

Swift Sensors Gateway Installation and Deployment Best Practices and Network Troubleshooting Guide

Swift Sensors gateways transmit measurement data from your wireless sensors to the internet. We recommend following the steps outlined in this guide to create an optimal communication network with your gateways. In addition, we've included some troubleshooting steps for navigating network connectivity issues that you may run into when dealing with corporate networks.

Installation Guidelines

The SG3-1010 and SG3-1012 gateways are designed for indoor use only in a dry environment, away from water. (Water-resistant NEMA enclosures are available if you must install your gateway in outdoor or harsh environments). Gateways used outdoors without the proper protection may void their guarantee.

For optimal wireless sensor communication, the Series 3 gateway should be mounted in the correct orientation, with the power and communication ports facing down (as shown below) and connected to the best source of internet connection (e.g., Ethernet, Wi-Fi, or Cellular). When possible, installing higher-up on a wall can provide stronger communication signals throughout your facility. We also recommend finding a place that is out of heavy traffic if possible to reduce the risk of an employee accidentally kicking or knocking over the gateway. The power connection is threaded to provide strong connectivity in the event that the cable is accidentally kicked or caught on something to avoid power outages to your gateway.



Figure 4.1:
Drywall-mounted indoors



Figure 4.2:
Mounted in stand indoors



Figure 4.3:
Mounted in enclosure indoors or outdoors

For more information on how to install your gateway, refer to our user [manual](#).

Troubleshooting Internet Connectivity Issues

Your gateway, by default, is optimized to connect to any network. However, facilities such as school districts, medical offices, corporate offices or government workspaces may have tighter

security integrated into their network which may cause connectivity issues with your gateway during installation. To ensure the best deployment experience possible, we recommend reviewing the following network requirements with your IT department -

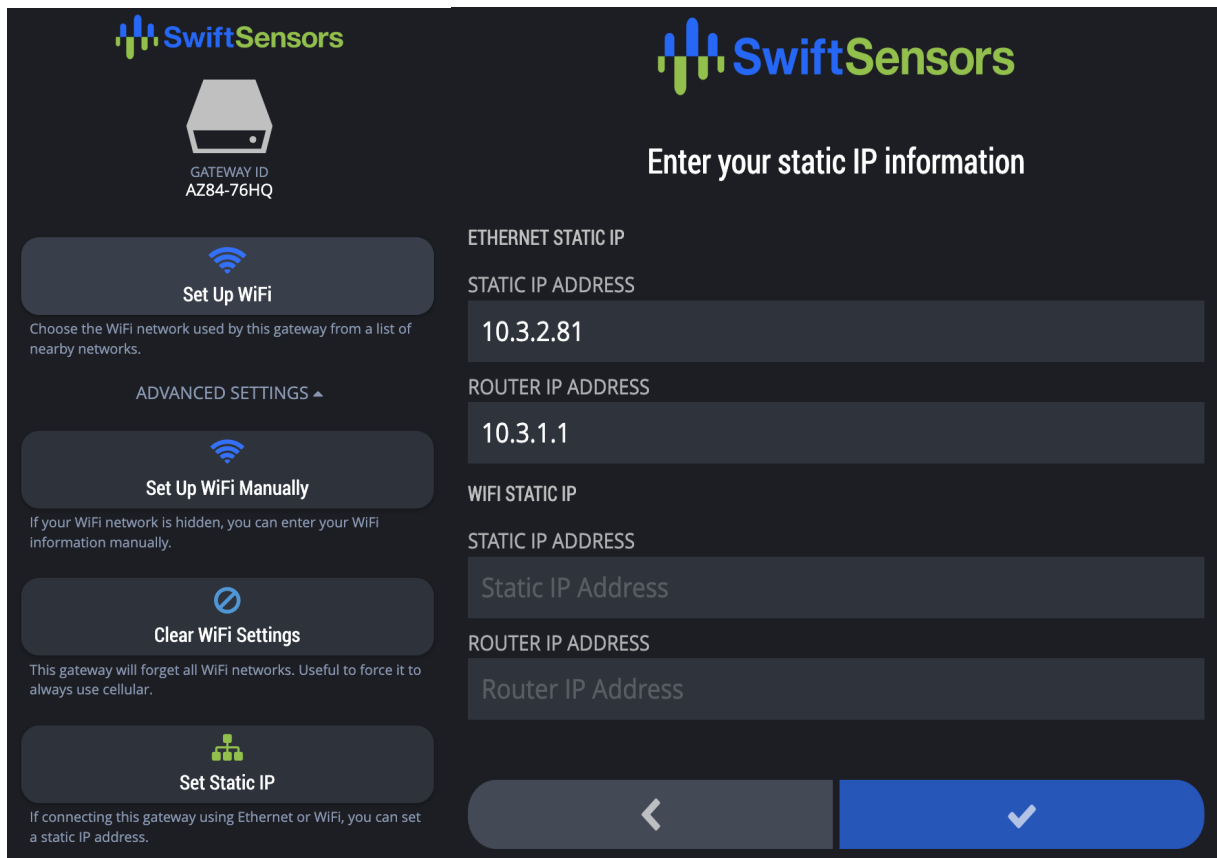
Ports - Different channels through which your router sends and receives data.

