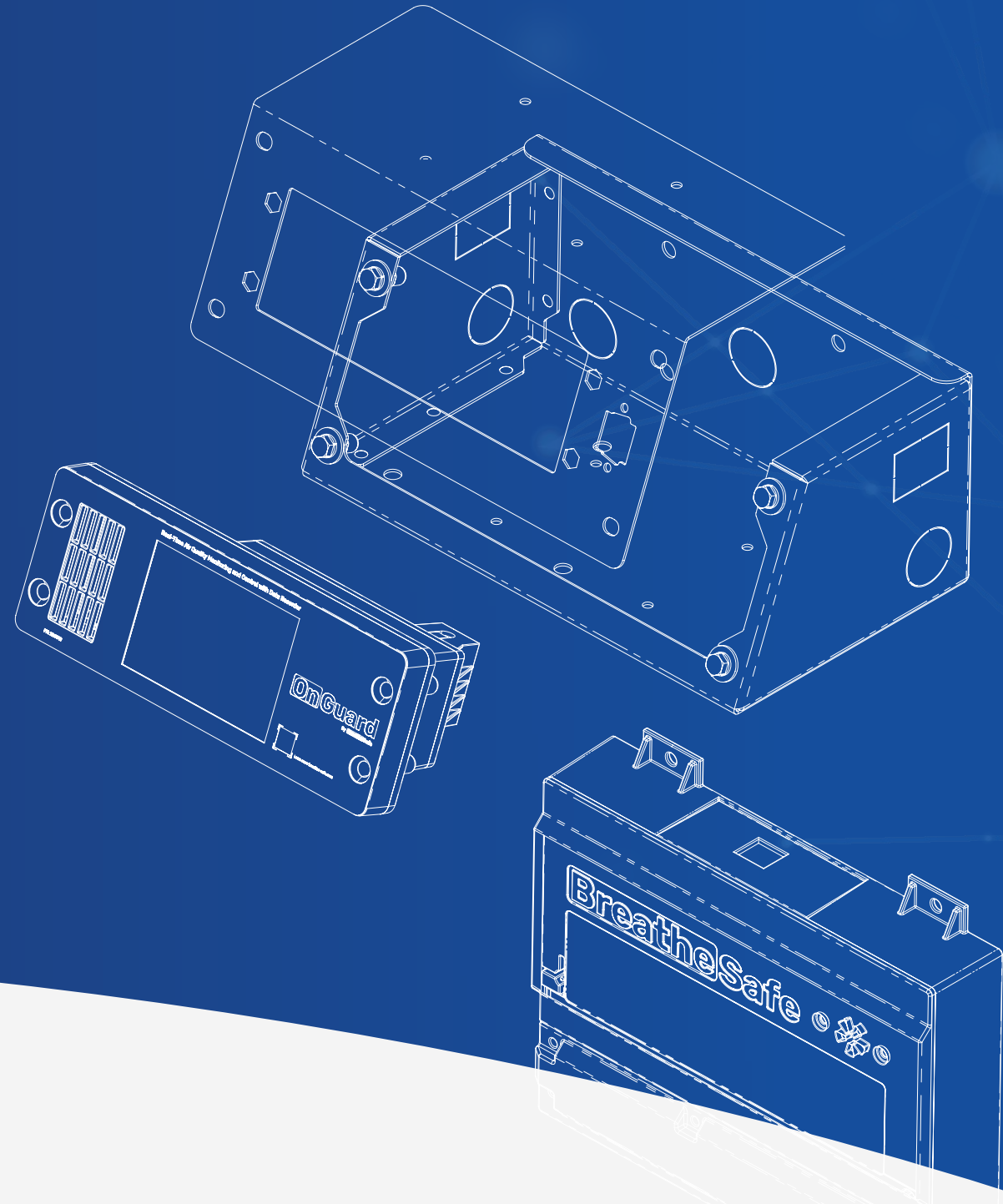


BreatheSafe

OnGuard™ Quick Start Guide



OnGuard™

Quick Start Guide

Contents

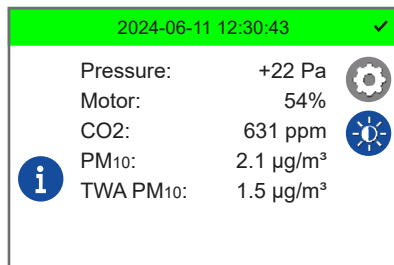
1.0 How to Gain Access to the Operator and Admin Menus on the TS UI	3
2.0 How to Access the Web Interface via the Wi-Fi Access Point	4
3.0 How to Configure the OnGuard to Connect to an External Wi-Fi Network via the Web Interface	4
4.0 First Time Start Up	5
5.0 How to Configure the OnGuard to Connect to an External Wi-Fi Network via the Touchscreen User-Interface (UI)	5
6.0 How to Modify Automatic Network Connection on OnGuard Startup via the User-Interface (UI)	7
7.0 How to Modify Automatic Network Connection on OnGuard Startup via the Web-Interface (UI)	7
8.0 How to Disable a Network Mode on the Touchscreen User Interface	8
9.0 How to Adjust or Disable the Alarms on the UI	8
10.0 How to Adjust PM & CO₂ Alerts on the Web Interface	9
11.0 Commissioning: How to Run a Max Speed Test	9
12.0 Commissioning: How to Run a Pressure Test	10
13.0 How to Replace a Sensor Pod	10

OnGuard™

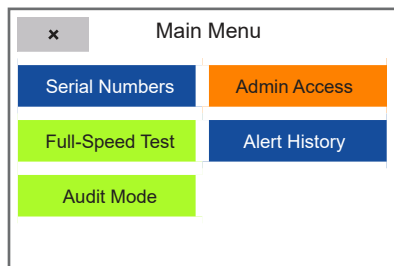
Quick Start Guide

1.0 How to Gain Access to the Operator and Admin Menus on the TS UI

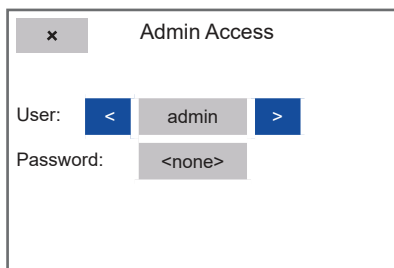
1. Press the action menu button on the home screen to access the main menu.



2. Press the 'Admin Access' button.



