CG 3900 is a Sigfox micro base station for extending the Sigfox coverage.
This is to be used in areas with limited coverage.

Installation requires:

- 230 V net power
- Internet connection via SIM card or Ethernet

All detailed documentation on: https://support.sigfox.com/products/#micro

Complete following steps for complete installation and activation:
1. Set up the site
2. Set up Internet connection with SIM card or Ethernet

⚠️ You need an android phone with the app installed on it.
The site management app is **not available for iPhone**.
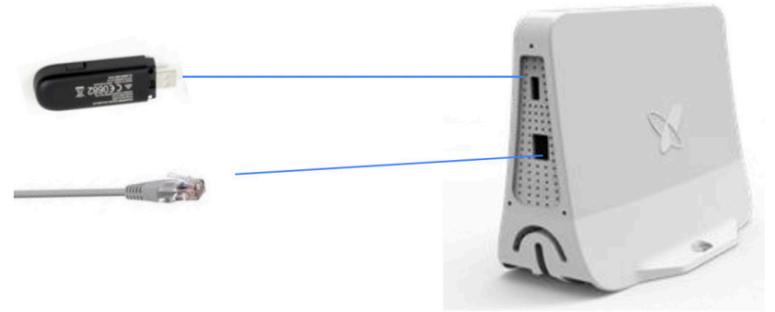
1. Set up the site

First we set the site where the base station is installed. This is basically adding the location of your micro base station to the Sigfox network (called Atlas).

Download and install the the app from the google store
https://play.google.com/store/apps/details?id=com.sigfox.accessstation.utility&gl=US
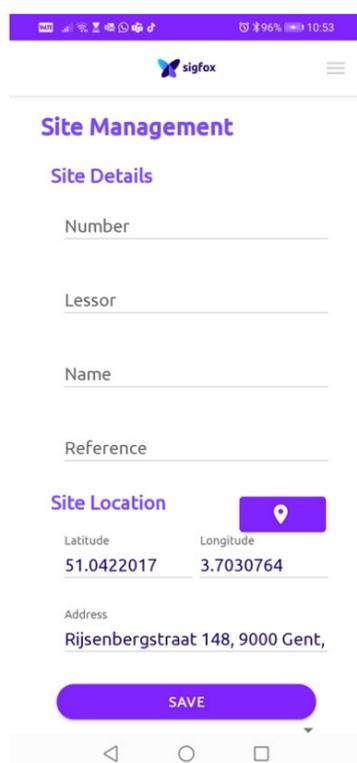
Open the sigfox app and do the following:
1. click on the **3-lines** menu icon
2. Choose **site management**
3. Fill in the details, you can use the GPS of your phone to detect the coordinates
4. The number is for internal reference. You can use any number you want (eg. 1,2,3,…), this field is mandatory. If you use your phone's GPS you do not have to fill in the other fields.
5. Click **SAVE**

2. Set up Internet connection with SIM card

2.1. Requirements

- Android phone with Sigfox utility app (Sigfox Access Station Utility - Apps on Google Play)
- USB cable
- Micro base station + all cabling
- Activated SIM card
- 2 GB monthly subscription or more
- NO PIN code configured on SIM card (disable by putting in your phone and change the settings)
- Dongle:

Cellular type	Model	Firmware	Zone
3G	MS2131I-8-SIG	21.751.11.00.00	_
4G/3G	MS2372h-153	21.327.07.00.00	EMEA
4G/3G	MS2372h-517	21.328.01.06.00	America
4G/3G	MS2372h-607	21.328.01.07.00	Asia

