

G1 WIFI GATEWAY USER MANUAL

Manual in English

Anleitung auf Deutsch

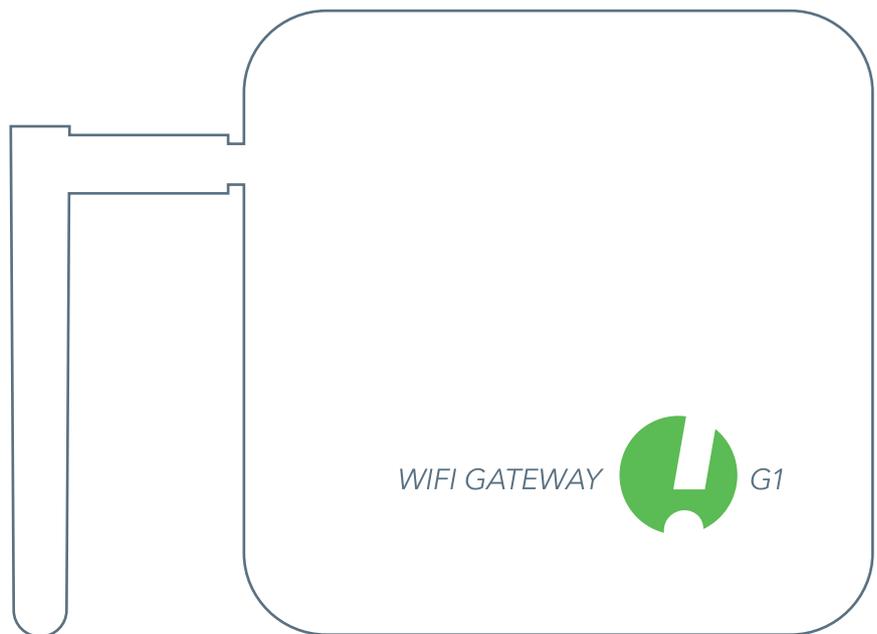
Manual en español

Manuel en français

Manuale in italiano

한국어 안내서

www.sensorpush.com/manuals

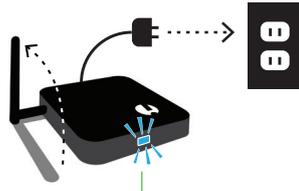


GET STARTED

1 SET UP

Plug in to a power outlet and raise the antenna.

The light on the front should be blue. (If light remains unlit or is red, see the "Basic Troubleshooting" section below.)



2 BLUETOOTH

Make sure Bluetooth is ON on your mobile device so you can add the Gateway to the app.



3 DOWNLOAD OR UPDATE APP

Visit Google Play or the App Store to download or update the SensorPush app.



4 ADD DEVICE

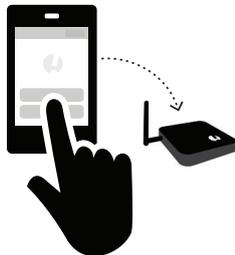
Once installed, open the app and start by tapping the Add Device button in the upper right.



5 ADD GATEWAY & LOG IN

Tap Add Gateway. Your mobile device will form a temporary connection to the Gateway. It may take a minute or two. If it takes longer than that, please restart the mobile device and also the Gateway and then try again.

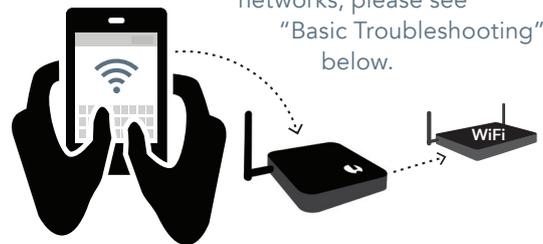
You will then get the option to sign up for an account (or log in if you are not currently logged in to an existing account). If you don't get the option to sign up and you don't have an existing account, see "Basic Troubleshooting" below.



6 CONNECT TO WIFI

After you have created or logged in to your SensorPush account, choose a WiFi network to use with your Gateway and enter your WiFi password.

If your WiFi password is not accepted or if your WiFi network is not among the list of available networks, please see "Basic Troubleshooting" below.



7 STATUS: ONLINE

Your Gateway will appear at the bottom of the list of Devices. After a few minutes its status should be "online," and any sensors that are in range of the Gateway will display a small Gateway icon.

If the Gateway does not show up as 'online' within a few minutes, see "Basic Troubleshooting" below.



IF AT ANY POINT YOU GET STUCK:

- Try restarting your mobile device and the Gateway
- See the "Basic Troubleshooting" section below
- Visit the FAQ or Support pages at sensorpush.com
- Contact support via email at support@sensorpush.com

BASIC TROUBLESHOOTING

WE'RE HERE TO HELP!