3. Select the respective credential level (admin or operator).



4. Press the input box beside 'Password:' and enter the respective access credentials using the on-screen keyboard. these are provided on the info sheet.

Default Access Credentials

The factory default configuration contains the following passwords, which can be changed in the OnGuard Web Interface (by the "admin" user). These credentials work for both the Display Pod and the Web Interface.

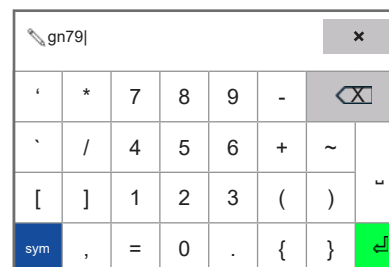
Minimal Privileges: Username "operator", Password dr28

Full Privileges: Username "admin", Password gn79

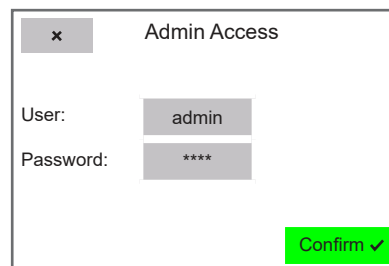
Web API, read-only: Username "api", Password <Not Set, Inactive>

Figure 1: Excerpt from example information sheet showcasing access credentials

5. Press the enter button once the password has been entered.



6. Press the 'Confirm button' to login with the selected username and password.



OnGuard™

Quick Start Guide

2.0 How to Access the Web Interface via the Wi-Fi Access Point

1. Turn the OnGuard on and wait 3 minutes for the network to start.
2. Open any Web Browser from a 2.4GHz Wi-Fi capable device.
3. On the device, connect to the Wi-Fi network being hosted by the OnGuard. The details of the OnGuard's AP are found on the Info sheet (example shown below). These details are also shown in 'Net Config' in the Admin menu on the OnGuard UI.