2.2. Cabling

Access Station Micro · USB Dongle · POE Injector · Ethernet cable · Internet · Power · Power supply
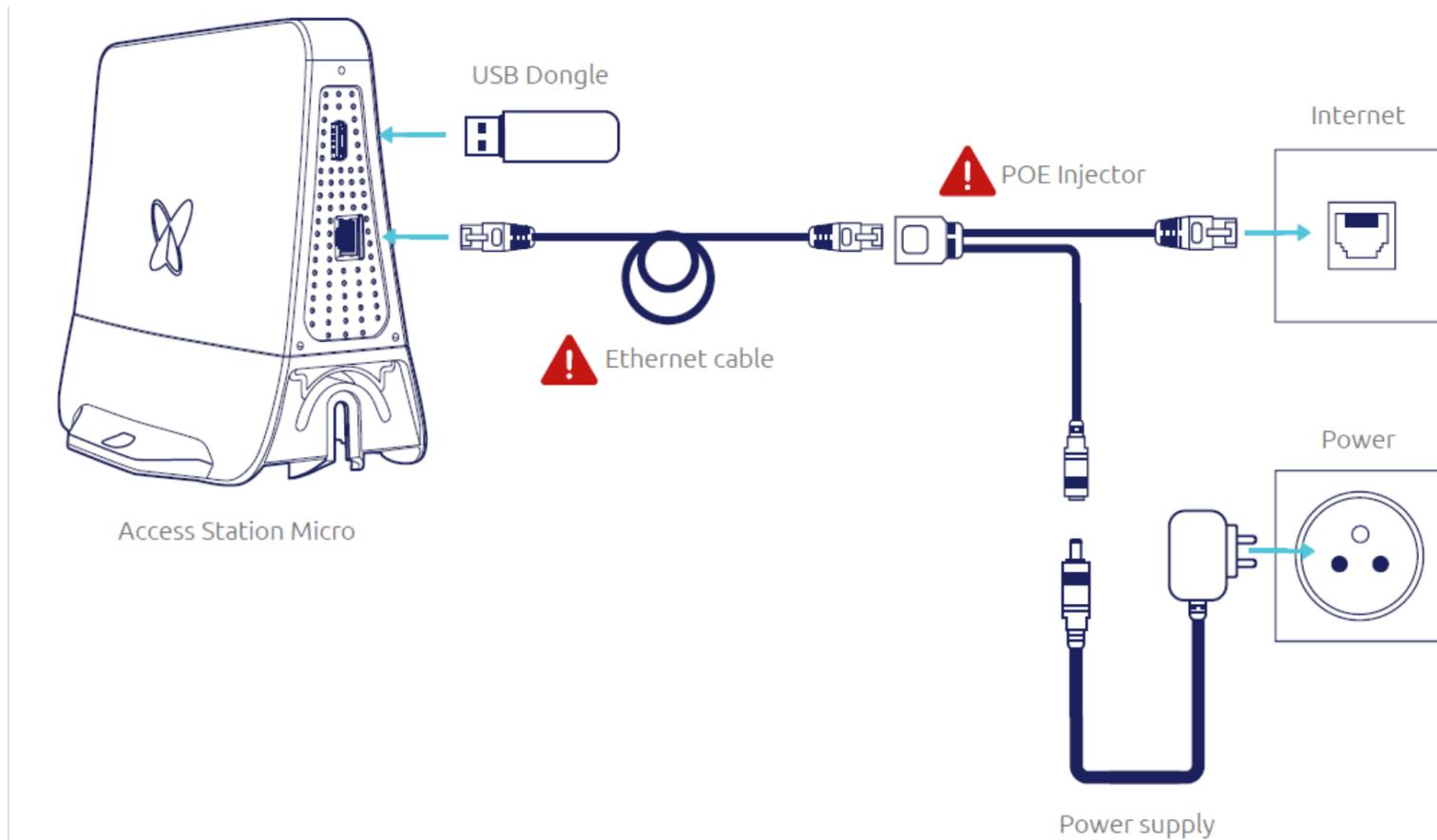
2.3. Installation steps for dongle connection

2.3.1. Preparation

1. Read the installation manual
   https://storage.googleapis.com/public-assets-xd-support-sigfox-production-338901379285/68386935-SMBS-T4_
   Product%20Manual.pdf
2. Power on the micro base station by plugging in the power supply
3. Connect an android phone to the USB port of the Micro Base Station
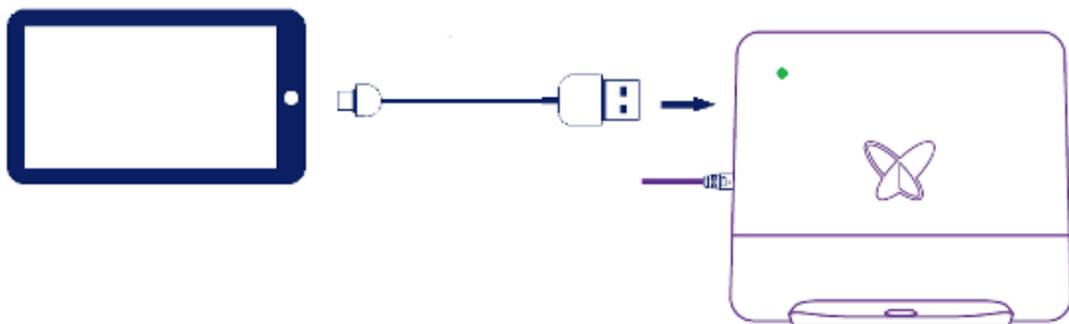
2.3.2. Connect with app