If you continue to experience difficulties after reviewing these basic troubleshooting tips below, please review our FAQ section and/or contact us directly at support@sensornpush.com and a member of the engineering team will get you back to you ASAP.

POWER LIGHT IS RED OR NOT ON

If there are issues during set up and the light on the front of the Gateway is not blue and is instead red or there is no light, stop now and reach out using the Help link on our website (www.sensornpush.com).

WIFI PASSWORD ISN'T ACCEPTED

If the WiFi network password isn't accepted, return to the "Devices" screen using the back arrow in the upper left corner of the app. Then scroll to the bottom of the Devices list and select the Gateway. Then choose the "Configure" option. This will restart the network selection and password entry process.

If you have an Android phone and a few attempts with the above method does not work, try the same process from the beginning but turn off Bluetooth for the mobile device first.

Note: If you have a hex-based WEP password, you must have the prefix "0x" in front of the password (and the "0" in "0x" is a zero). These are usually found on older WiFi networks.

WIFI NETWORK DOES NOT APPEAR AMONG LIST OF AVAILABLE WIFI NETWORKS

If your WiFi network does not appear among the available WiFi networks, please verify that the router is communicating via 2.4 GHz or is in "dual band" mode, because the Gateway requires 2.4 GHz. If not, then please turn on dual band/2.4GHz and try again. If your network uses a hidden SSID, use the "Join other network" option to enter it manually.

NO 'SIGN UP' OPTION FOR NEW GATEWAY ACCOUNT

If you do not already have an existing SensorPush Gateway account and the app does not give you the option to "Sign Up" for a new one (you only get the option to "Log In" to an existing account) please contact support@sensornpush.com right away.

SECOND GATEWAY IS NOT FOUND

If you are setting up multiple Gateways and the second unit is not found by the app, you might need to restart your phone so its Bluetooth is reset. Then try again.

YOU GET AN ALERT THAT THE GATEWAY IS OFFLINE OR MISSING

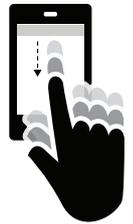
This means that the Gateway has not communicated with the SensorPush cloud for an hour or more. A couple of things to consider are:

- 1) Does the breaker for the Gateway still have power?
- 2) Is the power cord to the Gateway unplugged (or accidentally connected to a switch that was turned off)?
- 3) Is the internet source down or unavailable (the wifi router or modem needs to be rebooted)?

If you are unable to determine the cause, please contact support@sensornpush.com.

GATEWAY STATUS IS "UNKNOWN" OR "OFFLINE"

If you have not received an alert that the Gateway is offline, then the "unknown" or "offline" status might just be a normal delay. If you see this, try doing a pull-down refresh on the main "Devices" screen of the app. A pull-down refresh is the same thing you can do in an email app where you use a finger to pull down on the screen to check the server for new emails. This should load any new sensor and Gateway data from the cloud.



Once you start using a SensorPush WiFi Gateway in conjunction with your sensors, the monitoring pipeline moves mostly to the Gateway and to the cloud, so this reduces what the app has to do by a lot. What happens is the Gateway relays the data of any in-range SensorPush sensors to the internet using your local WiFi or Ethernet, and the Gateway also monitors these sensor readings for alert conditions (to see if the readings have exceeded one of the boundaries you've set). If you have selected to receive alerts, then a push notification is sent via the cloud to your mobile device. All of that happens outside the app, and this is whether the app is onscreen or not.

When you open the app, the app checks in with the SensorPush cloud to fetch updated data. It's kind of like an email app checking a server for new emails. There can be a few moments before it gets its update. If so, this is a normal delay. If you do a pull-down refresh and it does not update within a few moments, reach out to support@sensornpush.com.

RESET GATEWAY TO START OVER, OR REMOVE GATEWAY FROM APP

The process is the same whether you need to reset the Gateway (e.g. want to create a new account) or if you simply want to remove the Gateway from your app. Please follow these steps below (Important note: There is a small hole under the Gateway. This is not for resetting the device.):

