC100 may not be compatible with all security systems.

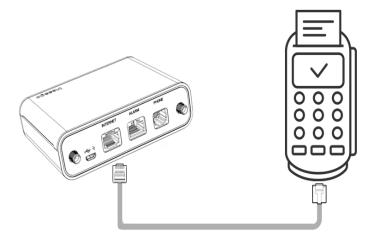


**NOTE:** Alarm company central station servers use a variety of signaling protocols to enable communication from a user's alarm system to the alarm company's central station. The Security Industry has not standardized a single communication protocol. While all central station server protocols have been developed to work over fixed, copper telephone lines, not all of these protocols work correctly over wireless networks. The BPC100 supports the most widely used central station server protocol called Contact-ID. Alarm calls using other central station server protocols are not supported. The quality of the end-to-end transmission path may affect the quality of individual alarm calls.

## Connecting to the Internet

The BPC100 provides an Ethernet port that can support data devices.

- 1. Plug the end of an Ethernet cable into the INTERNET port on the BPC100. **NOTE:** An Ethernet cable is not included with the BPC100.
- 2. Plug the other end of the cable into your data device.



## Activating your BPC100

A service plan is required to make and receive calls. Contact your service provider to set up a service plan.

Make a call to test service. Note that in most areas, you will need to include the three-digit area code even for local calls.

## **Transferring Your Existing Number**

**IMPORTANT:** Customers transferring a phone number from another service provider will not be able to receive calls on the BPC100 until the transfer process is complete. This process can take 2–10 business days.

Once your phone number transfer is complete, disconnect your phone from the wall port and connect it to the BPC100. After powered on, you will be able to make and receive calls through the phone connected to the BPC100.

## Caring for your BPC100

Like any electronic product, the BPC100 must be handled with care to ensure reliable operation. The following guidelines are recommended:

- Protect the BPC100 from liquids, dust, and excessive temperatures.
- Adhesive labels can be used to mount the BPC100 on a wall. Place the adhesive labels on the bottom of the device. Do not apply adhesive labels over any vents or ports; this may cause the BPC100 to potentially overheat or alter the performance of the antenna.
- Store the BPC100 in a dry and secure location when not in use.
- Never leave the BPC100 in an unattended vehicle due to uncontrollable temperatures that may be outside the desired temperature range for this BPC100, refer to page 41 for temperature ranges for the BPC100.

## Resetting the BPC100

The master reset button is in a small hole located on the bottom of the BPC100 battery compartment. This button returns the device to factory settings.

To reset the BPC100:

1. Place one end of an unfolded paper clip into the master reset button hole.



2. Press the paper clip on the button for five to six seconds; the BPC100 will restart.

# 2

# **Using your BPC100**

Making Calls
Receiving Calls
Using Voicemail
Using Call Forwarding

## Making Calls

Before making a call, make sure the LED indicator on the Power button is solid green.



- 1. Place a call by entering the desired phone number. In most areas, you will need to include the three-digit area code, even when dialing a local number.
- 2. When your call is complete, simply hang up the phone.

## Restrictions

The following types of calls cannot be made with your BPC100:

- Collect or operator-assisted calls
- Phone numbers beginning with 500, 700, 900, 976
- Dial-around calls (e.g., 1010-XXXX)
- DSL or dial-up internet service
- Text Telephone (TTY) or Real Time Text (RTT) calls
- Calls to Medical or Life Alert systems

## Receiving Calls

As soon as your BPC100 is set up and your voice service have been activated, it will be able to receive calls. When an incoming call is received, answer the attached phone as you normally would. **NOTE:** If you have a new phone number, be sure to share it with family, friends, and business contacts.

## Call Waiting

When a call comes in while you are on the phone, you hear a click and the incoming phone number appears on the phone screen (if available). Depress the **Flash** button on the phone to put the first call on hold and answer the second call. Hang up or press **Flash** again to reconnect with the first call.

## Missed Calls

If you do not pick up an incoming call, the BPC100 LED indicator light blinks blue.

## **Using Voicemail**

Your service provider may offer integrated voicemail. Contact your service provider for instructions on using voicemail.

## Accessing Voicemail with a Shortcut

You may be able to use a shortcut feature to access voicemail messages, depending on the capabilities of the phone you use with the BPC100. Please refer to the user material that came with your phone.

