inseego

Inseego Connect

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Overview

Inseego Connect™ is a device management platform that helps you harness the power and performance of your networked devices. With Inseego Connect, you can easily monitor device availability, location, and usage—and configure devices remotely, helping you scale your deployment reliably, securely, and quickly.

Key Features

Inseego Connect allows you to:

- Monitor an entire deployment of devices in mobile or remote environments to gain real-time visibility on the status of your assets and recognize trends in device data.

- Configure and troubleshoot devices from one user-friendly platform.

- Group devices together to push widespread configurations.

- Set alarm rules, associate rules to devices or device groups, and determine which users receive alerts when alarms are triggered.

- Run reports for data usage, signal quality, and alarm history.

Getting Support

Documentation for your Inseego Connect is available online. Go to www.inseego.com/support-documentation.

For additional information and technical support, email Technical Support at technicalsupportus@inseego.com or call Customer Support (Toll Free) at **1-877-698-6481**.

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Using Inseego Connect

Overview
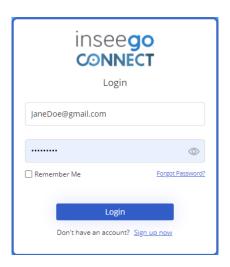
You will receive an email with access information when your Inseego Connect account is created. If you have not received this email, be sure to check your spam folder or company filters.

Logging In

To login to Inseego Connect, follow the instructions in the email sent to you. The initial login process includes setting a password and agreeing to the T&C and Privacy Policy.

The interface login screen appears:

Enter your email address and the password you set.

If you check **Remember Me**, you will not be prompted to log in for the next 24 hours. After 24 hours, you will need to re-enter your credentials on the login screen.

Click **Login**. Read and accept the Services Agreement. The Dashboard Home page displays.

Navigating the Interface

Use the side menu on the left of the page to access each page in the Inseego Connect interface. You can use this menu to jump to other pages. The current page is indicated by a white highlight.

NOTE: Feature availability varies according to the product you purchased.

The alarm icon ![bell icon] in the upper right of any screen displays the number of active alarms ![alarm icon with 1] on which you are included in the notify list. You can click on the icon to view alarms and dismiss them. When you click on an alarm name, a popup with details for that alarm appears. When you click **Close**, the popup closes and the alarm remains listed. When you click **Dismiss**, the alarm is removed from all alarm lists.

Click on the person icon ![person icon] in the upper right of any screen to change the tenant (if you belong to multiple tenants) or log out of Inseego Connect.

Getting Started

To add devices to Inseego Connect, navigate to **Devices > Register** (see Register Tab on page 25).

Dashboard

The Dashboard page allows you to view and filter current data for your Inseego devices and track their locations.

The Dashboard page includes two tabs:
- Home
- Map
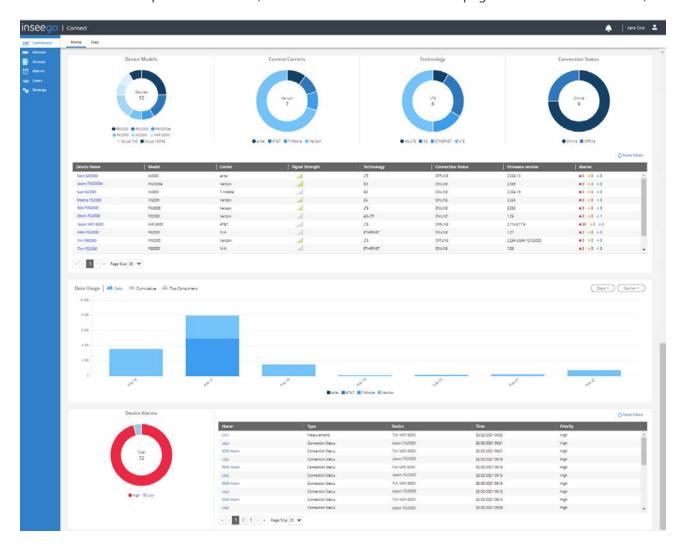
Home Tab

The Dashboard Home page displays charts for device models, current carriers, technology, and communication status. It also provides details on devices, a data usage graph, and alarm information.

This page appears upon login. You can navigate to it from other pages by selecting **Dashboard** from the side menu.

NOTE: You can click on a device name to access a device-specific dashboard that only displays information for that particular device (see Device Details Dashboard on page 16 for more information).

Charts

The charts at the top of the page provide visual displays of information about devices registered with Inseego Connect.

> **TIPS**
> - Hover over a color in a graph for details.
> - Click on a color to filter the Device table below for that element. If you click on additional colors in any graph, filtering includes those elements as well. Select **Reset Filters** to clear your selections and view data on all devices.

Device Models

Displays the count of each device model that is currently connected to Inseego Connect.

Current Carriers

Displays the count of devices that are connected to Inseego Connect through a specific carrier.

Technology

Displays the count of devices that are connected to Inseego Connect over 3G, LTE, or 5G.

Connection Status

Displays the count of devices that are online (currently connecting with Inseego Connect) and offline (not currently connecting with Inseego Connect).

Devices

This table provides information on all devices registered with Inseego Connect:

> **Device Name:** The name or IMEI of the connected device. **NOTE:** When you click on a device name, a dashboard with details for that device appears.
>
> **Model:** The model of the device, for example, MiFi M2000.
>
> **Carrier:** The vendor that provides wireless access for the device.
>
> **Signal Strength:** Displays network signal strength. More bars indicate more signal strength.
>
> **Technology:** Indicates the current data connection, for example, LTE or 5G.
>
> **Connection Status:** Whether the device is currently online or offline.
>
> **Firmware version:** The version of firmware on the device.
>
> **Alarms:** The number and type of alarms currently unresolved for the device.

To filter the information in this table, click on colors in the graphs above. For example, to see a list of MiFi M2000 devices on 5G, select the color for MiFi M2000 in the **Device Models** graph and the color for 5G in the **Technology** graph. Use the **Reset Filter** button to clear filters and show all devices.

Data Usage

The Data Usage graph provides data usage (In MB or GB) for all connected devices. You can select from the following display options on the upper left:

Daily — Displays data usage for all connected devices per day. Use the drop-downs in the upper right to change the number of days displayed or to filter on a particular carrier.