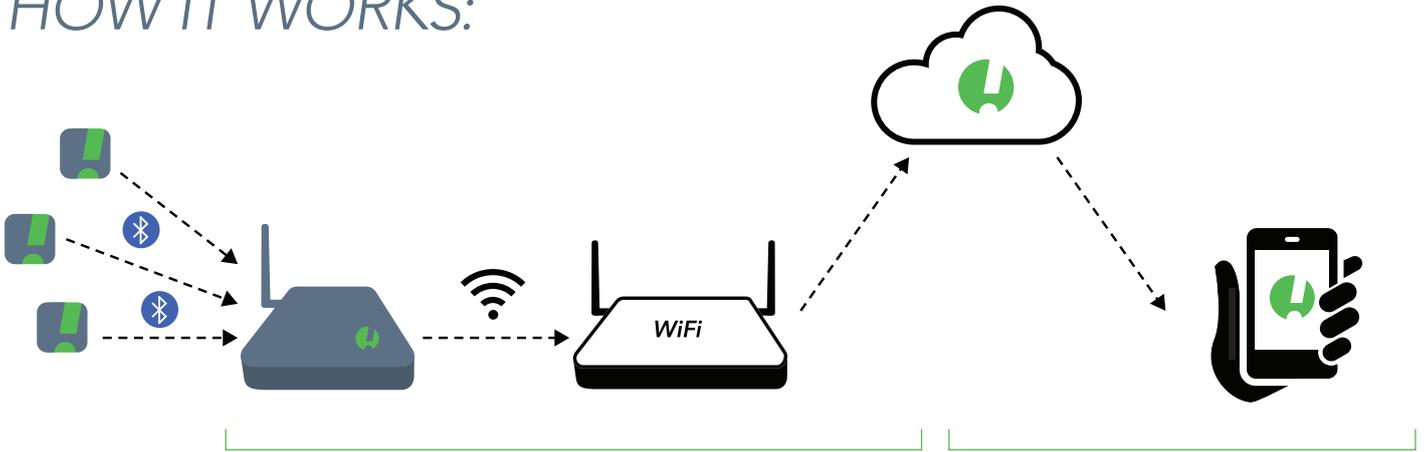
- 1) Make sure you are within range of the Gateway (e.g. same room).
- 2) Go to app settings inside the SensorPush app and verify that you are logged in. Here's how:
 - Open the app, and from the main screen (the screen with the word "Devices" at the top) select the button in the top left to open app settings.
 - Once in app settings you'll notice a section called "Account." If your account email is listed there, you are logged in. If not, please log in now.

You need to be logged in to reset the Gateway. If you no longer have the login email and password, contact us at support@sensorpush.com

- 3) Verify also that the Bluetooth for the mobile device is ON.
- 4) Return to the main screen of the app and select the Gateway you want to remove from the account.
- 5) Then select the "Remove Gateway" option and wait for the app to connect to the gateway. Once connected, choose "Remove and Unlock." Do NOT choose "remove without unlocking" because that will remove it from your account, but the Gateway will not be usable.

Once finished, the Gateway is removed from the app and it can be used with a different account.

HOW IT WORKS:



SENSORS COMMUNICATE WITH THE GATEWAY

The Gateway uses Bluetooth to pick up the signal from in-range SensorPush sensors and then it relays that sensor data to the cloud using your WiFi or Ethernet.

The Gateway device also checks sensor readings for alert conditions to see if the readings have exceeded one of the boundaries you've set.

YOUR MOBILE DEVICE NOW WORKS VIA THE CLOUD

The app on your mobile device will now go to the cloud for sensor data instead of getting that data directly from the sensor devices.

If you have selected to receive alerts, the Gateway also instructs the cloud to send out a push notification which is then sent to any mobile devices logged into your account. If you have activated the email alert feature, they are also triggered when push notifications are sent. Email alerts can be activated through the SensorPush Gateway Cloud web dashboard (<http://dashboard.sensorpush.com>).

All of this, including the push notifications and email alerting, is done outside the SensorPush app, whether the app is onscreen or not.

CHECKING THE DATA

When you open the app, the app checks in with the SensorPush cloud to fetch updated data. It's similar to an email app checking a server for new emails. There can be a few moments before your device receives the update. Sometimes, you might see a delay before it updates. This is normal. During that delay, the Gateway might still display "Offline" and the sensors may not update, but they will update once the app has fresh data from the cloud.



You can also force the SensorPush app to check the cloud. To do this try a pull-down refresh (a.k.a. "swipe-down-to-refresh") on the main screen of the app. The main screen is the screen where the sensors are listed with the word "Devices" at the top. A pull-down refresh is the same thing you can do in an email app where you use a finger to pull down on the screen to check the server for new emails. This will load any new sensor and Gateway data from the cloud, including current conditions, historical data, and Gateway status.

NOW THAT THE GATEWAY IS SET UP

ADDING MULTIPLE SENSORS AND GATEWAYS

Anytime you need to add more sensors and/or more Gateways, they only need to be added to one of the mobile devices logged into the account. Within a few minutes, the new units will appear on all the other mobile devices logged into the account.

MULTIPLE GATEWAYS

Accounts can have multiple Gateways. The Gateways can be at the same location on the same network, or they can be at different locations entirely. If you are setting up multiple Gateways, power off your mobile device each time before setting up additional Gateway.

