



HORIZON



POWER

Quick Reference Guide

SGD + SMA Installation

1. SMA compatible devices

Here is the list of SMA inverters compatible with Horizon Power Smart Connect Solar

Model	Size in KW	No Of Phases	Equipment Category
SB3.0-1AV-41 (AS4777-2 2020)	3	1	Grid Connect PV Inverter
SB4.0-1AV-41 (AS4777-2 2020)	4	1	Grid Connect PV Inverter
SB5.0-1AV-41 (AS4777-2 2020)	5	1	Grid Connect PV Inverter
SB6.0-1AV-41 (AS4777-2 2020)	6	1	Grid Connect PV Inverter
STP3.0-3AV-40 (AS4777-2 2020)	3	3	Grid Connect PV Inverter
STP4.0-3AV-40 (AS4777-2 2020)	4	3	Grid Connect PV Inverter
STP5.0-3AV-40 (AS4777-2 2020)	5	3	Grid Connect PV Inverter
STP6.0-3AV-40 (AS4777-2 2020)	6	3	Grid Connect PV Inverter
STP 50-41 (AS4777-2 2020)	50	3	Grid Connect PV Inverter
STP8.0-3AV-40 (AS4777-2 2020)	8	3	Grid Connect PV Inverter
STP10.0-3AV-40 (AS4777-2 2020)	10	3	Grid Connect PV Inverter

2. Hardware & Software Checklists

Hardware

- A SMA (**SB AV-41** 1-Phase PV Inverter, **STP AV-40/STP Core 1** 3-Phase PV Inverter)
- B Horizon Power Secure Device Gateway 'SGD'
- C SGD Power Supply
- D Ethernet cable + Ethernet/USB adapter

A



B



D



C



Software

Ensure you have a user account with installer accreditation for the following applications:

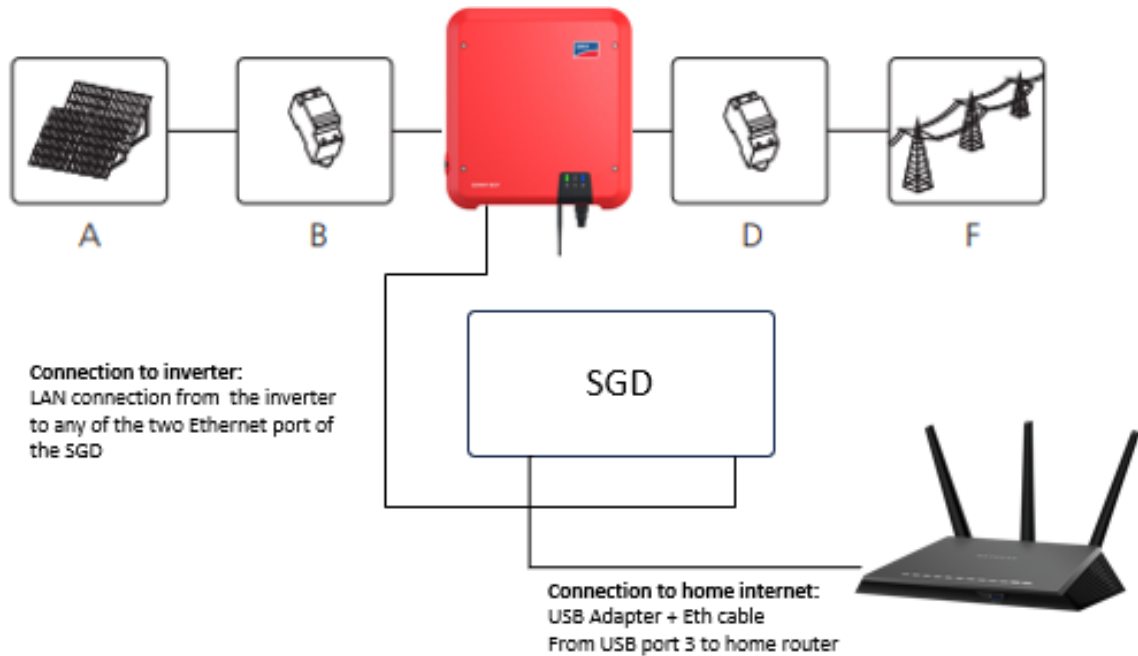
SMA 360 App: this application is needed with installer permission access to fine-tune the inverter settings.

Stormcloud (SwitchDin): Ensure you pass the HP Installer accreditation to get installer permissions open on the user account you create on this app.

2. Physical connection

Behind the meter configuration overview

Here is the overview of the physical connections you need to establish between devices



Position	Description
A	PV modules
B	DC load circuit breaker
C	Inverter
D	AC load circuit breaker
F	Utility grid

Mount the SGD

Start by mounting the SGD on a DIN Rail using the pre-fitted DIN Rail mounting bracket.