Cumulative — Displays 30 days of cumulative and projected data usage for all connected devices. The projected data usage is forecast based on usage patterns from the last 30 days. Use the drop-downs in the upper right to select a billing start date to store for each carrier and to filter on a particular carrier.

Top Consumers — Displays data usage for the ten devices using the most data. When the **Show average** checkbox in the upper-right is checked, a dotted yellow line shows the average usage for this account. Use the **Days** drop-down to display usage for 7 or 30 days.

TIP - Hover over a color in the graph for details.

Alarms

The Alarms section contains a chart and a list providing alarm information.

Device Alarms

Displays alarms in low, medium and high priorities.

TIPS
- Hover over a color in a graph for details.
- Click on a color to filter the Alarms table to the right for that priority. If you click on additional color, filtering also includes that priority. Select **Reset Filters** to clear your selections and show all alarms.

Alarms List

The list provides details for all currently unresolved alarms on all registered devices:

Name: The name of the alarm.

NOTE: When you click on an alarm name, a popup with details for that alarm appears. When you click **Close**, the popup closes and the alarm remains listed in the list. Click **Dismiss** to dismiss the alarm. You should dismiss an alarm once the triggering event is understood and any necessary actions have been taken. Dismissing an alarm removes it from all alarms lists so users can focus on unresolved alarms.

Type: The type of alarm (Connection Status, Device Data Usage, or Measurements).

Device: The name of the device with the alarm.

Time: The date and time of the alarm.
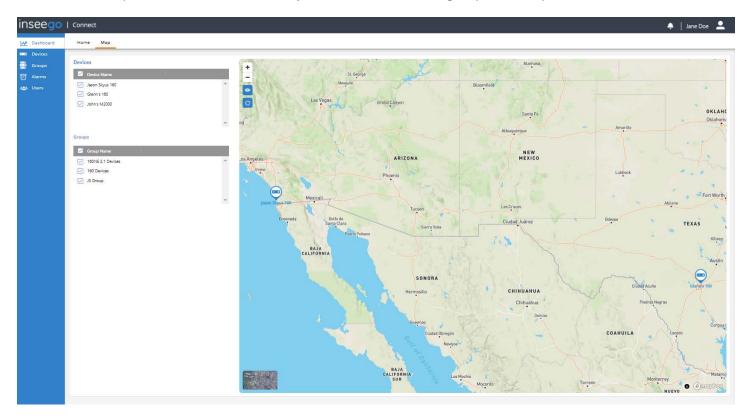
Priority: The priority of the alarm.

Click on priority colors on the graph to filter information by priority for this table. Use the **Reset Filter** button to clear filters and show all alarms.

Map Tab

Use the Map tab to view the location of your devices and device groups on a map.

Devices

Lists all the devices currently registered with your Inseego Connect that have reported a GPS location. The last reported GPS location is shown in the map.

TIP - Use the filter icon ▼ to search or sort the list, or in tandem with the checkboxes to hide devices.

Groups

Lists all the groups currently defined for your Inseego Connect.

TIP - Use the filter icon ▼ to search or sort the list, or in tandem with the checkboxes to hide groups.

Map

 Click on a ping icon to view details for that device.

TIPS

 Use the plus and minus icons in the upper left of the map to zoom in and out. You can also zoom in and out using the mouse wheel. You can navigate the map by clicking with the left mouse button and dragging the map.

 Use the eye icon to reset zoom. The zoom will adjust to fit all the devices in your account on the map.

 Click the refresh icon to update the map with the latest information sent by devices.

 The numbered circles represent clusters of devices in a specific location, with the number of devices in the location displayed on the circle. Click on a cluster to zoom in on the map and separate the cluster into individual devices. If you reach the maximum zoom level and the devices are still clustered, click on the cluster again for additional device information.

 Click the image in the bottom left to toggle between satellite and street view.

Devices

Use the Devices page to view device details and to configure devices, create templates, manage and monitor operations, and register devices with Inseego Connect.
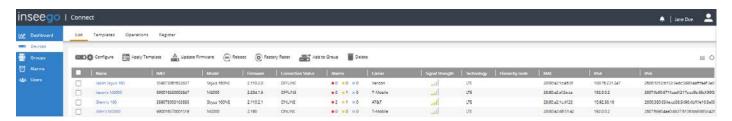
The Devices page includes four tabs:
- List
- Templates
- Operations
- Register

List Tab

Use the List tab to view details and configure settings on all the devices registered with Inseego Connect.

NOTE: You can click on a device name to access a device-specific dashboard that only displays information for that particular device (see Device Details Dashboard on page 16 for more information).

The list provides details on all devices registered to your Inseego Connect:

Name: The name of the device. **NOTE:** When you click on a device name, a dashboard with details for that device appears.

IMEI: The International Mobile Equipment Identity (IMEI) for the device. This is a 15 digit code used to uniquely identify an individual mobile station on a mobile network.

Model: The model of the device, for example, Skyus 160NE.

Firmware: The version of firmware on the device.

Connection Status: The connection status of the device: Online or Offline.

Alarms: The number and type of alarms currently unresolved for the device.

Carrier: The vendor that provides wireless access for the device.

Signal Strength: Displays network signal strength. More bars indicate more signal strength.

Technology: The technology associated with the device, for example, LTE or 5G.

Hierarchy node: The hierarchy node designated for the device (for future use).

MAC: The MAC Address (unique network identifier) for the device.

IPv4: The Internet IP address assigned to the device.

IPv6: The Link-Local IPv6 address of the device.

2.4G SSID: The name (SSID) of the 2.4G network.

5G SSID: The name (SSID) of the 5G network.

RSSI: Received Signal Strength Indicator. An estimated measure of how well a device can hear a signal from a radio transmitter.

RSRP: Reference Signal Receive Power. A measure of signal strength, similar to RSSI, but RSRP measures lower than RSSI due to the method of calculation.

RSRQ: Reference Signal Received Quality. A calculated value from RSRP and RSSI that provides a measure of signal and interference.

SINR: Signal to Interference plus Noise Ratio. A measure of signal quality, taking interference and noise into account. SINR values are positive, and higher numbers are better.