If your wired phone does not support a shortcut feature to access voice messages, you may have the option to save your voicemail number into the address book on the handset and assign that number to the #1 speed dial position on your phone's keypad.

## Using Call Forwarding

Support for call forwarding is dependent on your service provider. Contact your service provider for instructions on enabling/disabling call forwarding.



## **Using the Web Interface**

Introduction

**Overview Page** 

**Managing Settings** 

**Software Update Page** 

**Viewing Info About the BPC100** 

**Getting Help** 

## Introduction

The BPC100 Web Interface is web-based software that interacts directly with your BPC100. Use it for managing settings, software updates, network status and information, and links to online help and customer support.

To access the Web Interface, your BPC100 must be connected to a computer with an Ethernet cable. On the computer, use a browser to log into <a href="http://my.bpc100">http://my.bpc100</a>.

The first time you log in, use the default password: **admin**. You will be prompted to enter and confirm your own individual password for future access.

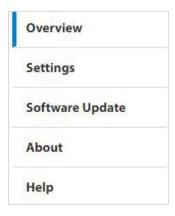
#### Banner

When you are logged in, the website banner at the top of each page displays current voice signal status ( ••••••• ) and battery strength ( ••••••• ) for your BPC100. It also includes a drop-down to sign in or out of your account and to change your password.



## Side Menu

Each screen in the BPC100 Web Interface includes a menu on the side, which you can use to return to the Overview page or jump to other pages. The current page is indicated by a blue bar.



## **Getting Help**

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

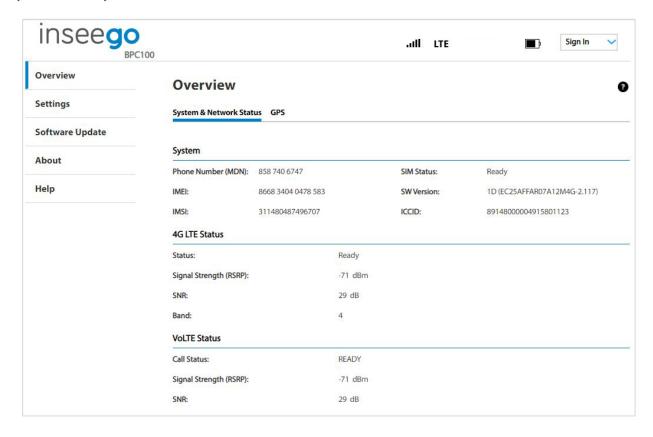
## Overview Page

The Overview page is the initial page of the Web Interface and includes of two tabs:

- System & Network Status
- GPS

## System & Network Status Tab

The Overview System & Network Status tab is the home screen for your BPC100. It displays data for your BPC100 system and current status information for the LTE network and VoLTE.



## **System**

**Phone Number (MDN):** The phone number of your BPC100.

**IMEI:** The International Mobile Equipment Identity (IMEI) for your BPC100. This is a 15 digit code used to uniquely identify an individual mobile station. The IMEI does not change when the SIM is changed.

**IMSI:** The International Mobile Subscriber Identity (IMSI) for your BPC100. This is a unique number, usually fifteen digits, that identifies a Global System for Mobile Communications (GSM) subscriber.

**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.

**SW Version:** The version of the firmware (software) currently installed on your BPC100.

**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.

#### **4G LTE Status**

**Status:** The status of the 4G LTE network.

**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 ratio of signal power to noise power expressed in decibels. SNR is a positive value, and higher numbers are better.

**Band:** The band in use for the current connection.

#### **VoLTE Status**

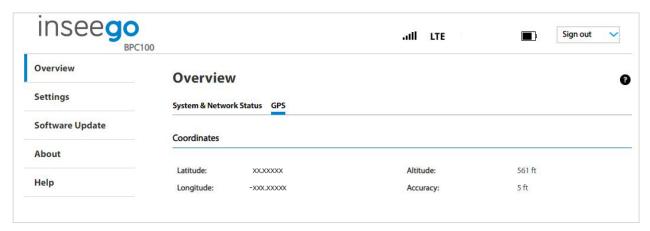
**Status:** The status of Voice over LTE.

