Kinexus® Wi-Fi Gateway for Liberty User's Guide

For use with the Liberty® Select Cycler

P/N 480173-R Rev A | September 2023



Legal

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Fresenius Medical Care only distributes the Gateway for use with the Liberty Select Cycler. For more information, contact:

> Fresenius Medical Care North America Waltham, MA 02471 1-800-227-2572 Assembled in Mexico

This document provides overview, installation instructions, specifications, and troubleshooting for the Gateway. For more information about the Liberty Select Cycler, refer to the Liberty Select 3.0 User's Guide, P/N 480165-R.

Use: The Kinexus Portal is intended to allow clinicians to review patient data collected from the patient's home dialysis device(s) and to enable physicians to manage patients' home dialysis therapies for certain Fresenius products, including peritoneal dialysis cycler(s). The Kinexus Portal does not provide medical diagnosis or recommendations regarding medical treatment. The Kinexus Portal and the content appearing on this site are not substitutes for professional medical advice, diagnosis, or treatment.

The Kinexus Gateway is intended for transmission of home dialysis therapy data and patient data for patients using certain Fresenius products, including peritoneal dialysis cycler(s).

Kinexus is not an electronic health record (EHR) or billing solution.

Indications for Use: The Fresenius Liberty Select Cycler is indicated for acute and chronic peritoneal dialysis.

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Glossary

Home Router Home router will be connected by the Kinexus

mobile app to the Wi-Fi Gateway.

A place on the internet where your Gateway and Cloud

vour healthcare team can exchange information.

Data on the cloud is kept secure.

A type of cable that connects two devices **Ethernet Cable**

through a local area network (LAN).

A type of port connected by an Ethernet cable. LAN

Ethernet cables connect devices to each other or connect a device to the internet. Stands for Local

Area Network.

A small light on the top of the Gateway. Stands LED

for Light Emitting Diode.

A type of port used to send data between two de-**RS-232**

vices. The RS-232 port on the Liberty Select Cycler connects to a USB port on the Gateway.

Stands for Recommended Standard 232.

A type of port and cord. USB cords connect devic-**USB**

es to each other. Stands for Universal Serial Bus.

Introduction

Communication between you and your health care team is essential to making sure you get the most out of your dialysis treatments. The Kinexus Gateway for the Liberty Select Cycler ("Gateway") is a new accessory made to assist your healthcare team in keeping track of your Peritoneal Dialysis (PD) therapy. The Gateway transfers treatment and alarm history data at the end of each treatment to your care team. A home router is required to the use Gateway.

The Gateway may receive therapy parameters from your healthcare team. The Gateway is not intended to upload any software or treatments to the Liberty Select Cycler and is not a treatment monitoring device.

About this Guide - Call-outs

You should read this guide before using the Gateway with your cycler. The guide has several helpful call-outs within to help you use the Gateway correctly.



WARNING: Warnings warn against actions that could hurt you. If you do not follow these directions, it can lead to serious injury or death.



SHOCK HAZARD: Shock Hazard means that you could get a severe electrical shock if you do not use the equipment the right way.



CAUTION: Cautions warn against actions that could harm your machine.



NOTE: Notes mark extra information about Gateway features. Notes have helpful information. They may also have information about unique cases.

Using this Guide

This user's guide is designed to walk you through the process of setting up your Gateway to work with your cycler. Look through the Table of Contents to quickly find a section, or search the Index to find a specific topic. Pages are also labelled on the sides to help you keep track of what section you are reading.



NOTE: The Gateway is not in use during the treatment. Some wireless transmissions from the Gateway may be actively emitted during treatment or device functions. The associated hazards should be minimal.



NOTE: If the treatment data transfer is not successful, your cycler will retry the transfer at the end of next treatment.



NOTE: Do not connect any other accessories to your cycler that are not approved by Fresenius Medical Care.



NOTE: Do not modify the Gateway provided to you by Fresenius Medical Care.



NOTE: Do not connect or disconnect the Gateway from your cycler when the cycler is powered ON.

What's Included

When you receive your Gateway, you will find the following items:

- The Gateway
- One (1) 100-240V AC wall power adapter
- One (1) RS-232 to USB cable
- Kinexus Gateway User's Guide (this document)
- SysLINK[™] Gateway User Manual and Installation Guide



NOTE: For all inquiries and questions, call Fresenius Medical Care Technical Support at (800) 227-2572.



NOTE: It is recommended to place the Gateway approximately three (3) feet (one [1] meter) away from the cycler.

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Gateway Overview

The Gateway is a small device that connects to the internet to communicate with your healthcare team through the cloud. The Gateway communicates with the cloud to transfer treatment and alarm history data at the end of each treatment. The Gateway has a number of ports to connect the device. There are several LED lights on top of the Gateway. These lights help show you what the device is doing or if there is a problem with the Gateway.



CAUTION: Do not share your Gateway or give your Gateway to others to use. The Gateway must be distributed to and used only by the person it is prescribed for.