Network Configuration
Your OnGuard unit supports Wired Ethernet and 2.4GHz WiFi, and currently the stand-alone WiFi Access Point connection is configured for automatic starting. You can change the network settings using the OnGuard Web Interface (or the Display Pod, which also lets you stop or start all connections).

WiFi Ethernet: Inactive
Address: Dynamic Address Assignment (DHCP) 192.168.7.1

WiFi Access Point: Autostarted at Boot

WiFi Net Name:

WiFi Password:

Address: Static Address Netmask 255.255.255.0, No Gateway

Figure 2: Excerpt from info sheet showing OnGuard's AP

4. Enter the IP address of the OnGuard AP, 192.168.7.1, the AP address is the same for all OnGuard Kits.

Default Access Credentials
The factory default configuration contains the following passwords, which can be changed in the OnGuard Web Interface (by the "admin" user). These credentials work for both the Display Pod and the Web Interface.

Minimal Privileges: Username "operator", Password dr28

Full Privileges: Username "admin", Password gn79

Web API, read-only: Username "api", Password <Not Set, Inactive>

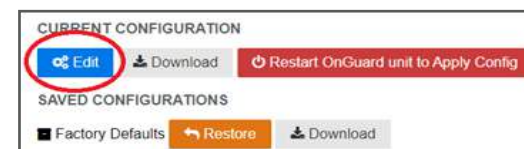
Figure 3: Excerpt from info sheet showing access credentials

Username:

Password:

3.0 How to Configure the OnGuard to Connect to an External Wi-Fi Network via the Web Interface

1. Connect to the web interface via the Access Point (See Section 2.0).
2. Ensure client is logged in as 'admin'.
3. Click 'Edit' under 'Current Configuration' heading.



4. Scroll down to 'WiFi, Client Mode'.

WiFi Client Mode

Join network at startup?

Network Name:

Password:

Address Assignment:

IPv4 Address:

Netmask Length:

Gateway Address:

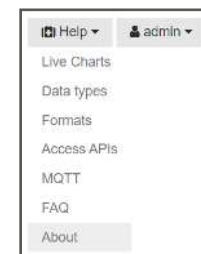
Namserver Address:

WiFi Client (STA) mode is independent of the OnGuard Access Point; the unit's current IP address can be found in the Operator's UI menu.

5. Enter the details of the network the OnGuard will connect to under 'Network Name' and 'Password'.
6. Click 'Save Changes'.
7. Click 'Restart OnGuard unit to Apply Config'.



8. Once the OnGuard has restarted, reconnect to the web interface via the AP.
9. Navigate to 'Help' -> 'About'.



OnGuard™

Quick Start Guide

10. Verify the OnGuard has successfully connected to the Wi-Fi network by checking that 'WiFi Client' is 'Up' and has an IP Address assigned. If the status of the Wi-Fi Client is 'Down', manually restart the OnGuard Main Unit by turning it off and then powering it back on after 10 seconds.

Network Connections	Connection Type	Status	IP Address
	WiFi Access Point	Down	
	WiFi Client	Down	
	Wired Ethernet	Up	149.28.173.70
	Remote Access VPN	Enabled but Down	

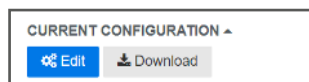
11. The OnGuard web interface can now be accessed on this network by navigating to the IP address displayed next to 'WiFi Client' (as above example) on any normal web browser.

Trouble Shooting:

1. If the network status in step 10 shows 'WiFi Client: down', the OnGuard has not successfully connected to the network.
2. Verify all network details were entered correctly in step 5.
3. Restart the OnGuard by powering off the Main Unit for 10 seconds.
4. Once the OnGuard has restarted, return to step 10.

4.0 First Time Start Up

1. Connect to the web interface via the Access Point (See Section 3.0).
2. Ensure client is logged in as 'admin'.
3. Click 'Edit' under 'Current Configuration' heading.