**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 ratio of signal power to noise power expressed in decibels. SNR is a positive value, and higher numbers are better.

## **GPS Tab**

The GPS tab displays GPS coordinates of the current location of the BPC100. Latitude, longitude, altitude, and accuracy are shown as defined by GPS NMEA strings.



## **Coordinates**

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.

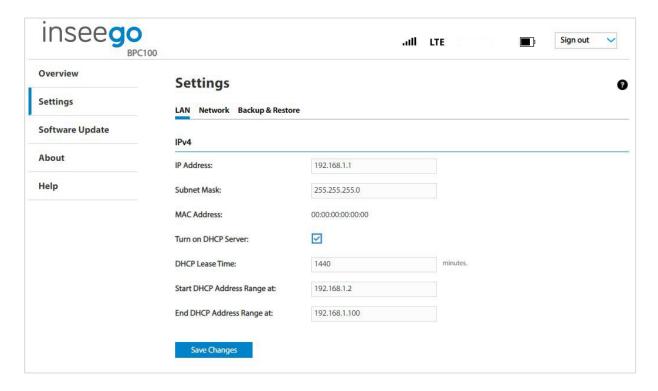
## Managing Settings

The Settings page includes three tabs:

- LAN
- Network
- Backup & Restore

## **LAN Tab**

This page provides settings and information about the BPC100 local area network (LAN). The LAN consists of the device and all connected devices.



#### IPv4

**IP Address:** The IP address for your BPC100, as seen from the local network. Normally, you can use the default value.

**Subnet Mask:** The subnet mask network setting for the BPC100. The default value 255.255.255.0 is standard for small (class "C") networks. If you change the LAN IP Address, make sure to use the correct Subnet mask for the IP address range of the LAN IP address.

**MAC Address:** (read-only) The Media Access Control (MAC) Address for the Ethernet interface on your BPC100. The MAC address is a unique network identifier assigned when a network device is manufactured.

**Turn on DHCP server:** This checkbox turns the DHCP Server feature on or off. This should be left checked. The DHCP server allocates an IP address to each connected device. **NOTE:** If the DHCP Server is turned off, each connected device must be assigned a fixed IP address.

**DHCP Lease Time:** The number of minutes in which connected devices must renew the IP address assigned to them by the DHCP server. Normally, this can be left at the default value, but if you have special requirements, you can change this value.

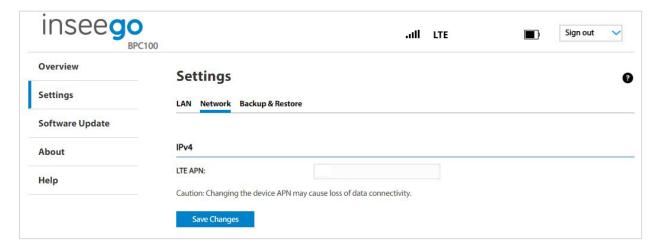
**Start DHCP Address Range at:** The start of the IP address range used by the DHCP server. If the IP is set on the client device, use an IP address outside of this DHCP range; if the IP address is set using an IP reservation, it will usually be inside this range. **NOTE:** Only expert users should change this setting.

**End DHCP Address Range at:** The end of the IP address range used by the DHCP server. If the IP is set on the client device, use an IP address outside of this DHCP range; if the IP address is set using an IP reservation, it will usually be inside this range. **NOTE:** Only expert users should change this setting.

Click **Save Changes** to activate and save new settings.

## Network Tab

In most configurations, the BPC100 is used with a dynamic IP and SIM and the Access Point Name (APN) is available from the network, for example: *internet*. 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 BPC100.



#### IPv4

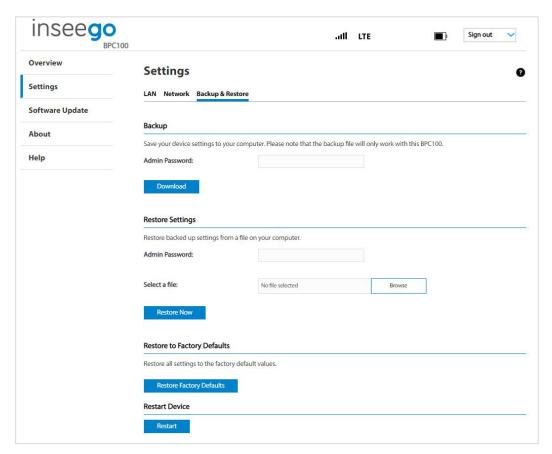
**LTE APN:** Enter the APN for your private network.