Front View



Front View

The front of the Gateway is a blue plate with the Fresenius Medical Care logo on the left. There are no LEDs or ports on the front.

The left side of the Gateway is a heat vent. The right side is a speaker. The Gateway lets you know about its status with voice responses. See "Gateway Commands" on page 63 for a list of the possible responses you may hear.

Back View



Back View

The back of the Gateway is where you power on the Gateway and where you connect the Gateway to your cycler. The back of the Gateway includes:

- Power Cord Inlet: This is where you plug in the power cord. Plugging in the power cord turns the Gateway ON. Unplugging the power cord turns the Gateway OFF.
- Reset: This is where you can reset the Gateway. If you are unable to reset the Gateway, Fresenius Medical Care Technical Support Representative will instruct you how to reset.
- **USB Port:** This is where you plug in the USB-to-RS232 cable that connects the Gateway to the cycler.
- WAN/LAN Port: The WAN/LAN Port is not used.
- LAN Port: The LAN Port is not used.

Top View

The top of the Gateway displays several LEDs. These LEDs show the power status, if the Gateway is communicating with the cycler.

The top parts of the Gateway, include:

- **Option:** No function.
- Bluetooth: No function.



Top View

- Wi-Fi: This LED is solid green when Wi-Fi is connected; when Wi-Fi is not connected, this LED is solid orange.
- WAN/LAN: No function.
- Status: These LEDs show the status of the connection.
 - •Solid green means that the Gateway is ON.
 - •Flashing green means that the Gateway is receiving or transmitting data.
 - •Flashing red and green means that the Gateway is not connected to the internet.

(Descriptions continue on the next page.)

Setup: Pressable button that is used to have the Gateway enter/exit pairing mode and diagnostic mode.

Bottom View



Bottom View

The bottom panel of the Gateway is labelled with the marker plate. The marker plate lists the manufacturer name, model number, part number, serial number, and any cautions or warnings associated with the device. Some of the information on the bottom of the Gateway is unique to each Gateway and your Gateway will not exactly match the image above.

For more information, see "Marker Plate Symbols" on page 75.

Gateway Setup

Before setting up your Gateway, you should find a flat, dry surface near your cycler to set it up. Make sure the Gateway is at least eight (8) inches away from your body during your dialysis treatment.



NOTE: Avoid placing the Gateway near your bedside if at all possible. Electromagnetic (EM) radiation may interfere with your other medical devices.



CAUTION: Pacemaker devices, implanted neurostimulators, and implanted defibrillators may be affected by EM radiation. If you wear a pacemaker, implanted neurostimulator, or implanted defibrillator, you should avoid contact with the Gateway and stay further away from the Gateway than the recommended eight inches. You should also avoid installing the Gateway yourself.



CAUTION: Position the power cord and RS232 to USB cable so they will not be tripped over by you or others living in your home.



CAUTION: Do not let the Gateway come into contact with blood or bodily fluids, i.e. dialysate from your abdomen.



CAUTION: Place the Gateway on a flat, dry surface, away from any potential fluid spills or splatter.



NOTE: The Gateway may transmit during treatment or other cycler functions.

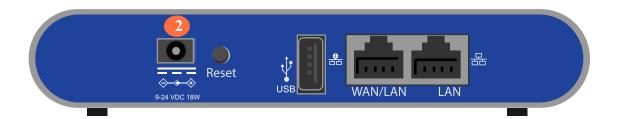


NOTE: Before starting, take the USB-to-RS-232 cable out of the Gateway packaging.

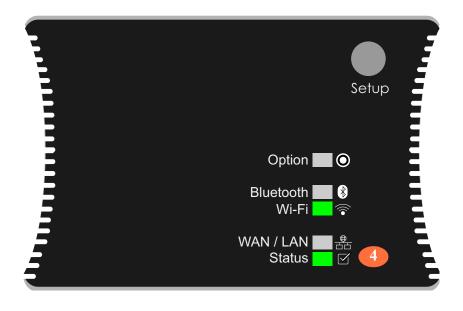
Connect Gateway to Your Home Wi-Fi

Internet

- 1 Remove your Gateway from the packaging. Inspect the Gateway for signs of damage such as breaks or cracks.
- 2 Plug the round end of the power cord into the power cord inlet in the back of the Gateway, .



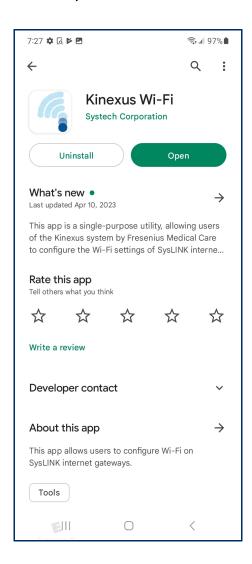
- 3 Plug the power adapter directly into a 120v wall outlet.
- 4 Once the Gateway has been plugged in the Status LED will turn orange. Wait until the LED turns green to continue.