4. Scroll to the 'Identifiers and Tags' heading.
5. Enter at least one identifier: 'Vehicle/Installation Type', 'Vehicle/Installation ID', 'Vehicle/Installation Serial Number'.

6. Scroll to the bottom of the page to save the configuration changes. Enter a brief description of the change and click 'Save Changes'.

5.0 How to Configure the OnGuard to Connect to an External Wi-Fi Network via the Touchscreen User-Interface (UI)

1. Enter the Admin menu on the TS UI using the 'admin' pin (See Section 1.0).
2. Enter the Network Config page by pressing the 'Network Config' button.
3. Press the button beside 'Interface' to select the Wi-Fi Client option.

4. Press the blue arrow to continue to edit the Wi-Fi Client network settings.
5. Select the addressing type by cycling through the options (Static/DHCP). The default option is dhcp and is standard for most networks. Consult your network admin to confirm the configuration of the network being connected to (i.e. if static connection is required).

OnGuard™

Quick Start Guide

WiFi Client

Addressing: Static

0.0.0.0/24

Address/Mask

none none

Gateway DNS server

✓

WiFi Client

Addressing: Automatic (DHCP)

✓

- Continue to edit the network name and password by pressing the blue arrow on the bottom right of the screen.
- Enter the name of the Wi-Fi network for the OnGuard to join beside 'Network Name (SSID)'. Press the enter button when complete.

NetworkName

q	w	e	r	t	y	<X>
u	i	o	p	a	s	d
f	g	h	j	k	l	z
123	x	c	v	b	n	m

✓

- Enter the password for this network beside 'Password (PSK)'. Press the enter button when complete.

Password

q	w	e	r	t	y	<X>
u	i	o	p	a	s	d
f	g	h	j	k	l	z
123	x	c	v	b	n	m

✓

- Press the 'Confirm' button to save changes.

WiFi Client

Network Name: NetworkName

Password (PSK): Password

✓ Confirm

- Back on the Network Configuration page, enable 'At Startup' to automatically start the network on boot.

Network Settings

Interface: WiFi Client

At Startup: Off

Start Now

Current Status: Down

Address:

>>

- Press the 'Start Now' button to start the network.

Network Settings

Interface: WiFi Client

At Startup: On

Start Now

Current Status: Down

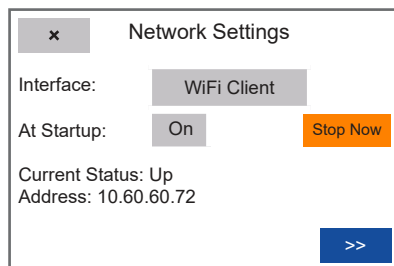
Address:

>>

OnGuard™

Quick Start Guide

12. Confirm the OnGuard has connected to the desired network, the DHCP or static IP address will have appeared on the Network settings page and the current status should show 'Current Status: Up' if the OnGuard has connected to the network.



13. The IP address displayed (10.60.60.72 in the example) is the address of the OnGuard web interface on the network. Navigate to this address via a web browser on a device connected to the same network to access the OnGuard's web interface.

Trouble Shooting:

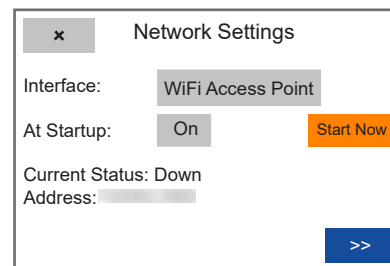
1. If the network status in step 12 shows 'WiFi STA: down', the OnGuard has not successfully connected to the network.
2. Verify all network details were entered correctly in steps 7-8
3. Restart the OnGuard by powering off the Main Unit for 10 seconds.
4. Once the OnGuard has restarted, return to step 12.

Note: The OnGuard will attempt to re-connect to the configured network periodically if the first attempt was unsuccessful or if it is moved out of range of the network.

6.0 How to Modify Automatic Network Connection on OnGuard Startup via the User-Interface (UI)

1. Enter the Admin menu on the TS UI using the 'admin' pin (See Section 1.0)
2. Press the 'Network Config' button to navigate to the network configuration options.