**CAUTION!** Changing the APN may cause a loss of data connectivity.

Click **Save Changes**. The BPC100 will reboot for changes to take effect.

## **Backup and Restore Tab**

Use this tab to back up current BPC100 settings to a file on your computer, restore (upload) a previously-saved configuration file, reset the BPC100 to factory defaults, or restart the BPC100.



## Backup

To back up current BPC100 settings to a file on your computer, enter your Admin password in the **Admin Password** field.

Click the **Download** button. The file is automatically downloaded to the default Downloads folder on the device connected to the Web Interface. This configuration file contains all settings for your BPC100.

**NOTE:** The backup file cannot be edited or viewed on the downloaded system or on any other device. This file can only be restored for this model of BPC100, and settings can only be viewed or changed using the Web Interface.

## **Restore Settings**

**CAUTION!** Restoring settings (uploading a configuration file) changes ALL of the existing settings to match the configuration file. This may break existing connections to the BPC100 and disconnect you from the Web Interface.

To restore system settings from a backup settings file, enter your Admin password in the **Admin Password** field.

**Select a file:** Click **Browse** and choose a backup settings file to restore.

**NOTE:** You can only restore a file that was created for this model of BPC100.

Click the **Restore Now** button.

## **Restore to Factory Defaults**

**Restore Factory Defaults:** This button resets all settings to their factory default values.

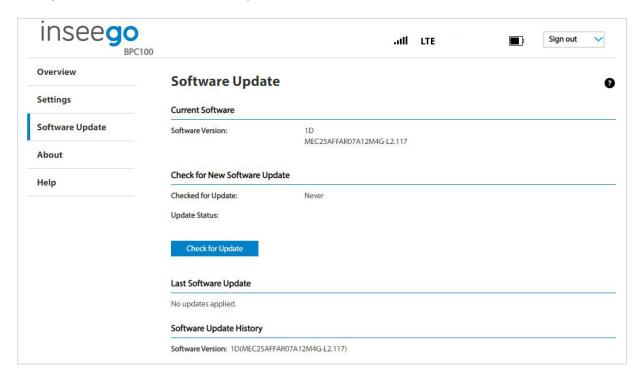
**CAUTION!** This initiates a restart and may break all existing connections to your BPC100 and disconnect you from the Web Interface.

## **Restart Device**

**Restart**: This button turns your BPC100 off and on again.

## Software Update Page

Software updates are delivered to the BPC100 automatically over the mobile network. This tab displays your current software version, last software update information, software update history, and allows you to check for new software updates.



## **Current Software**

**Software Version:** The version of the software currently installed on your BPC100.

## **Check for New Software Update**

Checked for Update: The date and time the BPC100 last checked to see if an update was available.

**Update Status:** This area is usually blank. If you check for an update, the results display.

**Check for Update:** Click this button to manually 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.

## **Software Update History**

This section displays details of the last updates that have been downloaded and installed to your BPC100. If no updates have been installed, this section is not displayed.

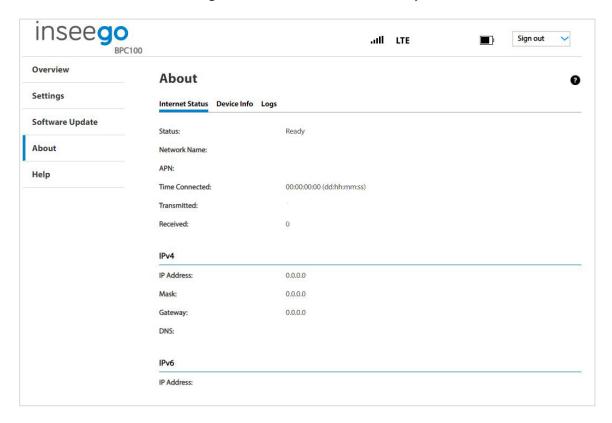
## Viewing Info About the BPC100

The About page includes three tabs:

- Internet Status
- Device Info
- Logs

## Internet Status Tab

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



**Status:** The current status of the BPC100 connection.

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

APN: The Access Point Name (APN) for your BPC100.