RENAMING GATEWAY

To change the name of the Gateway, open the SensorPush app to the main "Devices" screen. Scroll to the Gateways section of the Devices list and select the Gateway. On the screen that appears, tap the edit button to begin editing.

GATEWAY RANGE

Wireless range from the sensors to the Gateway is affected by a combination of distance and obstacles (e.g. walls, floors, windows, etc). Put the Gateway in a location central to the sensors, or make sure the Gateway is as close to the sensors as possible. If a sensor is inside a container like a freezer or safe, its wireless signal can be reduced by quite a bit, so consider putting the Gateway near the opening of that container and locating the sensor just inside that opening.

ADDITIONAL MOBILE DEVICES

Additional mobile devices can simultaneously log into the same account. You will need to use the same email and password. You will not need to add the sensors, nor the Gateway to these additional mobile devices. This is because the sensor(s) and Gateway(s) are already associated with the account. Just download the app to an additional mobile device. Open the app to the main screen (the screen with the word "Devices" at the top), and then select the settings button in the far upper left. Once in the settings screen you will see the option to login. After you log in using the same login credentials, turn off the Bluetooth switch below in the "Configuration" section. Then return to the main screen of the app where you will see the sensor(s) and Gateway(s) on that account.

It can take several minutes to download all the data from the cloud. It can take even longer for very large accounts with lots of sensors or long data history. Try to keep the app open until this process completes.

WEB BROWSER DASHBOARD

A web browser dashboard is available so you can interact with your SensorPush Gateway and your sensor data from a desktop or laptop computer. You can also use the dashboard to set up email alerting and other features exclusive to Gateway monitoring. Using a standard web browser like Google Chrome visit: <https://dashboard.sensorpush.com>

GATEWAY CLOUD API

There is a Gateway cloud API. Information on this is available at: www.sensorpush.com/gateway-cloud-api

BLUETOOTH AUTO-SHUTOFF

Once you set up your Gateway, the app's Bluetooth monitoring is automatically switched off for improved battery life. You can turn it back on at any time through the settings section inside the SensorPush app.

If you have some sensors that you still wish to monitor using your phone's Bluetooth instead of using the Gateway (e.g. you carry a sensor with you in a backpack), you still can. It will not interfere with the Gateway. Just make sure your phone's Bluetooth is on, and also that the Bluetooth is on inside the settings section of the SensorPush app. Important Note: any sensor data collected through the phone using only Bluetooth will not get pushed to the cloud. It will only be on that mobile device.

ETHERNET CONNECTION OPTION

You can use Ethernet to connect the Gateway to your router instead of WiFi. Once the Gateway is added to your account using Bluetooth and your mobile device, instead of choosing a WiFi network, just plug an Ethernet cable from your network into the Gateway.

CELLULAR HOTSPOT CONNECTION OPTION

You can choose to use a standard cellular hotspot as the internet connection for the Gateway instead of WiFi or Ethernet. Just be sure its wifi is 2.4GHz, which is common.

USB POWER OPTION

The USB port is an alternative method for powering the Gateway. If you have a male-to-male USB cable and a phone charger with 5 volts / 2 amps you can power the Gateway via its USB port. This is handy when using the Gateway in a vehicle.

ADDITIONAL INFORMATION

ADVANCED NETWORKING

With WiFi, you'll be able to use WPA/WPA2, WEP, or open networks. Web-based WiFi authentication (like you often see in a hotel, for instance) is not supported.

Whether using WiFi or Ethernet, your network needs to be able to configure clients automatically via DHCP. Static IP addresses and other custom settings are not available at this time.

We utilize standard methods for securing the Gateway. All network connections are encrypted and no incoming ports are required to be opened on the Gateway.

FIREWALL SETTINGS

The Gateway uses outbound ports 80, 443, and UDP port 123 (NTP), and incoming connections are not required.

You can get MAC address information in the app during set up. It will appear once the Gateway has connected to the mobile device during configuration.

TERMS AND WARRANTY

Up-to-date Terms, Warranty Information and Additional Terms for Commercial Use or API Usage are available at www.sensorpush.com/legal/info.

SUPPORT AND FAQ

We update the support section of our website regularly with answers to frequently asked questions (www.sensorpush.com/support). Also, feel free to contact us any time at support@sensorpush.com and a member of our engineering team will be in touch with you within one business day.

PRODUCT SPECIFICATIONS

The most up-to-date specifications for each SensorPush sensor and Gateway model are detailed in the product section of our website: www.sensorpush.com/products

SPECIFICATIONS

Width	141 mm / 5.6 in
Height	20 mm / 0.8 in
Depth	107 mm / 4.2 in
Weight	149 g / 5.3 oz
Power	DC 5V / 2A
WiFi Frequency Band	2.4 GHz