No of Connected Clients: The number of client devices connected to the device.

TIPS

Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the menu icon in the upper right to select which columns are visible in the table.

Use the refresh icon in the upper right to refresh with the latest data sent by devices.

You can make changes to devices by selecting the checkboxes next to devices you want to change and using the commands along the top of the table. Use the checkbox at the top to select or deselect all devices.

Configure: Allows you to view and change settings on a selected device. Use the side menu to navigate. When you make a change, a change icon appears on the side menu and next to each changed item. A red warning appears if you need to fix something. Make all your changes and select **Save to Device**.

NOTE: You can only select and configure one device at a time with **Configure**. To configure multiple devices with the same model and firmware, create a template (in the Templates tab) and use **Apply Template**.

Apply Template: Allows you to apply a template created in the Templates tab to selected devices with the same model and firmware.

Update Firmware: Instructs the selected devices to check for a pending firmware update. If there is a new firmware version, it is downloaded and applied.

Reboot: Restarts selected devices. Rebooted devices will automatically reconnect to Inseego Connect once they resume operation.

Factory Reset: Resets all settings on selected devices to their factory default values.

CAUTION: If you use **Factory Reset**, you will need to reconfigure each device for it to work in your environment.

Add to Group: Allows you to add selected devices to an existing group, or you can create a new group.

Delete: Removes the selected devices from Inseego Connect.

Device Details Dashboard
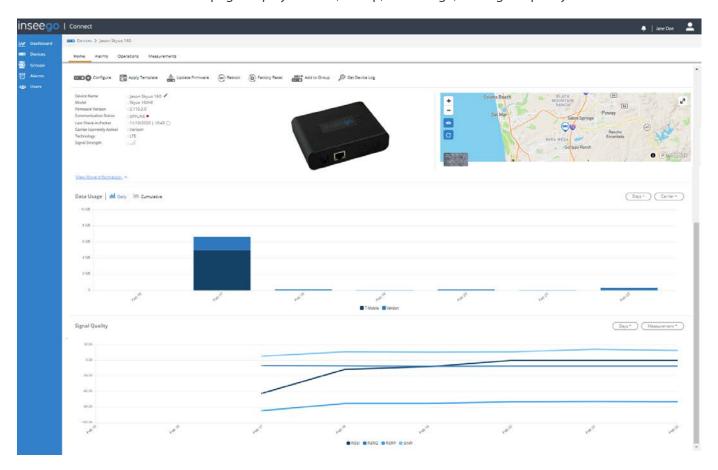
When you click on a device name in the Devices table, a dashboard with details for only that device appears.

The Device Details Dashboard page includes the following tabs:
- Home
- Alarms
- Operations
- Measurements

Device Details Home Tab

The Device Details Home page displays details, a map, data usage, and signal quality for the device.

Information

The upper left section of this page provides information on the device similar to what is displayed on the Devices List tab.

TIPS

Use the pencil icon next to **Device Name** to edit the name.

Click the refresh icon next to **Last Check-in Packet** to request a fresh packet of data from the device without waiting for the next scheduled transmission.

You can make changes to the device using the commands along the top.

Configure: Allows you to view and change settings on the device. Use the side menu to navigate. When you make a change, a change icon appears on the side menu and next to each changed item. A red warning appears if you need to fix something. Make all your changes and select **Save to Device**.

Apply Template: Allows you to apply a template created in Devices > Templates to the device.

Update Firmware: Instructs the device to check for a pending firmware update. If there is a new firmware version, it is downloaded and applied.

Reboot: Restarts the device. The rebooted device will automatically reconnect to Inseego Connect once it resumes operation.

Factory Reset: Resets all settings on the device to factory default values.

CAUTION: If you use **Factory Reset**, you will need to reconfigure the device for it to work in your environment.

Add to Group: Allows you to the device to an existing group, or you can create a new group.

Get Device Log: The cloud requests a log from the device and the device uploads the log to the cloud. When a log is available ⬇ Download Device Log File displays below the information in this section. The link remains until there is a new request for a log.

NOTE: Logs are encrypted and not readable. They are intended for Support use only.

Click the **View More Information** link at the bottom of this section for more device details:

Hide Information ^

Hardware Information		Cellular		GPS	
IMEI	: 990016280000504	APN	: vzwinternet	GPS State	: 1
MAC Address	: 00:15:ff:fa:26:bd	IMSI	: 311480540117561	GPS Latitude	: 32.9373
Modem Firmware Version	: SDX55MOR-2.08 1 [2020-0...	ICCID	: 89148000005529554743	GPS Longitude	: -117.126
		IPv4 Address	: 100.65.248.148	GPS Heading	:
		IPv6 Address	: 2600:1012:b156:383b:d4a...	GPS Speed	:
		RSSI	: -78	GPS Altitude	: 87
		RSRP	: -107	GPS Satellite in View	:
		RSRQ	: -11		
		SINR	: 10		
		PTN	: 18587751429		
		Tower Number	: 90724108		
		Band Number	: 66		

Click **Hide Information** to exit.

Map

The map shows the location of this device.

TIPS

⬈ Use the expand icon in the upper right to expand the map size for easier viewing.

➕➖ Use the plus and minus icons in the upper left of the map to zoom in and out. You can also zoom in and out using the mouse wheel. You can navigate the map by clicking with the left mouse button and dragging the map.

👁 Use the eye icon to reset zoom.

🔄 Click the refresh icon to update the map with the latest information sent by the device.

 Click the image in the bottom left to toggle between satellite and street view.

Data Usage

The Data Usage graph provides data usage (In MB or GB) for this device. You can select from the following display options on the upper left:

Daily — Displays data usage for this device per day. Use the drop-downs in the upper right to change the number of days displayed or to filter on a particular carrier.

Cumulative — Displays 30 days of cumulative and projected data usage for this device. The projected data usage is forecast based on usage patterns from the last 30 days. Use the drop-downs in the upper right to select a billing start date to store for each carrier and to filter on a particular carrier.

TIP - Hover over a color in the graph for details.

Signal Quality

The graph provides signal quality information for this device (in dBm) by day, including:

RSSI: Received Signal Strength Indicator. An estimated measure of how well a device can hear a signal from a radio transmitter.