Open: Port 443 / Protocol: TCP/UDP

Open: Port 50 / Protocol: TCP/UDP

DHCP - Dynamic Host Configuration Protocol (DHCP) is a network management protocol used to automate the process of configuring devices on IP networks. Our gateways ship with settings for dynamically connecting to your network's preferred DHCP settings. If this is an issue with your network configuration, we can reset your gateway's DHCP settings to static utilizing Google's default DNS servers: option domain-name-servers 8.8.8.8, 8.8.4.4. Contact Swift Sensors technical support for making this change.

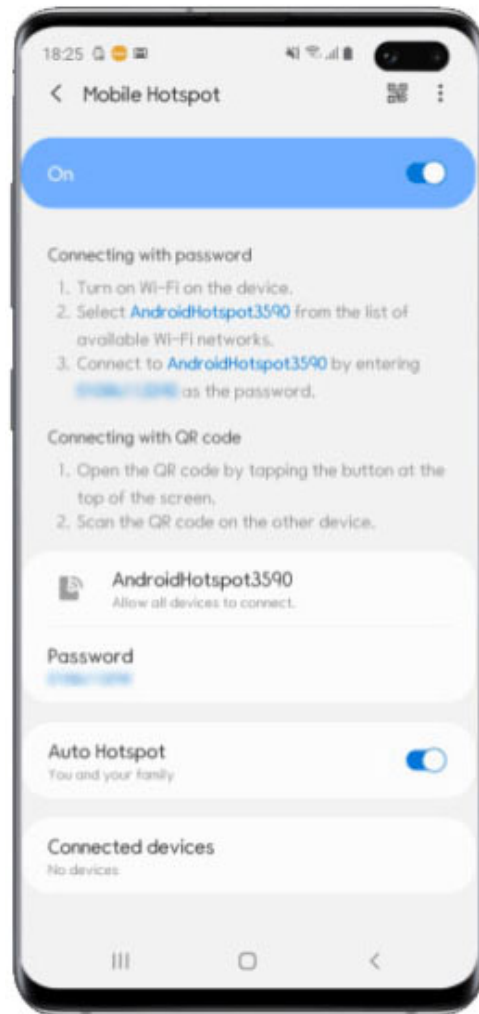
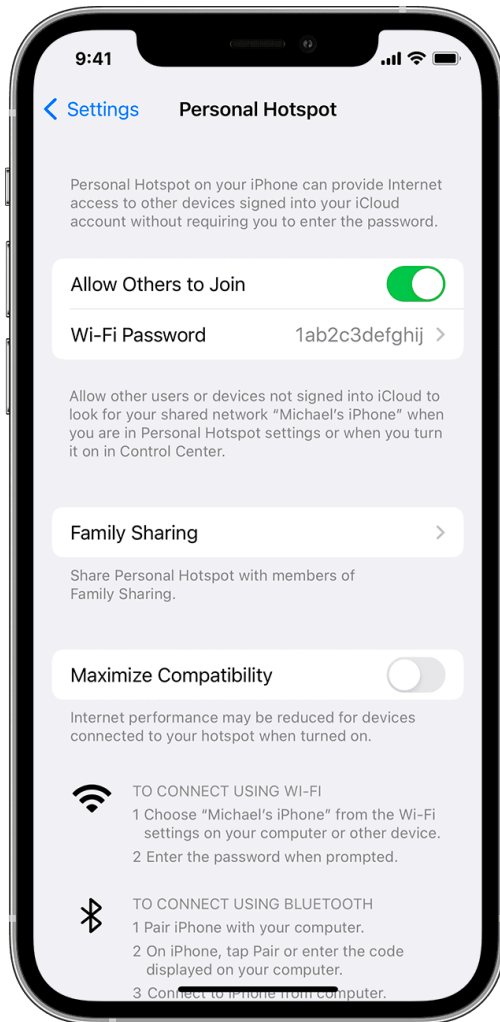
Static IP Configuration - A device on the Internet can have a static IP address, which means it stays the same over time. Static IP Configuration is ideal for large-scale deployments where an IT department needs to control which IP addresses are used and checked out to specific devices. Upon deployment, you or your team may choose to leave this IP address configuration as is; however, we offer the capability to set up a static IP during your initial deployment. To do this, simply follow the steps provided in your [Quick Start Guide](#), and instead of selecting 'Set Up Wi-Fi' when connected to your gateway, select 'Advanced Settings', and then 'Set Static IP'.