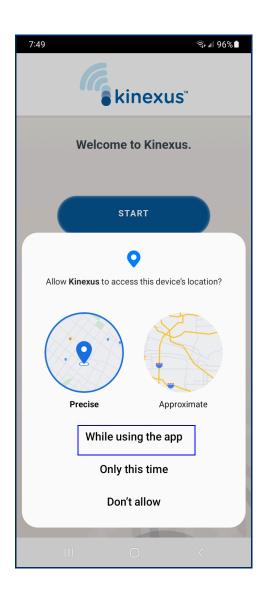
Installing and Launching the Kinexus Wi-Fi App for Android Users

Prerequisite: The Wi-Fi Gateway requires a smart phone or tablet to connect to your home internet service.

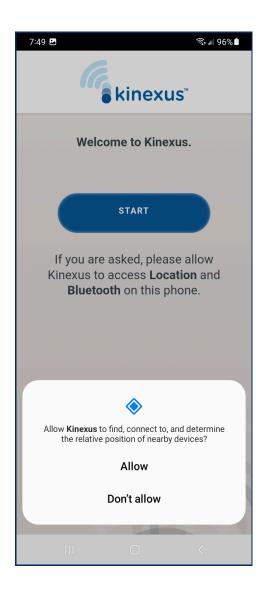
- 1 Enter "Kinexus Wi-Fi" in the search bar of the Google Play Store.
- 2 Select the Kinexus Wi-Fi application.
- 3 Click on the "Install" button to install the Kinexus Wi-Fi app.
- 4 After the successful installation, you will be presented with a screen similar to the one shown in the figure below. To launch the application, click on the "Open" button.



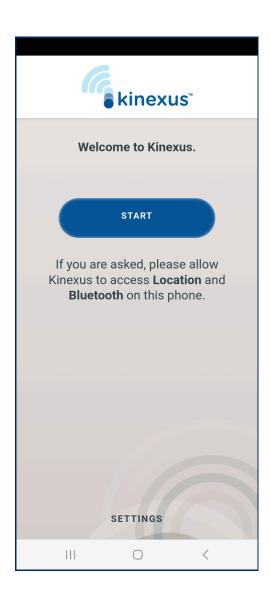
5 When prompted for location access, select the "While using the app" option.



6 Select "Allow" when prompted to find nearby devices, as shown in the figure below.



7 Click on the "START" button to initiate the search for nearby Gateways.



8 The Kinexus app will begin searching for nearby Gateways, as shown in the figure below.



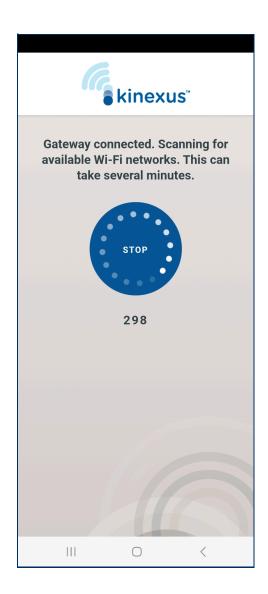
9 Once the application has identified the available Gateways, you can choose your preferred Gateway from the list provided below.



10 After selecting your preferred Gateway from the list, the application will begin the process of connecting to the Gateway, as shown in the figure below.



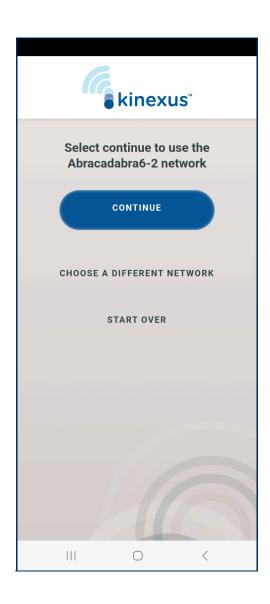
11 Once the Gateway is successfully connected, the application will initiate a scan to detect available Wi-Fi networks. Please note that this scanning process may take several minutes to complete.



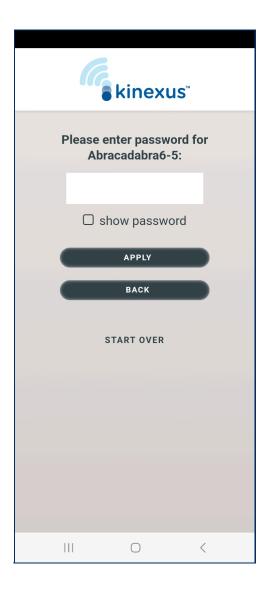
12 A list of available Wi-Fi networks will be displayed, as shown in the figure below. From this list, select your home Wi-Fi network.