DIN rail mounting bracket

Connect to Home Internet

Then connect the SGD to the internet by plugging the USB-Ethernet adapter with a CAT 6 cable from the home router into the USB port number 3 as shown here.

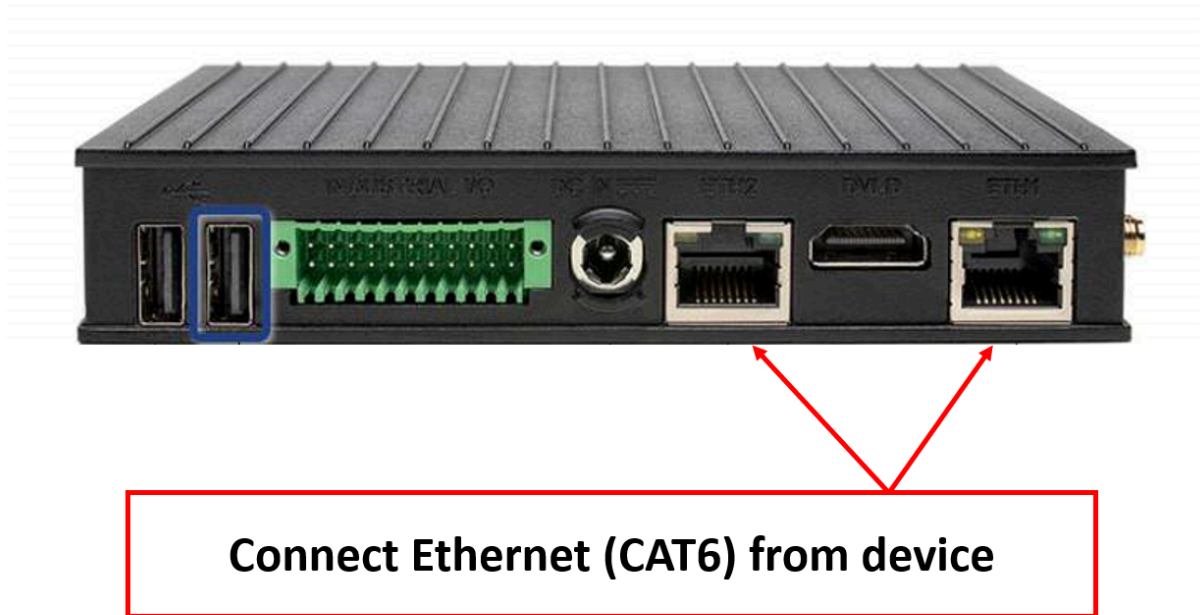
Please be aware that there is no other USB port that will accept any Internet traffic.



**For home internet
connect USB-Ethernet adapter here ONLY**

Connect to SMA inverter

Connect a Cat6 cable between any of the Ethernet port of the SGD and your SMA Ethernet port.



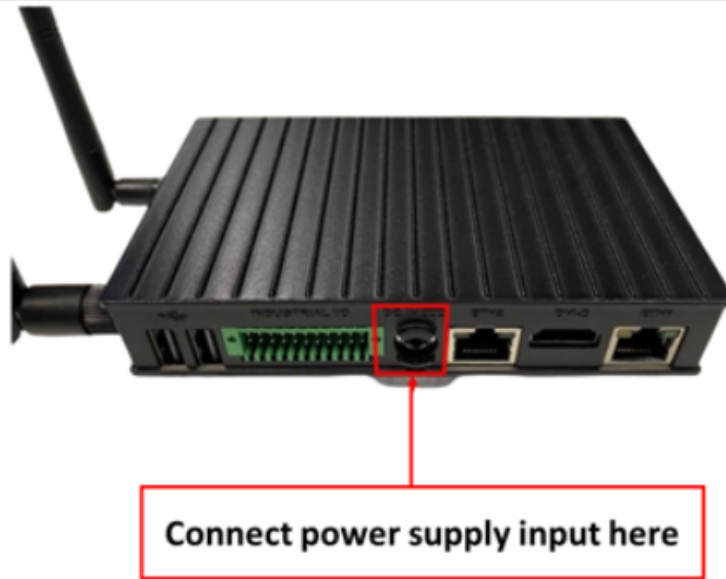
Connect the main 4G antenna

Make sure you connect the main 4G antenna to the WLAN-B connection as shown here.