3. Select the desired network connection to be automatically started upon startup. (Example Wi-Fi AP).
4. Toggle the 'At Startup' option to automatically start the network on boot.



5. Repeat steps 3-4 for the Wi-Fi client or wired ethernet.
6. Confirm the OnGuard has started the network, the DHCP or static IP address will appear on the Network settings page and the current status should show 'Current Status: Up' if the OnGuard has started the network.

7.0 How to Modify Automatic Network Connection on OnGuard Startup via the Web-Interface (UI)

1. Connect to the web interface via the Access Point (See Section 2.0).
2. Ensure client is logged in as 'admin'.
3. Click 'Edit' under 'Current Configuration' heading



4. Scroll down to the network connection type that is to be enabled/disabled. The option pertaining to each connection type is shown below.
5. To disable the connection on startup – change the dropdown menu option to no. To enable – change the item to yes.

OnGuard™

Quick Start Guide

6. Click 'Save Changes'.
7. Click 'Restart OnGuard unit to Apply Config' on the home page.

8.0 How to Disable a Network Mode on the Touchscreen User Interface

1. Press the menu button to go to the main menu.
2. Press the 'Admin Access' button.
3. Enter the admin access credentials to access the admin menu.
4. Press the 'Network Config' button to access the current network configuration.
5. Click 'Stop Now' on the respective network interface (AP, Client or Ethernet) to disable it for the current session.

9.0 How to Adjust or Disable the Alarms on the UI

1. Enter the Admin menu on the TS UI using the 'admin' pin (See Section 1.0).
2. Press the 'Alert Options' button to enter the menu.
3. Select a suitable buzzer type for high and low priority alerts by editing the selection.
4. Select a suitable buzzer volume for high and low priority alerts by editing the selection (1-16 with 16 being the highest volume).
5. To disable the buzzer, adjust the volume to 0.
6. The 'Sound buzzer' button can be pressed to play the buzzer and cancelled by pressing it again.

7. Press confirm to save the new alert settings.

OnGuard™

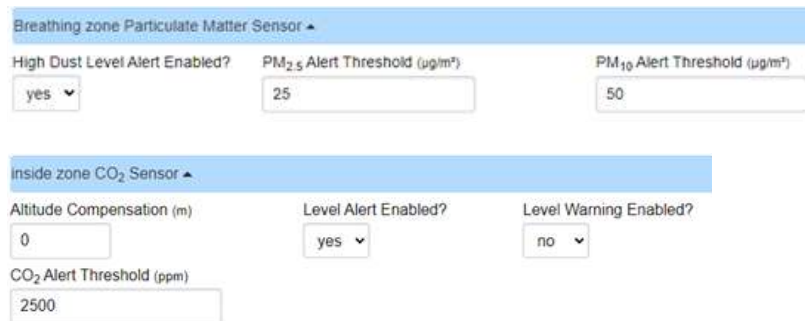
Quick Start Guide

10.0 How to Adjust PM & CO₂ Alerts on the Web Interface

1. Sign in to the Web Interface as 'admin' (see section 2.0).
2. Click 'Edit' under 'Current Configuration' heading.



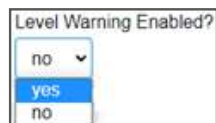
3. Scroll down to '[Sensor Name] [Sensor Type]' (e.g. Breathing Zone Particulate Matter Sensor).



4. To disable the alert level, click the 'Alert Enabled?' drop-down and select 'no'.



5. For the CO₂ sensor, to enable a secondary alert level, click the 'Level Warning Enabled?' drop-down and select 'yes'.



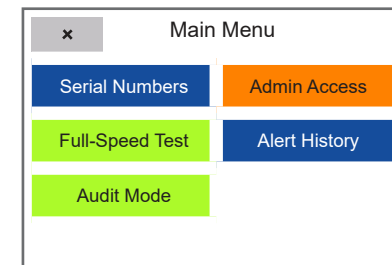
6. The alert thresholds can be adjusted by changing the value(s) under '[Parameter] Alert Threshold' (e.g. 'CO₂ Alert Threshold').