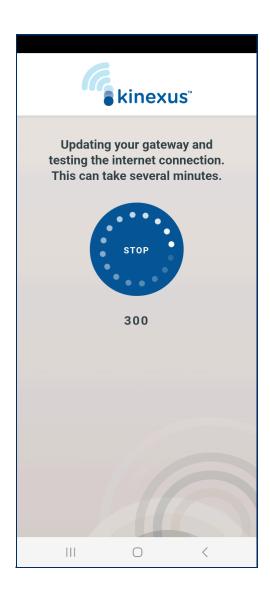
13 After selecting your home Wi-Fi network, click on the "CONTINUE" button.



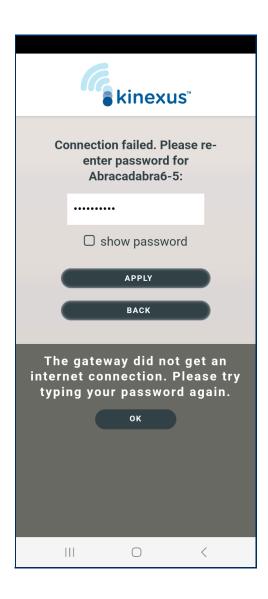
14 Enter the password of your home Wi-Fi network and click on the "APPLY" button.



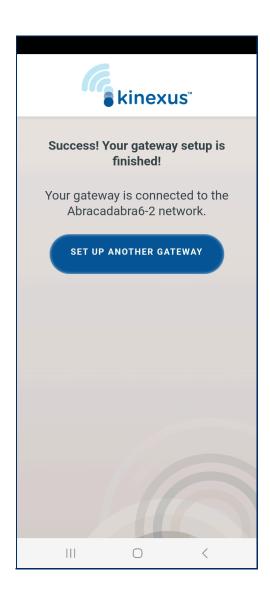
15 Once the password is entered, the app will initiate the connection to the Wi-Fi network. Please note that the process of connecting to the network may take several minutes to complete.



16 If the entered password is incorrect or if the Gateway fails to establish an internet connection, you will see the screen displayed in the figure below. In this case, please check your internet connection, re-enter your password, and click on the "APPLY" button.



17 Once the setup of your Gateway is completed and it successfully connects to your home Wi-Fi network, you will see the Success screen displayed, as shown in the figure below. This indicates that the Gateway setup process has finished successfully.



Replacement Scenario For Android Users

1 After the application has identified the available Gateways, you have the option to select a different Gateway if needed. From the list provided below, you can choose your preferred Gateway by selecting it.



2 After selecting your preferred Gateway from the list, the application will begin the process of connecting to the Gateway, as shown in the figure below.



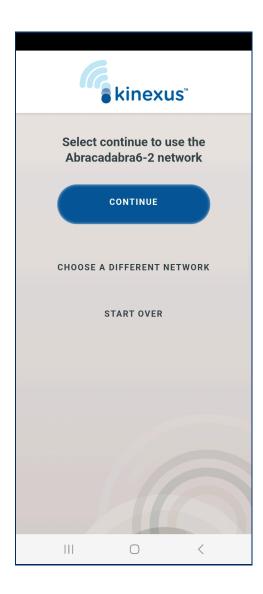
3 Once the Gateway is successfully connected, the application will initiate a scan to detect available Wi-Fi networks. Please note that this scanning process may take several minutes to complete.



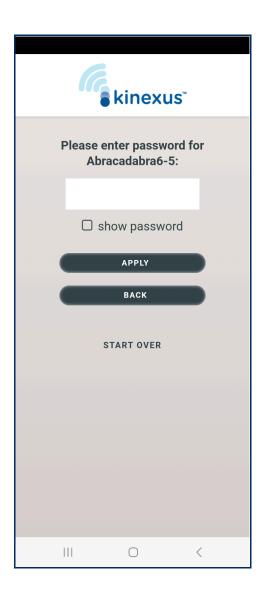
4 A list of available Wi-Fi networks will be displayed, as shown in the figure below. From this list, select your home Wi-Fi network.



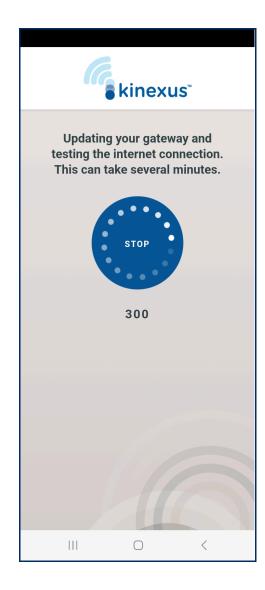
5 After selecting your home Wi-Fi network, click on the "CONTINUE" button.



6 Enter the password of your home Wi-Fi network and click on the "APPLY" button.



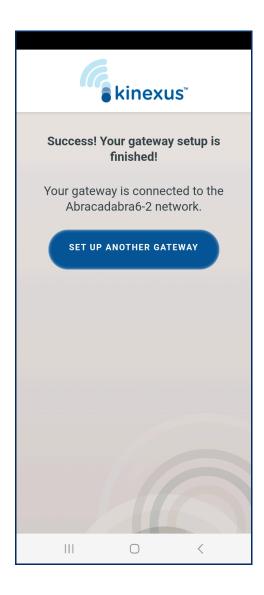
7 Once the password is entered, the app will initiate the connection to the Wi-Fi network. Please note that the process of connecting to the network may take several minutes to complete.