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

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

**Received:** The amount of data received 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 BPC100.

Mask: The network mask associated with the IPv4 address.

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

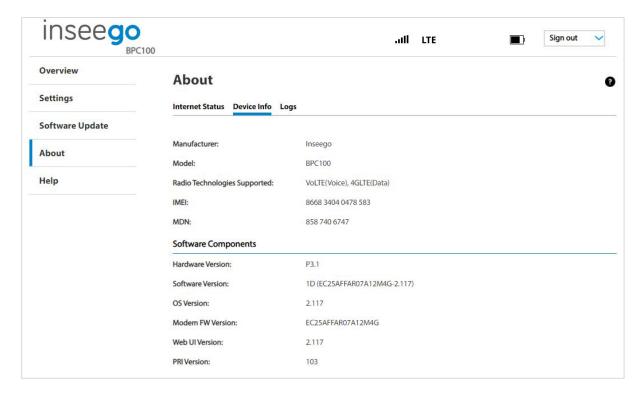
**DNS:** The Domain Name Server currently used by the BPC100.

## IPv6

**IP Address:** The global IPv6 address for the BPC100 (blank if IPv6 is turned off or is not supported by the current network connection or operator).

## **Device Info Tab**

Use this tab to view details about your BPC100.



Manufacturer: Inseego.

Model: Model of the device (BPC100).

**Radio Technologies Supported**: The technologies supported.

**IMEI:** The International Mobile Equipment Identity (IMEI) for your BPC100. This is a 15 digit code used to uniquely identify an individual mobile station. The IMEI does not change when the SIM is changed.

MDN: The phone number of your BPC100.

## **Software Components**

**Hardware Version:** The version of hardware.

**Software Version:** The version of software currently installed.

**OS Version:** The version number for the Operating System and its components.

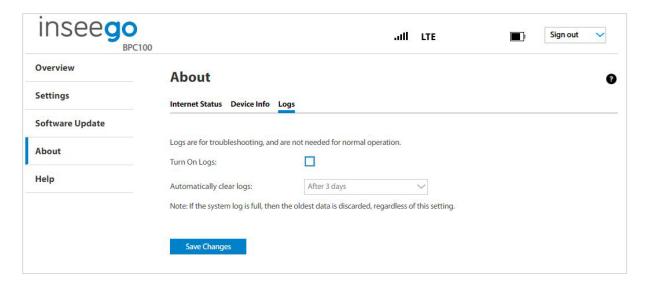
**Modem FW Version:** The version of firmware (software) currently installed for the modem component.

**Web UI Version:** The version number for the BPC100 Web Interface.

**PRI Version:** The configuration version currently applied to the BPC100.

## Logs Tab

Use this tab to view log information for troubleshooting.



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

**Automatically clear logs:** Use the drop-down list to select when logs are cleared. **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:

Click on **Mobile Network Log** for log data of connections to the mobile network.

Click on **Device Log** for log data of events other than mobile data connections that occurred on this device.

Refresh: Updates the displayed log data.

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

**Export Logs:** Allows you to export log data.

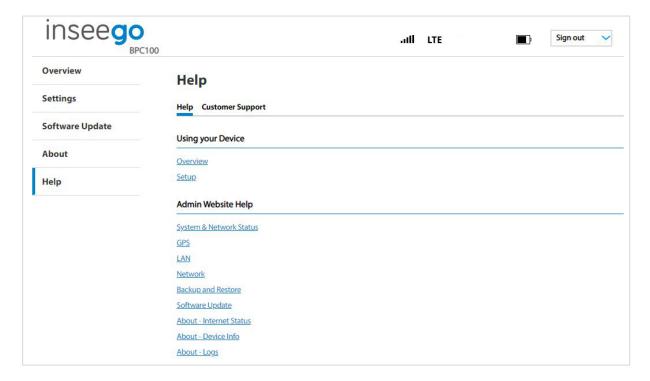
## Getting Help

The Help page includes two tabs:

- Help
- Customer Support

## Help Tab

Use the Customer Support tab for useful links and support information.