RSRQ: Reference Signal Received Quality. A calculated value from RSRP and RSSI that provides a measure of signal and interference.

RSRP: Reference Signal Receive Power. A measure of signal strength, similar to RSSI, but RSRP measures lower than RSSI due to the method of calculation.

SINR: Signal to Interference plus Noise Ratio. A measure of signal quality, taking interference and noise into account. SINR values are positive, and higher numbers are better.

TIPS
- You can hover over a line on the graph for details.
- Use the drop-downs in the upper right to change the number of days displayed or to filter on a particular measurement.

Device Details Alarms Tab

The Device Details Alarms tab allows you to view and manage unresolved alarms for the device.

The list provides details for unresolved alarms on the device for the past 30 days:

Name: The name of the alarm. Click on an alarm name for more details on that alarm. You can use the **Dismiss** button in the popup to dismiss the alarm.

Type: The type of alarm (Connection Status, Device Data Usage, Carrier Data Usage, Measurements, or Geofence).

Device: The name of the device reporting the alarm.

Time: The date and time of the alarm.

Priority: The priority of the alarm.

TIPS

Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the refresh icon in the upper right to refresh with the latest data sent by devices.

Use the **Dismiss** button at the top of the list to dismiss selected alarms. You should dismiss an alarm once the triggering event is understood and any necessary actions have been taken. Dismissing an alarm removes it from the all alarms lists so users can focus on unresolved alarms.

Device Details Operations Tab

The Device Details Operations page allows you to view and manage operations for the device.

The table lists all operations conducted on the device in the past 30 days:

Operation: The type of operation. Click on an operation to view details, download a debug log file, or retry a pending or failed operation.

Status: The status of the operation:

COMPLETE	The operation completed successfully.
PENDING	The operation is waiting for the device to come online and/or accept the command. You can stop pending operations using the **Stop** button.
STOPPED	The operation was stopped while pending. To resume the operation, click on it and click **Resume**. The operation will change to pending.
FAILED	The operation completed unsuccessfully. To retry the operation, click on it and click **Retry**. The operation will change to pending.

Device: The name or IMEI of the device.

User Name: The name of the user that initiated the operation.

Created: The date and time the operation was created.

Start: The date and time the operation began.

End: The date and time the operation ended, if applicable.
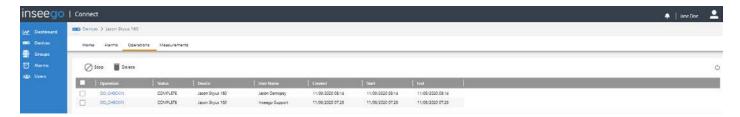
TIPS

 Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

 Use the refresh icon in the upper right to refresh with the latest data sent by the device.
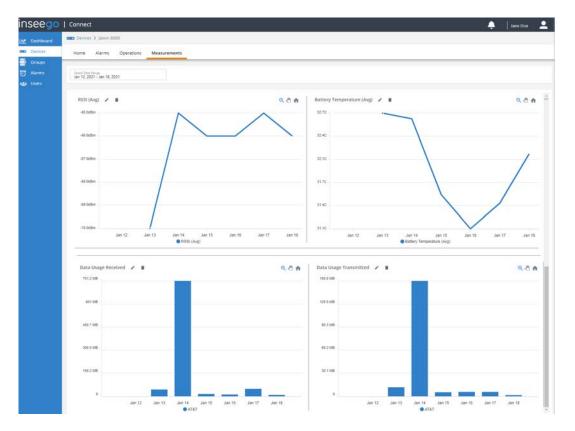
You can make changes to device operations by selecting the checkboxes next to operations you want to change and using the commands along the top of the table. Use the checkbox at the top to select or deselect all operations.

Stop: Stops operations that are pending.

Delete: Permanently removes the operation from the list.

Device Details Measurements Tab

The Device Details Measurements page allows you to view four charts of detailed measurements for the device.

Click the **Select Date Range** button. You can choose a date range from the list on the left, select the beginning and end of a range of dates from the calendar, or choose single day by clicking on the same day twice. **NOTE:** Inseego Connect stores 90 days of data.

Select **Add Chart** and select a **Measurement** from the list (RSSI, RSRP, RSRQ, SINR, Data Usage Transmitted, Data Usage Received, Data Usage Total, Battery Voltage, or Battery Temperature).

Select a **Value** (Avg, Min, Max, or Raw) to display the measurement in the chart.
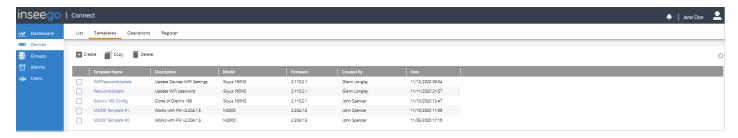
Click **Save**. Repeat for charts with different measurements.

> **TIPS**
>
> Use the pencil icon to edit the chart.
>
> Use the trash icon to delete the chart.
>
> Use the expand icon to expand the chart.
>
> Use the zoom icon and select a portion of the graph to focus on.
>
> Use the hand icon to scroll through larger charts.
>
> Use the eye icon to reset zoom.
>
> Use the download icon to download an SVG, PNG, or CSV file of the chart.

Templates Tab

Use the Templates tab to create and manage templates for device settings.

The list provides information on existing templates:

Template Name: The name of the template. Click on a name to bring up the template and make changes to settings. Select **Save** to keep your changes.

Description: A description of the template.

Model: The model of device the template applies to, for example, Skyus 160.

Firmware: The version of firmware the template applies to.

Created By: The user that created the template.

Date: The date and time the template was created.

TIP - Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the tools along the top of the table to create a new template, or to select a template to work from or delete.