8 If the entered password is incorrect or if the Gateway fails to establish an internet connection, you will see the screen displayed in the figure below. In this case, please check your internet connection, re-enter your password, and click on the "APPLY" button.



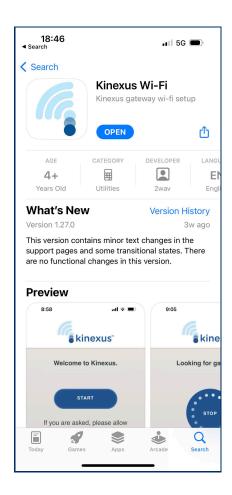
9 Once the setup of your Gateway is completed and it successfully connects to your home Wi-Fi network, you will see the Success screen displayed, as shown in the figure below. This indicates that the Gateway setup process has finished successfully.



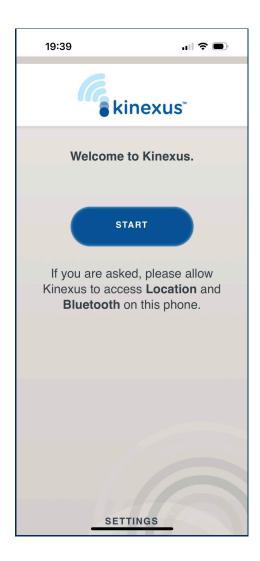
Installing and Launching the Kinexus Wi-Fi App for iOS Users

Prerequisite: The Wi-Fi Gateway requires a smart phone or tablet to connect to your home internet service.

- 1 Enter "Kinexus Wi-Fi" in the search bar of the Apple App Store.
- 2 Select the Kinexus Wi-Fi application.
- 3 Click on the "Install" button to install the Kinexus Wi-Fi app.
- 4 After the successful installation, you will be presented with a screen similar to the one shown in the figure below. To launch the application, click on the "Open" button.



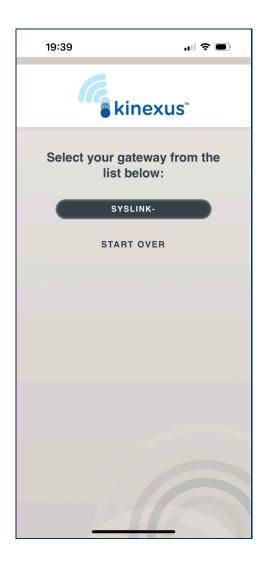
5 Click on the "START" button to initiate the search for nearby Gateways.



6 The Kinexus app will begin searching for nearby Gateways, as shown in the figure below.



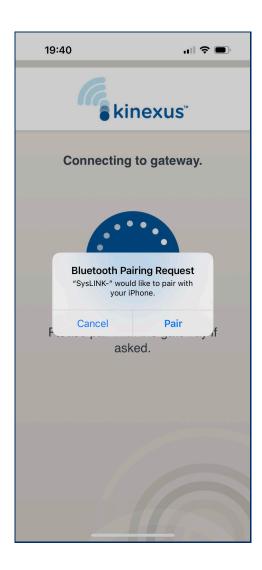
7 Once the application has identified the available Gateways, you can choose your preferred Gateway from the list provided below.



8 After selecting your preferred Gateway from the list, the application will begin the process of connecting to the Gateway, as shown in the figure below.



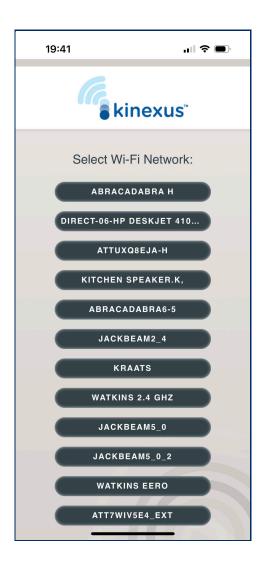
9 When prompted with a Bluetooth Pairing Request, select the "Pair" option as shown in the figure below.



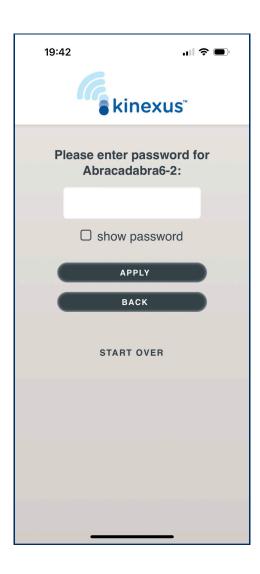
10 Once the Gateway is successfully connected, the application will initiate a scan to detect available Wi-Fi networks. Please note that this scanning process may take several minutes to complete.