Advanced Troubleshooting

Should either of the steps above fail to work for your deployment, we advise that your IT team conduct the following checks and methods to diagnose the issue further.

- 1) If a Captive Portal, Web Filter, or App Blocker is used, this will disrupt the gateway's ability to connect to your network. To determine if the issue is a result of your gateway or network, assign the gateway a static IP on a virtual local area network (VLAN). This will bypass your captive portal, web filter, and app blocker and show as online in your account. However, this should only be used for diagnostic purposes rather than as a permanent solution.
- 2) Utilize an outside network (e.g., a home network or mobile hotspot). For our support team to assist with diagnosing your gateway, it must be online and connected to your account. This may prove to be difficult if your network is not cooperating with your gateway. We recommend taking the gateway offsite and using it on a home or public network to get it connected to the internet and adopted into your account. This will enable Swift Sensors to troubleshoot your gateway remotely and provide assistance. By default, our gateways ship with the ability to connect to a mobile hotspot. To do this, navigate to your phone's settings, enable your hotspot, and create a custom Wi-Fi password.*



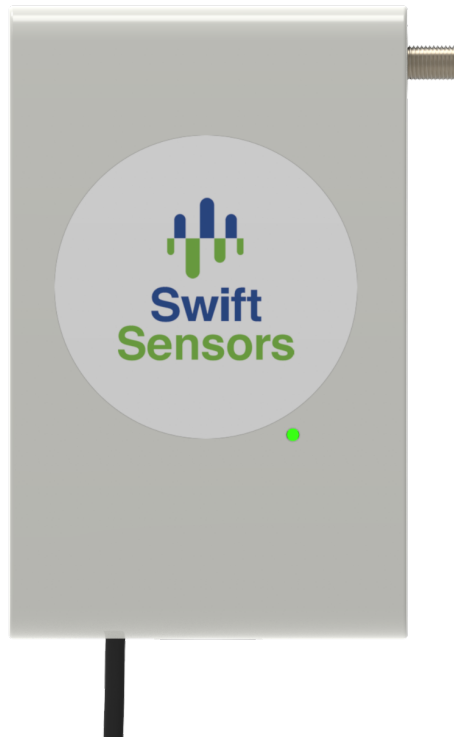
Connect the gateway to your mobile hotspot and ensure your mobile device remains on for the connection to stay active.

To learn more about setting up a mobile hotspot on your device, refer to these articles -

[Apple](#)
[Android](#)

*Please refer to your carrier's policies or data plan to ensure this feature is available on your device.

- 3) Purchase and use a Swift Sensors Cellular Network Modem. Swift Sensors offers a solution to bypass the need to connect via Ethernet or Wi-Fi for customers with strict networks or IT departments who do not allow unapproved devices onto your facility's network. The cellular modem connects through USB to the gateway and transmits/receives data through nearby AT&T or T-Mobile cell towers.



Before purchasing a Swift Sensors Cellular Network Modem, ensure that a strong, reliable cellular connection is available.

Contact Swift Sensors for pricing of cellular modems and monthly cellular service plans.

For more purchasing information, visit our [website](#).

To troubleshoot connectivity issues with your Cellular Modem, click [here](#).

Your Satisfaction Matters

Swift Sensors is committed to your satisfaction and success with our remote monitoring and alert system. As such, we offer free technical support to help you get up and running and navigate potential network connectivity issues. In addition, Swift Sensors offers a lifetime warranty on your gateway. We will repair or replace any gateway free of charge that has not been misused and associated with an account in good standing. For more information on our warranty, visit our [website](#).