Create: Use this button to create a new template.
1. Enter a **Template Name**.
2. Enter a **Description** for the template.
3. Choose **Create New Template** or **Copy Settings from Existing Device**.
4. If you chose **Create New Template**, make selections from the **Select a hardware model** and **Select a firmware version** drop-down lists. If you chose **Copy Settings from Existing Device**, select a device from the list. **TIP**: Use the filter icon next to a column heading to filter the device list by name, model, and firmware version.
5. Click **Next.**
6. Navigate through the side menu and tabs to enter or edit settings as desired. When you make a change, a change icon appears on the side menu and next to each changed item. A red warning appears if you need to fix something. **NOTE:** Only the fields you select will be included in the template. Make all of your changes and select **Create Template**. The template appears in the list.
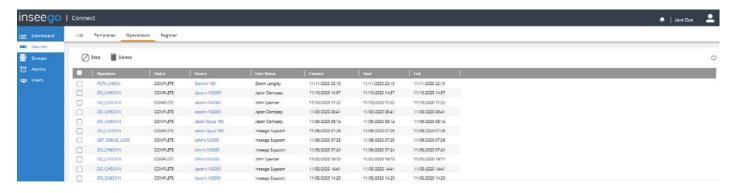
Copy: Use this button to copy a selected template to use as the basis for a new template.

Delete: Use this button to delete selected templates.

Operations Tab

Use the Operations tab to view details and manage device operations, such as firmware and configuration updates.

NOTE: You can click on a device name to access a device-specific dashboard, including an Operations tab that only displays operations for that particular device.

The table lists all operations conducted on devices in the past 30 days:

Operation: The type of operation. Click on an operation to view details, download a debug log file, or retry a pending or failed operation.

Status: The status of the operation:

COMPLETE	The operation completed successfully.
PENDING	The operation is waiting for the device to come online and/or accept the command. You can stop pending operations using the **Stop** button.
STOPPED	The operation was stopped while pending. To resume the operation, click on it and click **Resume**. The operation will change to pending.
FAILED	The operation completed unsuccessfully. To retry the operation, click on it and click **Retry**. The operation will change to pending.

Device: The name or IMEI of the device. **NOTE:** When you click on a device name, a dashboard with details for that device appears, including an Operations tab for that device (see Device Details Dashboard on page 16 for more information).

User Name: The name of the user that initiated the operation.

Created: The date and time the operation was created.

Start: The date and time the operation began.

End: The date and time the operation ended, if applicable.

TIPS

Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the refresh icon in the upper right to refresh with the latest data sent by devices.
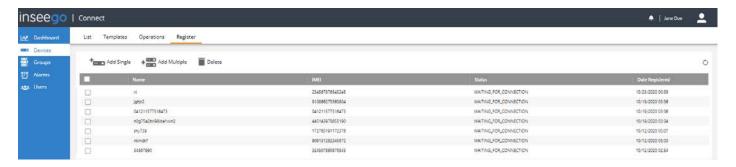
You can make changes to device operations by selecting the checkboxes next to operations you want to change and using the commands along the top of the table. Use the checkbox at the top to select or deselect all operations.

Stop: Stops operations that are pending.

Delete: Permanently removes the operation from the list.

Register Tab

Use the Register tab to add devices to Inseego Connect.

The table lists all devices currently pending registration with Inseego Connect:

Name: The name entered for the device (optional).

IMEI: The International Mobile Equipment Identity (IMEI) for the device. This is a 15 digit code used to uniquely identify an individual mobile station on a network.

Status: Indicates the registration status of the device, for example, WAITING_FOR_CONNECTION.

Date Registered: The date and time the device was added.

TIPS

 Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

 Use the refresh icon in the upper right to refresh with the latest data sent by devices.

Use the tools along the top of the table to add or delete devices from the list.

NOTE: When adding devices, make sure the devices are powered on and are connected to the Internet.

Add Single: Use this button to add a single device. Enter a **Device Name** (optional), **Device IMEI**, and click **Register**. The device enters a Waiting for Connection state while waiting to connect to the Inseego cloud.

Add Multiple: Use this button to add a multiple devices by uploading an .xlsx file. Click the **Download sample template (.xlsx)** link. Open the .xlsx file and enter a **Name** (optional) and **IMEI** for each device you wish to register. Click **Upload**. The devices enter a Waiting for Connection state while waiting to connect to the Inseego cloud.

Delete: Deletes selected devices from the pending registry list.

NOTE: It may take up to an hour for devices to check in and process the registration request. Once devices are registered, they appear in the List tab and no longer appear on the Register tab.

Groups

Use the Groups page to create device groups, view group details and configure group devices. You can also create templates for settings on group devices.

The Groups page includes three tabs:
- List
- Templates
- Operations

List Tab

Use the List tab to create, view, and manage groups of devices.

The list provides details for all device groups currently defined:

> **Group Name:** The name assigned to the group of devices. When you click on a group name, a version of the Dashboard Home page appears with data for that group. The dashboard page also includes tabs for Alarms and Operations.

> **Model:** The model of the devices in the group, for example, Skyus 100. **NOTE:** If a group includes multiple models, this column displays **Mixed**.

> **Firmware:** The version of firmware on the devices in the group. **NOTE:** If a group includes multiple firmware versions, this column displays **Mixed**.

> **No. of Devices:** The number of the devices in the group.

> **Alarms:** The number and type of alarms currently unresolved for the devices in the group.

> **Group Type:** Indicates that the group is static. A static group is comprised of a fixed set of devices.

TIP - Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the commands along the top of the table to create a new group or make changes to groups by selecting the checkboxes next to groups you want to change. Use the checkbox at the top to select or deselect all groups:

> **Create:** Use this button to create a new device group:
> 1. Enter a **Group Name**.
> 2. Select the devices you want included in the group.
> 3. Click **Save**. The group appears in the list.

Edit: Use this button to change the group name. You can also add and/or remove devices from the group.

Delete: Use this button to remove a selected device group.

Apply Template: Allows you to apply a template created in the Templates page to selected groups with devices that have the same model and firmware.

Update Firmware: Updates the firmware on selected group devices.

Reboot: Restarts selected group devices. Rebooted devices will automatically reconnect to Inseego Connect once they resume operation.

Factory Reset: Resets all settings on selected group devices to their factory default values.

CAUTION: If you use **Factory Reset**, you will need to reconfigure each device for it to work in your environment.

Templates Tab

Use the Templates tab to create and manage templates for device settings. **NOTE:** You can apply templates to device groups in which all devices have the same model and firmware.