## **Using your Device**

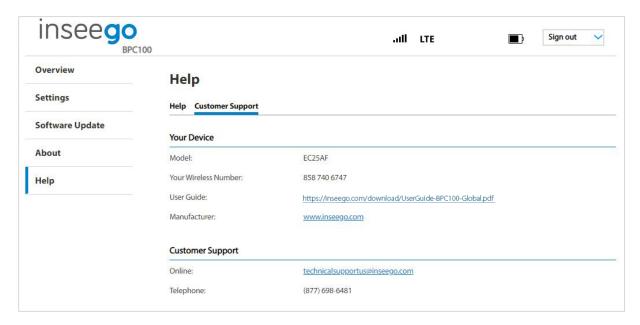
This section contains links to topics on setting up and using your BPC100.

## **Admin Website Help**

This section contains a link to the help topics for each page on the Web Interface.

## **Customer Support Tab**

Use the Customer Support tab for useful links and support information.



## **Your Device**

Model: Model of the device.

**Your Wireless Number**: The phone number associated with your BPC100.

**User Guide**: A link to this User Guide.

Manufacturer: A link to the Inseego website.

## **Customer Support**

Contact your service provider or reseller for assistance.

## **Troubleshooting and Support**

Overview

Common Problems and Solutions

Technical Support

## Overview

When properly installed, the BPC100 is a highly reliable product. Most problems are caused by one of these issues:

- Phones or Ethernet devices connected to incorrect ports. Refer to the labels next to the ports for proper connections.
- Network coverage is unavailable due to coverage area, an account problem, or a network problem. Contact your service provider to view the latest coverage map for your area.

The following tips can help solve many common problems encountered while using the BPC100:

- Make sure you are using the BPC100 in the correct geographic region.
- Ensure that your wireless coverage extends to your current location.
- If you do not receive a strong data signal, move the device to a different location.
- Ensure that you have an active subscription plan.
- You can resolve many issues by restarting your BPC100.

## Common Problems and Solutions

The following are some common problems and solutions:

## No Dial Tone

Issue: No dial tone on a handset.

#### **Solution:**

- Make sure the AC power adaptor is properly connected to both the BPC100 and the wall socket.

## Calling 911

Issue: Can I call 911 on a BPC100?

**Solution:** Yes. It is important to note that the GPS chipset embedded in this device will work best if the BPC100 is located near a window or other opening.

## Power Outage/Backup Battery

**Issue:** There is a power outage. Will the BPC100 work?

#### **Solution:**

- Service is only available during a power outage if the phone connected to the device does not
  rely on external power to operate (as is the case with many corded phones). While the BPC100
  has backup batteries, if the phone connected to it requires external power to operate, service
  is not available during a power outage. This includes the ability to make 911 calls.
- Internet connectivity is disabled to preserve talk time when in backup battery mode.
- Talk usage time on backup batteries is approximately 3 hours and standby time is approximately 23 hours. Actual values can vary with environmental conditions.
- Replacing the batteries will extend the usage time during a power outage.

## Caller ID

Issue: Does caller ID (CID) work with a BPC100?

**Solution:** Yes, caller ID is available on the phone you connect to the BPC100, allowing you to see the caller's name and/ or phone number before you take the call. Monthly subscription charges may apply. Contact your service provider for further information.

## Adjusting Volume

**Issue:** How do I adjust the volume on my phone?

**Solution:** You can adjust the volume using the phone connected to the BPC100.

## Call Cannot be Completed as Dialed

Issue: I am getting the recording, "Call cannot be completed as dialed".

**Solution:** Check the number to ensure you are dialing correctly and dial the number without pauses longer than four seconds between dialed digits.

## **Technical Support**

**IMPORTANT:** Before reaching out for support, be sure to restart your BPC100.

#### **Customer Service and Troubleshooting**

Contact your service provider for assistance.

#### **More Information**

Documentation for your BPC100 is available online. Go to <a href="https://inseego.com/resources/product-documentation">https://inseego.com/resources/product-documentation</a>. Or, from the Admin website, select **Help > Customer Support**.