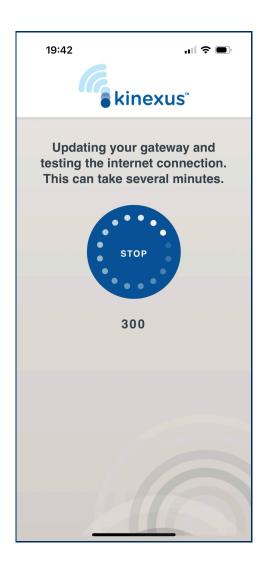
11 A list of available Wi-Fi networks will be displayed, as shown in the figure below. From this list, select your home Wi-Fi network.



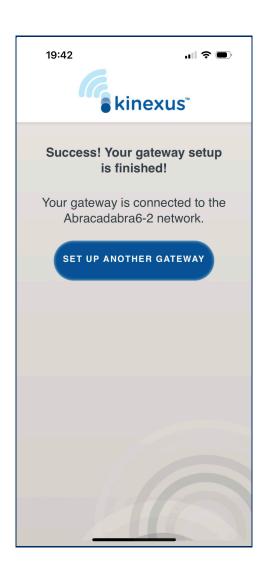
12 Enter the password of your home Wi-Fi network and click on the "APPLY" button.



13 Once the password is entered, the app will initiate the connection to the Wi-Fi network. Please note that the process of connecting to the network may take several minutes to complete.

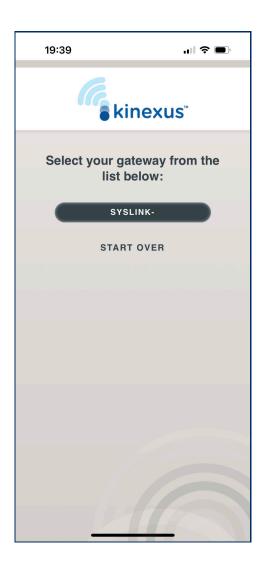


14 Once the setup of your Gateway is completed and it successfully connects to your home Wi-Fi network, you will see the Success screen displayed, as shown in the figure below. This indicates that the Gateway setup process has finished successfully.

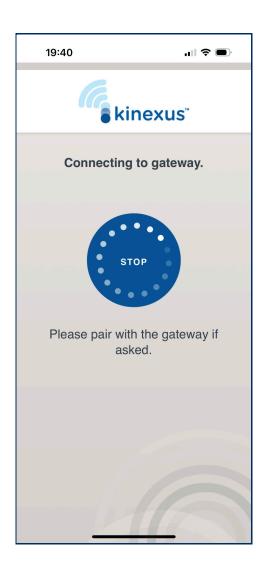


Replacement Scenario for iOS Users

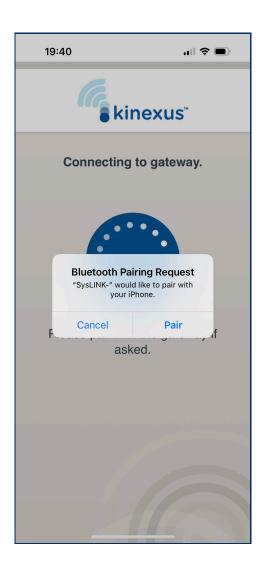
1 After the application has identified the available Gateways, you have the option to select a different Gateway if needed. From the list provided below, you can choose your preferred Gateway by selecting it.



2 After selecting your preferred Gateway from the list, the application will begin the process of connecting to the Gateway, as shown in the figure below.



3 When prompted with a Bluetooth Pairing Request, select the "Pair" option as shown in the figure below.



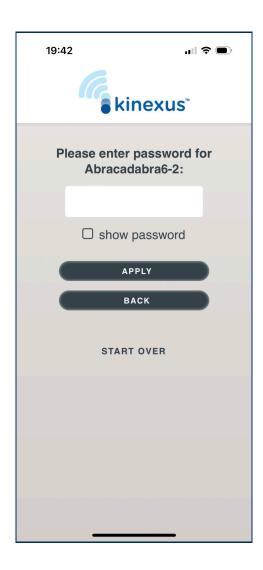
4 Once the Gateway is successfully connected, the application will initiate a scan to detect available Wi-Fi networks. Please note that this scanning process may take several minutes to complete.



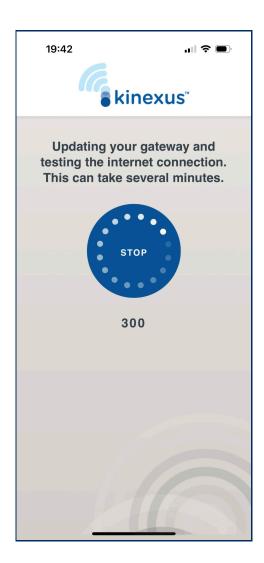
5 A list of available Wi-Fi networks will be displayed, as shown in the figure below. From this list, select your home Wi-Fi network.