The list provides information on existing templates:

Template Name: The name of the template. Click on a name to bring up the template and make changes to settings. Select **Save** to keep your changes.

Description: A description of the template.

Model: The model of device the template applies to, for example, Skyus 160.

Firmware: The version of firmware the template applies to.

Created By: The user that created the template.

Date: The date and time the template was created.

TIP - ▼ Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the tools along the top of the table to create a new template, or to select a template to work from or delete.

Create: Use this button to create a new template.

1. Enter a **Template Name**.
2. Enter a **Description** for the template.
3. Choose **Create New Template** or **Copy Settings from Existing Device**.
4. If you chose **Create New Template**, make selections from the **Select a hardware model** and **Select a firmware version** drop-down lists. If you chose **Copy Settings from Existing Device**, select a device from the list. **TIP:** Use the filter icon next to a column heading to filter the device list by name, model, and firmware version.
5. Click **Next.**
6. Navigate through the side menu and tabs to enter or edit settings as desired. When you make a change, a change icon appears on the side menu and next to each changed item. A red warning appears if you need to fix something. **NOTE:** Only the fields you select will be included in the template. Make all of your changes and select **Create Template**. The template appears in the list.
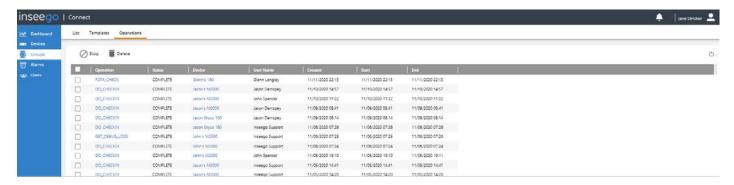
Copy: Use this button to copy a selected template to use as the basis for a new template.

Delete: Use this button to delete selected templates.

Operations Tab

Use the Operations tab to view details and manage device operations, such as firmware and configuration updates.

NOTE: You can click on a device name to access a device-specific dashboard, including an Operations tab that only displays operations for that particular device.

The table lists all operations conducted on devices in the past 30 days:

Operation: The type of operation. Click on an operation to view details, download a debug log file, or retry a pending or failed operation.

Status: The status of the operation:

COMPLETE	The operation completed successfully.
PENDING	The operation is waiting for the device to come online and/or accept the command. You can stop pending operations using the **Stop** button.
STOPPED	The operation was stopped while pending. To resume the operation, click on it and click **Resume**. The operation will change to pending.
FAILED	The operation completed unsuccessfully. To retry the operation, click on it and click **Retry**. The operation will change to pending.

Device: The name or IMEI of the device. **NOTE:** When you click on a device name, a dashboard with details for that device appears, including an Operations tab for that device (see Device Details Dashboard on page 16 for more information).

User Name: The name of the user that initiated the operation.

Created: The date and time the operation was created.

Start: The date and time the operation began.

End: The date and time the operation ended, if applicable.

TIPS

Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the refresh icon in the upper right to refresh with the latest data sent by devices.

You can make changes to device operations by selecting the checkboxes next to operations you want to change and using the commands along the top of the table. Use the checkbox at the top to select or deselect all operations.

Stop: Stops operations that are pending.

Delete: Permanently removes the operation from the list.

Alarms

Use the Alarms page to view and manage alarms and to create alarm rules.

The Alarms page includes two tabs:
- List
- Rules

List Tab

Use the List tab to view and manage unresolved alarms.

The list provides details for unresolved alarms on all registered devices for the past 30 days:

Name: The name of the alarm. Click on an alarm name for more details on that alarm. You can use the **Dismiss** button in the popup to dismiss the alarm.

Type: The type of alarm (Connection Status, Device Data Usage, Carrier Data Usage, Measurements, or Geofence).

Device: The name of the device reporting the alarm.

Time: The date and time of the alarm.

Priority: The priority of the alarm.

TIPS

Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the refresh icon in the upper right to refresh with the latest data sent by devices.

Use the **Dismiss** button at the top of the list to dismiss selected alarms. You should dismiss an alarm once the triggering event is understood and any necessary actions have been taken. Dismissing an alarm removes it from all alarms lists so users can focus on unresolved alarms.

Rules Tab

Use the Rules tab to create and manage alarm rules.

The list provides details for all current alarm rules.

> **Name:** The name of the alarm rule. Click on a name to view or edit that rule.
>
> **Type:** The type of alarm (Connection Status, Device Data Usage, Carrier Data Usage, Measurements, or Geofence).
>
> **Priority:** The priority of the alarm rule (High, Medium, or Low).

TIP - Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the **Delete** button at the top of the table to delete selected alarm rules from the list. No new alarms will trigger for a deleted rule.

Use the **Create** button at the top of the table to create a new alarm rule. The Create Rule dialog appears.

Creating Alarm Rules

The Create Rule dialog leads you through the following screens:

Alarm Type

1. **Alarm name** — Enter a name for the alarm rule.
2. **Priority** — Select a priority level from the drop down.
3. **Maximum Alerts per Device per Day** — Use the drop-down to select the maximum number of alerts you want allowed for any device on one day.
4. **Alarm Type** — Select a type of alarm from the drop-down (Connection Status, Device Data Usage, Carrier Data Usage, Measurements, or Geofence).
5. Make the desired choices for the selected alarm type and click **Next**.

   NOTE: For Geofence alarms, click the information icon for tips.

Devices

1. **Select Devices** — Use the checkboxes to select devices for the alarm rule or use the checkbox at the top to select all devices in the list. After making your selections, you can check the **Show only selected devices** box, if desired.
2. **Select Groups** — Use the checkboxes to select groups for the alarm rule or use the checkbox at the top to select all device groups in the list. After making your selections, you can check the **Show only selected groups** box, if desired.
3. Click **Next**.

Notify

1. **Select User** — Use the checkboxes to select which users you want to receive alarms for this rule or use the checkbox at the top to select all users in the list. After making your selections, you can check **the Show only selected users** box, if desired.
2. **Enter Email Addresses** — Enter email addresses for any additional users you want to receive alarms for this rule.
3. Click **Finish**.

The alarm rule appears in the list.

NOTE: When the alarm parameters are met, the following actions occur:

- The alarm appears in the Alarms List and remains there for 30 days, or until it is dismissed.
- Users and email addresses selected in the Notify step receive an email with alarm details.