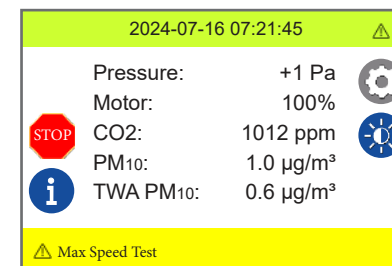
7. Scroll to the bottom and select 'Save Changes'. A comment recording the changes made will be required.

11.0 Commissioning: How to Run a Max Speed Test

1. Press the main menu button on the home screen to enter the main menu.



2. Ensure the cabin door and windows are completely closed.
3. Press the 'Full-Speed Test' button to initiate the test.
4. Press the 'Stop test' button to end the test and resume normal operation.

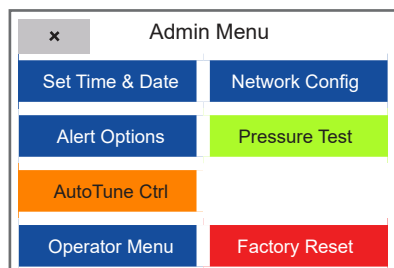


OnGuard™

Quick Start Guide

12.0 Commissioning: How to Run a Pressure Test

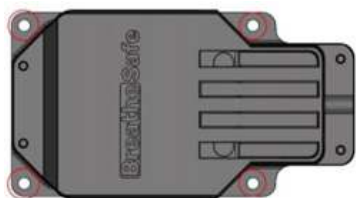
1. Access the Admin menu on the UI using the 'admin' pin (See Section 1.0).



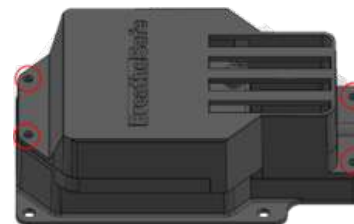
2. It is critically important that the cabin door and windows are fully closed during this operation. If target pressure (250pa default) is not reached, a Test Failure alert is raised.
3. Press the 'Pressure Test' button to initiate a pressure test.

13.0 How to Replace a Sensor Pod

1. Switch off power to the OnGuard Main Unit, as it powers the Sensor Pod.
2. Remove the existing Sensor Pod from where it is mounted by removing the 4 M4 Bolts from the corners of the case, the mounting holes are shown in the figure below:



3. Find the replacement Sensor Pod, do not mount this in the previous Sensor Pod's place yet.
4. Remove the 4 M3 screws from the top of the sensor pod and remove the lid.



5. Plug the cable used to power the previous Sensor Pod into the female port on the sensor board, clip facing upwards.

Note: Replace the cable as well if there is any visible damaged to the cable or connector.

6. Replace the lid, ensuring that the cable is clamped in the hole between the lid and the base. Special care must be taken to ensure the wires inside the case are not clamped by the lid when putting it back on the case.
7. Re-install the M3 screws. Do not over tighten the screws as excessive force will strip the threads inside the plastic.
8. Power on the OnGuard Main Unit.

If your OnGuard installation includes multiple (more than 1) sensor pod:

1. Sign in to the Web Interface as 'admin' (see section 2.0).
2. Click 'Edit' under 'Current Configuration' heading.
3. Scroll down to the 'Connect Accessories' heading.
4. Verify the newly replaced Sensor Pod has successfully connected to the OnGuard by checking the number under 'Hardware Serial Number' matches the serial number on the sticker attached to the Sensor Pod.



OnGuard™

Quick Start Guide

Hardware Type	Hardware Serial Number
CO ₂ /PM Sensor	30
Hardware Type	Hardware Serial Number
CO ₂ /PM Sensor	31

- Under 'Assigned to Zone', the new sensor will display 'None'. Click this drop-down menu and select the same zone that applied to the replaced sensor pod. This will be one of the zones that is not already assigned to another sensor pod.

For example, if the other connected sensor is assigned to 'Breathing Zone', the replacement sensor is most likely the 'Return Air zone' sensor.

Assigned to Zone
Return Air zone ▼
None
Breathing zone
Return Air zone

- Scroll to the bottom and select 'Save Changes'. A comment recording the changes made will be required.