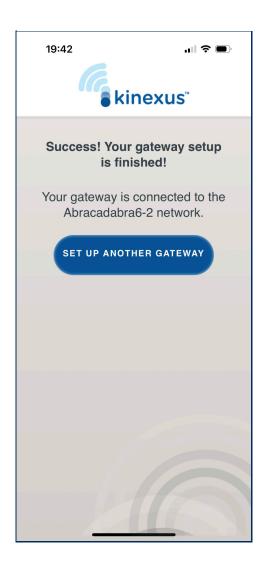
6 Enter the password of your home Wi-Fi network and click on the "APPLY" button.



7 Once the password is entered, the app will initiate the connection to the Wi-Fi network. Please note that the process of connecting to the network may take several minutes to complete.



8 Once the setup of your Gateway is completed and it successfully connects to your home Wi-Fi network, you will see the Success screen displayed, as shown in the figure below. This indicates that the Gateway setup process has finished successfully.



Connect Gateway to Cycler

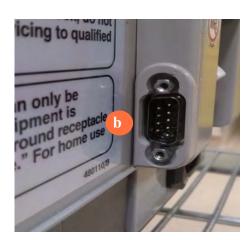


NOTE: Do not connect or disconnect the Gateway from your cycler while the cycler is powered ON.

- 1 With the Power Switch on your Liberty Select Cycler set to OFF, connect the USB-to-RS-232 cable to your Liberty Select Cycler, 1.
 - a. If your Liberty Select Cycler has a cap over the RS-232 port, remove the RS-232 cap using a screwdriver.



b. If your Liberty Select Cycler does not have a cap over the RS-232 port, proceed to step 1c.



c. Connect the RS-232 end of the RS-232 to USB cable to the RS-232 port on your Liberty Select Cycle, \bigcirc .



2 Plug the USB end of the RS-232 to USB cable into the USB port on the back of the Gateway, 2.



Gateway Commands

Failed to upload your treatment data - The Gateway was unable to upload your treatment information to the cloud. It will re-try automatically at the end of your next treatment.

Gateway is ON - Confirms the Gateway is powered ON.

Sending your treatment information to your clinic, please wait - Confirms the Gateway successfully received your treatment information from your cycler and is transmitting data to the cloud.

There seems to be a connectivity issue with your Gateway. Please contact technical support using the number found on your cycler - Your Gateway does not have an internet connection.

Treatment data uploaded successfully - Confirms the Gateway successfully uploaded your treatment information to the cloud.

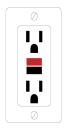
Gateway



NOTE: The Gateway is non-user-serviceable and must be replaced by Fresenius Medical Care. Call Fresenius Medical Care Technical Support at **(800) 227-2572** for questions regarding set-up, troubleshooting, or assistance in returning or replacing your Gateway.

If no LEDs light up on your Gateway:

- 1 Unplug the power cord from the Gateway and the wall outlet. Plug the power cord back into the Gateway, and then plug the cord back into the wall outlet.
- 2 If the outlet is connected to a power switch, ensure that the switch is set to ON.
- 3 Check to make sure the power to the wall outlet is working.
 - a. Unplug the Gateway from the wall outlet and plug another device, like a lamp, into the same outlet.
 - If device works, unplug it and plug the Gateway back into the wall outlet.t
 - If the device doesn't work, use a different outlet to test the Gateway.
- 4 If the outlet is a GFI (ground-fault interrupter):
 - a. Check to see if the Reset button is popped out on the outlet. Reset buttons are usually the large button in the middle of the wall outlet, and are often colored red. See the diagram on the right for an example of a GFI outlet.



- b. If the Reset button is popped out, unplug the Gateway from the wall outlet, press the Reset button back in, and plug the Gateway back into the outlet.
- 5 Check your fuse box to see if a circuit breaker needs to be reset.

If none of these steps work, call Fresenius Medical Care Technical Support at (800) 227-2572.

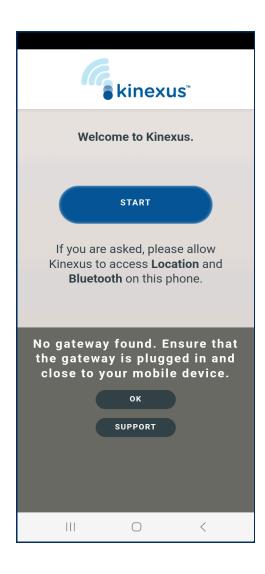
Android Application

If you encounter any issues during the setup of your Gateway using the Kinexus Wi-Fi application on your Android mobile device, please contact Fresenius Medical Care Technical Support at +1 (800) 227-2572 for assistance.