Reports

Use the Reports page to create and run reports for your account.

The Reports page includes one tab:
- List

List Tab

Use the List tab to create and run reports for data usage, signal quality, and alarm history.

The list provides details on all of your Inseego Connect reports.

Name: The name of the report. Click on a name to edit the report.

Description: An description of the report.

Timeframe: The timeframe for the report.

Last Run: The date and time the report was last run.

TIP - Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the tools along the top of the table to create a new report or manage existing reports:

Use the **Run** button at the top of the table to run a selected report from the list. Three dots flash on the screen while the report is downloading to the Downloads folder on your PC.

Use the **Delete** button at the top of the table to delete a selected report from the list.

Use the **Create** button at the top of the table to create a new report. The Create Report dialog appears.

Creating Reports

The Create Report dialog leads you through the following screens:

Report Type

1. Enter a **Report Name**.
2. Enter a description of the report (optional).

3. Select a type of report from the drop-down (Daily Device Data Usage Report, Signal Quality Report, or Alarm History Report).

4. Select a report format (Formatted or Raw Data).

5. For Daily Device Data Usage Reports, choose how you want the report summarized (Device or Date).

6. Click **Next**.

Devices

1. **Select Devices** — Use the checkboxes to select devices for the report or use the checkbox at the top to select all devices in the list. After making your selections, you can check the **Show only selected devices** box, if desired.

2. **Select Groups** — Use the checkboxes to select groups for the report or use the checkbox at the top to select all device groups in the list. After making your selections, you can check the **Show only selected groups** box, if desired.

3. Click **Next**.

Timeframe

1. Select a timeframe for the report. You can select a relative timeframe by clicking **Today**, **Yesterday**, **Last 7 Days**, or **Last 30 Days** (not available for Signal Quality Reports). To choose a specific day or range of days, click **Custom Date** and then click in the **Select Date Range** box. Select a desired day - or the beginning and end dates for a range of days, in the calendar.

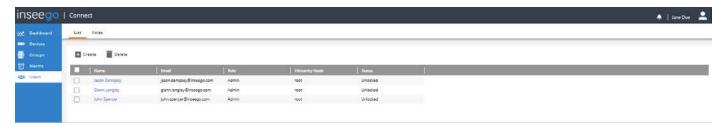2. Click **Finish**.

The report appears in the list.

Users

Use the Users page to add users, view user details and view roles.

The Users page includes two tabs:
- List
- Roles

List Tab

Use this page to create, view, and manage users.

The list provides details on all of your Inseego Connect users:

Name: The name of the user. Click on a name to edit the name, email address, or role assigned to the user.

Email: The email address of the user.

Role: The role assigned to the user.

Hierarchy Node: The node to which the user has access (for future use).

Status: Indicates whether the user is locked or unlocked. A locked user does not have access to Inseego Connect.

TIP - Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Use the tools along the top of the table to create a new user or manage existing users:

Create: Use this button to create a new user:

7. Enter the user's **First Name**.
8. Enter the user's **Last Name**.
9. Enter an **Email Address** for the user.
10. Use the drop down to select a **Role** for the user:

> **Admin** — Access to all functionality available with Inseego Connect.
> **Manager** — Access to manage devices, but cannot configure user settings.
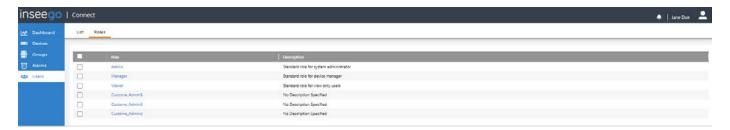> **Viewer** — Access to view information, but cannot make any changes.

11. Select **Save**. The user will appear in the list.

Delete: Use this button to remove selected users.

Roles Tab

Use the Roles tab to view user roles.

The list provides descriptions for all current roles.

Role: The name of the role.

Description: A description of the role.

TIP - Use the filter icon next to a column heading to view the type of searching and sorting capabilities for that column. Columns have unique filtering features and functions. You can drag and drop column headings to rearrange the column order in the table as desired.

Settings
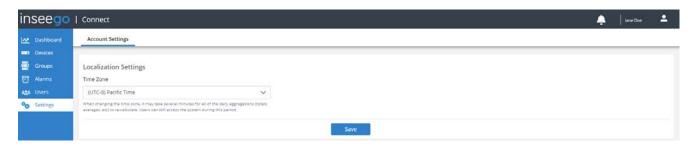
Use the Settings page to view and modify settings for your account.

The Users page includes one tab:
- Account Settings

Account Settings Tab

Use the Account Settings tab to view and adjust the time zone.

Time Zone — Use the drop down to select the time zone you want Inseego Connect to use for your account.

NOTE: This setting affects the determination of a day for daily data usage information.

3

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.

- **5G** — Fifth Generation. The successor to 4GLTE technology, offering greater bandwidth and higher download speeds. In addition to serving cellular networks, 5G networks can be used as internet service providers, competing with other ISPs. 5G also opens up new IoT and M2M possibilities. Wireless devices must be 5G enabled to use 5G networks.

- **802.11 (a, b, g, n, ac)** — A set of WLAN Wi-Fi communication standards in the 2.4 and 5 GHz frequency bands.

- **APN** — Access Point Name. The name of a gateway between a mobile network and another computer network, often the Internet.

- **bps** — Bits per second. The rate of data flow.

- **Broadband** — High-capacity high-speed transmission channel with a wider bandwidth than conventional modem lines. Broadband channels can carry video, voice, and data simultaneously.

- **DPD** — Dead Peer Detection. A method to detect the aliveness of an IPsec connection.

- **DHCP** — Dynamic Host Configuration Protocol. Software found in servers and routers that automatically assigns IP addresses and other configuration data to computers, tablets, printers, and other devices connection to the IP network.

- **DHCP Server** — A server or service with a server that assigns IP addresses.

- **DMZ** — DeMilitarized Zone. A sub-network that contains and exposes an organization's external-facing services to an untrusted network, usually a larger network such as the Internet.

- **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.

- **Firmware** — A computer program embedded in an electronic device. Firmware usually contains operating code for the device.