1. Open the Sigfox utility app, a message might appear, select "**Use by default**" and click **OK**
2. Click the **menu symbol**
3. Select **network management** in the menu
4. In the network management menu select the tab **cellular**
5. Fill in **APN** (ask this to provider of the SIM card). User name, Password and PIN can be left blanc
6. Press **Update configuration** to validate

The cellular configuration is applied to the station and reboot is not necessary

2.3.3. Complete the setup on the micro base station

1. Remove the USB cable from the micro base station
2. Put the SIM card in your phone and disable PIN code
3. Disable WIFI on the phone and check you have 3G/4G connection
4. Remove the SIM card from your phone and put the SIM card in the dongle
5. Put the dongle in the USB port of the Micro base station
6. Wait some minutes, the LED on the micro base station should become green
7. If the LED does not become green, plug out power and plug in again. Wait again several minutes until the LED
   becomes green
8. If the LED remains orange something is wrong with internet connection. Check SIM card and cellular settings of the
   micro base station
9. In the end the LED should be green, then the micro base station is operational

3. Set up Internet connection with an ethernet connection

3.1. Requirements

- Android phone with Sigfox utility app ( )
- USB cable
- Micro base station + all cabling
- Ethernet cable to connect to the network
- Configure firewall of the network so below communication ports (inbound and outbound) are open

Port	Connection protocol	Purpose	Destination IP
53	UDP	DNS	IP provided by DHCP lease
443	TCP	Communication with Sigfox Cloud	185.110.96.0/22
1194	UDP	Separate VPN	185.110.96.0/22
500	UDP	Separate VPN	185.110.96.0/22
4500	UDP	Separate VPN	185.110.96.0/22

3.2. Cabling

See section 2.2.

3.3. Installation steps for ethernet connection

3.3.1. Preparation

See section 2.3.1.

3.3.2. Connect with app

1. Open the Sigfox utility app, a message might appear, select "**Use by default**" and click **OK**
2. Click the **menu symbol**
3. Select **network management** in the menu
4. In the network management menu select the tab **ethernet**
5. By default, the configuration is set with DHCP and automatic DNS.
6. To set up manual configuration you need to fill the **static IP address, netmask and gateway**. For the DNS, set a primary and secondary address
7. Press **Update configuration** to validate and test it. The test can run only if the PoE is connected to an Ethernet outlet

3.3.3. Complete the setup on the micro base station

1. Wait some minutes, the LED on the micro base station should become green
2. If the LED does not become green, plug out power and plug in again. Wait again several minutes until the LED becomes green
3. If the LED remains orange something is wrong with internet connection. Check SIM card and cellular settings of the micro base station
4. In the end the LED should be green, then the micro base station is operational

4. LED color meaning

LED	Meaning	Troubleshooting
○ Off	No power	Your Access Station Micro is not powered. Please check that the PoE and power supply are properly connected.
● Red-Solid	Power on	Your Access Station Micro is powering on. If the light remains red after 2 minutes your Access Station Micro may need replacement. Contact your support.
◐ Green-Flashing	Booting up (30-60 sec)	If flashing continues for more than 2 minutes contact your support.
◐ Orange-Flashing	Establishing connectivity	If flashing continues after 1 minute, the Ethernet port or USB dongle may be disconnected. Make sure the internet connection is working.
● Orange-Solid	Establishing VPN connection	If the LED color remains after 1 minute, check your network configuration. Otherwise your station may not be registered correctly. Contact your support.
● Geen-Solid	In operation	Your Access Station Micro is up and running.
● Purple-Solid	Warming up (temp < 0°) Cooling down (temp > 55°C)	External temperature is too extreme. While your station is in cooling/warming mode, it is not in service.