# 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** 

**Proper Battery Use and Disposal** 

## **Product Specifications**

Device	
Name and Model:	BPC100
Regulatory:	FCC (North America)
Dimensions:	118 mm x 88 mm x 33 mm (4.65 in x 3.46 in x 1.30 in)
Weight:	272 g (9.59 oz)
Interface Types:	1 x Phone (RJ-11)
	1 x Security (RJ-31)
	1 x Ethernet (RJ-45)
	1 x Power (MicroUSB)
	2 x External Antenna (SMA)
Wireless Network:	LTE
Batteries:	3 x Non-Rechargeable AA
Chipset:	Qualcomm <sup>®</sup> 9207
Module:	Quectel EC25-AF (Cat 4)
LED:	Network
	Voicemail
	SIM status
GPS:	A-GPS with SUPL for E911 only
Environmental	
Operating Temperature:	-20 ° C to +60° C (-4°F to 140° F)
Storage Temperature:	-40 ° C to +85° C (-40°F to 185° F)
Drop:	1.5 meter (4.92 feet) drop, no mechanical, electrical or functional damage
	– fully operational
Vibration Stability:	50-2000 Hz, 3 axes
Technology and Bands	
Technology:	LTE
Band Designation:	LTE: B2/B4/B5/B12/B13/B14/B66

## Regulatory Information

## Federal Communications Commission Notice (FCC – United States)

#### **FCC ID: PKRISGBPC100**

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.

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

• 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.

**RF EXPOSURE INFORMATION:** This device complies with FCC radiation exposure limits set forth for uncontrolled environments. In order to comply with FCC/ISED RF Exposure requirements, this device must be installed to provide at least 30 cm separation from the human body at all times.

# 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.

## 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 moder 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 BPC100 device, or failure of the BPC100 device to transmit or receive such data.

## Limited Warranty and Liability

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE (OR BY COUNTRY OR PROVINCE). OTHER THAN AS PERMITTED BY LAW, INSEEGO CORP DOES NOT EXCLUDE, LIMIT OR SUSPEND OTHER RIGHTS YOU MAY HAVE, INCLUDING THOSE THAT MAY ARISE FROM THE A PARTICULAR SALES CONTRACT.

INSEEGO CORP warrants for the 12-month period (or 24-month period if required by statute where you purchased the Product) immediately following your receipt of the Product that the Product will be free from defects in material and workmanship under normal use. TO THE EXTENT PERMITTED BY LAW, 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 CORP'S option, of defective or non-conforming materials, parts, components or the device. 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 CORP'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 CORP'S specifications or authorized by INSEEGO CORP, (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 CORP, (VII) products designated by INSEEGO CORP 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. There is no warranty that information stored in the Product will be retained following any Product repair or replacement.

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, INSEEGO CORP IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY.

THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS, OR ANY STATUTORY LIABILITY FOR INTENTIONAL AND GROSS NEGLIGENT ACTS AND/OR OMISSIONS. SOME STATES (COUNTRIES AND PROVINCES) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

## Safety Hazards

Do not operate the BPC100 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.

## Proper Battery Use and Disposal

## **IMPORTANT:** In the event of a battery leak:

- Do not allow the liquid to come in contact with the skin or the eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.
- Seek medical advice immediately if a battery has been swallowed.
- Communicate the appropriate steps to be taken if a hazard occurs.

Please review the following guidelines for safe and responsible battery use:

- Do not disassemble or open, crush, bend or deform, puncture, or shred.
- Do not modify or remanufacture, attempt to insert a foreign object into the battery, immerse or expose to water or other liquids, or expose to fire, explosion, or other hazard.
- Do not short circuit a battery or allow a metallic or conductive object to contact the battery terminals.
- Replace the battery only with another battery that has been qualified with the system per this standard. Use of an unqualified battery may present a risk of fire, explosion, leakage, or other hazard.
- Promptly dispose of used batteries in accordance with local regulations.
- Battery usage by children should be supervised.
- Avoid dropping the BPC100 or batteries. If the BPC100 or batteries are dropped, especially on a hard surface, and the user suspects damage, take it to a service center for inspection.
- Improper battery use may result in a fire, explosion, or other hazard.



#### Waste Electrical and Electronic Equipment (WEEE)

This symbol means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Proper recycling of your product will protect human health and the environment.