- **FTP** — File Transfer Protocol. A standard network protocol used to transfer computer files between a client and server.

- **GB** — Gigabyte. A multiple of the unit byte for digital information storage. Usage depends on context. When referring to disk capacities it usually means 109 bytes. It also applies to data transmission quantities over telecommunication circuits.

- **Gbps** — Gigabits per second. The rate of data flow.

- **Hotspot** — A Wi-Fi (802.11) access point or the area covered by an access point. Used for connecting to the Internet.

- **HTTP** —Hypertext Transfer Protocol. An application-level protocol for accessing the World Wide Web over the Internet.

- **IEEE** —Institute of Electrical and Electronics Engineers. An international technical/professional society that promotes standardization in technical disciplines.

- **IMAP** — Internet Message Access Protocol. An Internet standard protocol for accessing email from a remote server from email clients. IMAP allows access from multiple client devices.

- **IMEI** — International Mobile Equipment Identity. Used in mobile networks to identify the device. It is usually printed on the device and can often be retrieved using a USSD code.

- **IoT** —Internet of things. An expansion of the internet and network connections to sensors and devices (things) allowing simple objects, such as light fixtures and locks, a higher degree of computing and analytical capabilities. IoT enables connected devices (things) to gather and share data from their environment with other devices and networks with the need for little or no human interaction.

- **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).

- **Kbps** — Kilobits per second. The rate of data flow.

- **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.

- **M2M**— Machine to machine. Direct communication between devices. This may include wired or wireless communication.

- **MAC Address** — Media Access Control. A number that uniquely identifies each network hardware device. MAC addresses are 12-digit hexadecimal numbers. This is also known as the physical or hardware address.

- **Mbps** — Megabits per second. The rate of data flow.

- **MNO**— Mobile 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.

- **MSID** — Mobile Station IDentifier. A number for a mobile phone that identifies that phone to the network.

- **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.

- **NMEA port** — National Marine Electronics Association port. The port through which applications can access a GPS data stream.

- **NNTP** — Network News Transfer Protocol. The primary protocol used to connect to Usenet servers and transfer news articles between systems over the Internet.

- **POP3** — Post Office Protocol 3. A protocol in which email is received and held for you by your Internet server until you download it.

- **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.

- **Port Forwarding** — A process that allows remote devices to connect to a specific computer within a private LAN.

- **Port Number** — A 16-bit number used by the TCP and UDP protocols to direct traffic on a TCP/IP host. Certain port numbers are standard for common applications.

- **PRL** — Preferred Roaming List. A list that your wireless phone or device uses to determine which networks to connect with when you are roaming (Network operator specific).

- **Protocol** — A standard that enables connection, communication, and data transfer between computing endpoints.

- **Proxy** — A firewall mechanism that replaces the IP address of a host on the internal (protected) network with its own IP address for all traffic passing through it.

- **RADIUS** — Remote Authentication Dial-In User Service. A networking protocol, operating on port 1812, that provides centralized Authentication, Authorization, and Accounting (AAA or Triple A) management for users who connect and use a network service.

- **Router** — A device that directs traffic from one network to another.

- **RP-SMA** — Reverse Polarity Sub-Miniature Version A. A connector interface with a screw-type coupling mechanism for coaxial cables.

- **RSRP** – Reference Signal Receive Power. An LTE-specific measure of signal strength, similar to RSSI, but RSRP measures lower than RSSI due to the method of calculation.

- **RSRQ** – Reference Signal Received Quality. A calculated value from RSRP and RSSI that provides a measure of signal and interference.

- **RSSI** — Received Signal Strength Indicator. An estimated measure of how well a device can hear a signal from an access point or router. RSSI value is pulled from the device's Wi-Fi card (hence "received" signal strength), so it is not the same as transmit power from an access point or router.

- **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.

- **SINR** — Signal to Interference plus Noise Ratio. An LTE-specific measure of signal quality, taking interference and noise into account. SINR is a positive value, and higher numbers are better.

- **SMA** — Sub-Miniature Version A. A variation of the SMA connector where the gender of the interface is reversed.

- **SMTP** — Simple Mail Transfer Protocol. The standard protocol for sending emails across the Internet.

- **SNMP** — Simple Network Management Protocol. An Internet protocol used to manage and monitor network devices and their functions.

- **SSID** — Service Set IDentifier. The name assigned to a Wi-Fi network.

- **TCP/IP** — Transmission Control Protocol/Internet Protocol. The set of communications protocols used for the Internet and other similar networks.

- **TFTP** — Trivial File Transfer Protocol. An Internet software utility for transferring files that is simpler to use than FTP, but does not provide user authentication and directory visibility supported by FTP.

- **Telnet** — A user command and underlying TCP/IP protocol that allows a user on one computer to log into another computer that is part of the same network.

- **TTY** — Text Telephones (TTY), also known as Telecommunications Device for the Deaf (TDD), are used by the deaf, hard–of–hearing, and individuals with speech impairments to communicate.

- **UDP** — User Datagram Protocol (UDP) is a communications protocol that offers a limited amount of service when messages are exchanged between computers in a network that uses the Internet Protocol (IP). UDP is an alternative to the Transmission Control Protocol (TCP) and, together with IP, is sometimes referred to as UDP/IP.

- **USB** — Universal Serial Bus. A connection type for computing device peripherals such as a printer, mobile modem, etc.

- **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).

- **USSD** — Unstructured Supplementary Service Data (USSD), also known as "Quick code" or "Feature code", is a communications protocol used to send data between a mobile device and network service provider.

- **VPN** — Virtual Private Network. A secure private network that runs over the public Internet. Commonly used to connect to an office network from elsewhere.

- **Wi-Fi** — Any system that uses the 802.11 standard developed and released in 1997 by the IEEE.

- **Wi-Fi 5** —The fifth generation of Wireless Fidelity, using 802.11ac on 5 GHz. This standard was developed and released in 2013.

- **Wi-Fi Client** — A wireless device that connects to the Internet via Wi-Fi

- **WPA/WPA2** — Wi-Fi Protected Access. A security protocol fir wireless 802.11 networks from the Wi-Fi Alliance.