When you encounter the screen shown below upon launching the Kinexus Wi-Fi application on your Android mobile device, following any of the steps mentioned below can help resolve the issue:

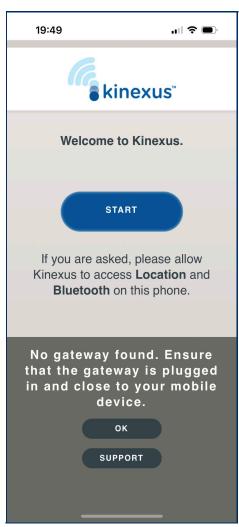
- 1 Check that the Gateway is properly plugged in and connected.
- 2 Ensure that your mobile device is in close proximity to the home router for a strong and stable signal.
- 3 Check the Wi-Fi LED status, and if it is solid green, then Gateway is already connected to your home Internet service. In this case, you can exit the app.



iOS Application

When you encounter the screen shown below upon launching the Kinexus Wi-Fi application on your iOS mobile device, following any of the steps mentioned below can help resolve the issue:

- 1 Check that the Gateway is properly plugged in and connected.
- 2 Ensure that your mobile device is in close proximity to the Gateway for a strong and stable connection.
- 3 Check the Wi-Fi LED status, and if it is solid green, then Gateway is already connected to your home Internet service. In this case, you can exit the app.



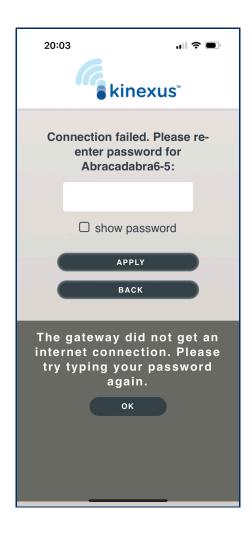
When you encounter the screen shown below upon launching the Kinexus Wi-Fi application, please ensure that Bluetooth is enabled on your iOS mobile device.



If you encounter any issues during the setup of your Gateway using the Kinexus Wi-Fi application on your iOS mobile device, please contact Fresenius Medical Care Technical Support at +1 (800) 227-2572 for assistance.



If the entered password is incorrect or if the Gateway fails to establish an internet connection, you will see the screen displayed in the figure below. In this case, please check your internet connection, re-enter your password, and click on the "APPLY" button.



This page intentionally left blank.

Appendix

Device Specifications Dimensions

Floor space: 5.5 inches (13.97 cm) wide by 4 inches (10.16

cm) deep

Height: 1 inch (2.54 cm)

Weight: 11b (0.45 kg

Operating Conditions

Temperatures: 50° - 104° F (10° - 40° C) with included

power supply

Relative Humidity: 10% - 85%, non-condensing

Storage Conditions

Temperatures: -22° - 149° F (-30° - 65° C)

Relative Humidity: 5% – 90%, non-condensing

Maximum Altitude 8500 feet (2591 meters)

Electrical

Power Supply: Positive polarity Direct Current at 9 - 24V

and minimum 18W input capacity connected to a circuit equipped with a hospital grade

receptacle

External Connections: Ethernet ports; USB port

Regulatory

The Gateway has been tested to the medical standard IEC 60601-1-2 with the Liberty Select Cycler. In addition, your Gateway meets the safety standards for IEC 60950-1 commonly found with Information Technology devices.

Ingress Rating: IP22

Standards Compliance: IEC 60601-1-2, 4th Edition

IEC 60950-1

FCC Part 15 Subpart B Colocation FCC 15.247

Marker Plate Symbols



Read the accompanying documentation, such as this guide, before installing the Gateway.



Temperature range.



Humidity range.



Elevation range.



The weight of the Gateway.



The DC power input to the Gateway at the defined voltage and minimum watts input capacity.



Positive polarity for the DC power input to the Gateway.

Cleaning Your Gateway

The Gateway is not sterile equipment; however, you should keep your Gateway clean and dry at all times. Clean the **exterior surface** of your Gateway using a damp cloth and a diluted (1:100) bleach solution or other suitable hospital disinfectant.

Use surface cleaner in **small amounts** to avoid excess cleaner from entering the interior of your Gateway. Rinse off cleaning solutions with a water-dampened cloth, especially if a corrosive cleaner such as bleach is used.



CAUTION: Do not allow any fluid to drip into your Gateway. The Gateway must be OFF when you are cleaning it. If any fluid gets inside your Gateway, you must contact a Fresenius Medical Care Technical Support immediately at **(800) 227-2572.** Clean fluid spills immediately to prevent moisture from possibly damaging your Gateway. Your Gateway should be placed on a water-tolerant surface, and spills should be cleaned up immediately.



CAUTION: foaming Do not type cleansers use or disinfectants containing alcohol or quaternary ammonium compounds like N-alkyl (C12-C18) dimethyl benzyl ammonium chloride (benzalkonium chloride). These chemicals attack the polycarbonate plastics used in your machine. the product labels and follow the instructions. Do not use spray bottles.

Any service must be performed by a Fresenius Medical Care technician. If your Gateway needs service, call Fresenius Medical Care Technical Support at (800) 227-2572.

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Information about Your Gateway

To find information about your Gateway, read the label on the bottom of the Gateway. See "Bottom View" on page 13.
Serial Number: GW
Model Number: SL-600 IP22
MEID:
Internet Connection: Wi-Fi.