Power up the SGD

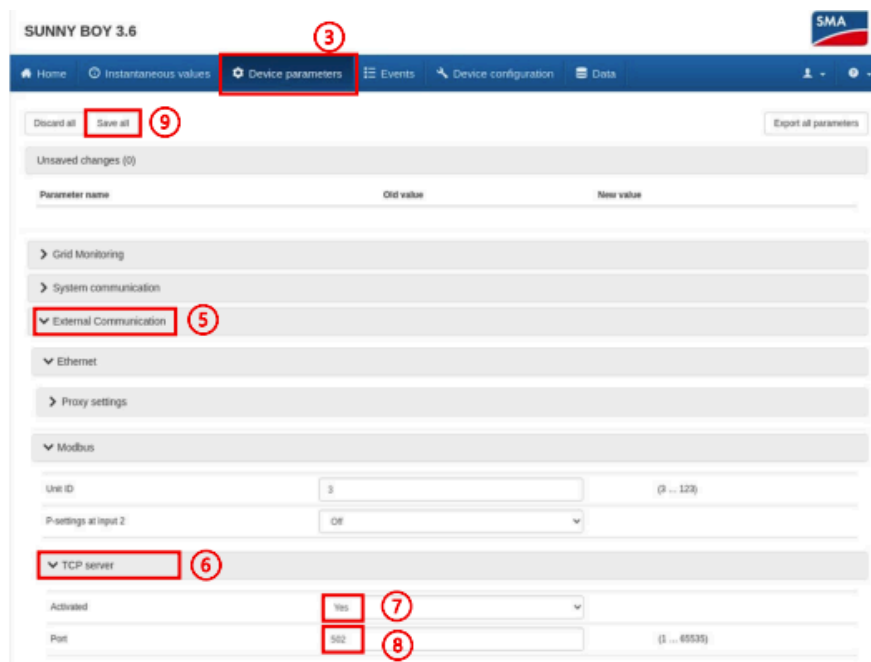
Ensure you connect the power supply as below.



3. SMA inverter settings

Enable Modbus TCP and port 502

1. Establish a connection to the user interface.
2. Log into the user interface as an Installer.
3. Select the Device Parameters tab.
4. Select [Edit parameters].
5. Select the Parameter group External Communication
6. Select Modbus>TCP Server.
7. In the drop-down list Activated, select the entry Yes.
8. If necessary, change the port in the field Port. (required setting: 502)
9. Select [Save all].



Failsafe mode

Ensure that the default value for export limitation is set to 0. The failsafe setting is a protection when communication between SGD is lost, the inverter runs at the default setting to not over the limitation value.

Inverter region setting

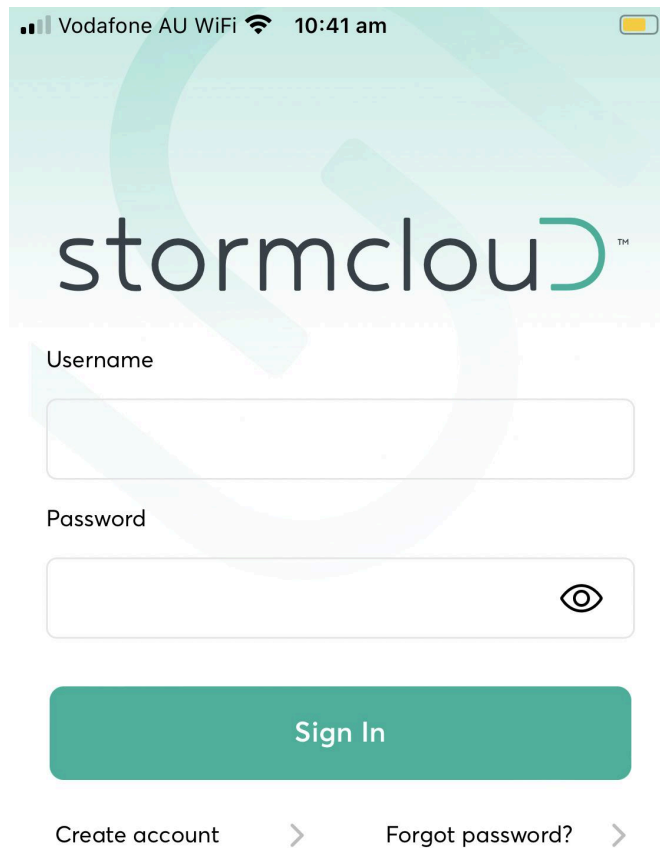
Ensure that you set the country to Australia and the region to **C** for Horizon Power.

4. Commissioning the SGD

Open the Stormcloud application and sign in.

Please follow this [link](#) if you are creating your user account. You must ensure you have permissions on this account opened by SwitchDin.

Your username is an email address. (both username and password are CASE sensitive)
If two-factor authentication has been enforced, you will receive a passcode valid for 300 seconds in your email inbox to finish logging in to the SwitchDin portal.



Vodafone AU WiFi 10:41 am

stormcloud™

Username

Password

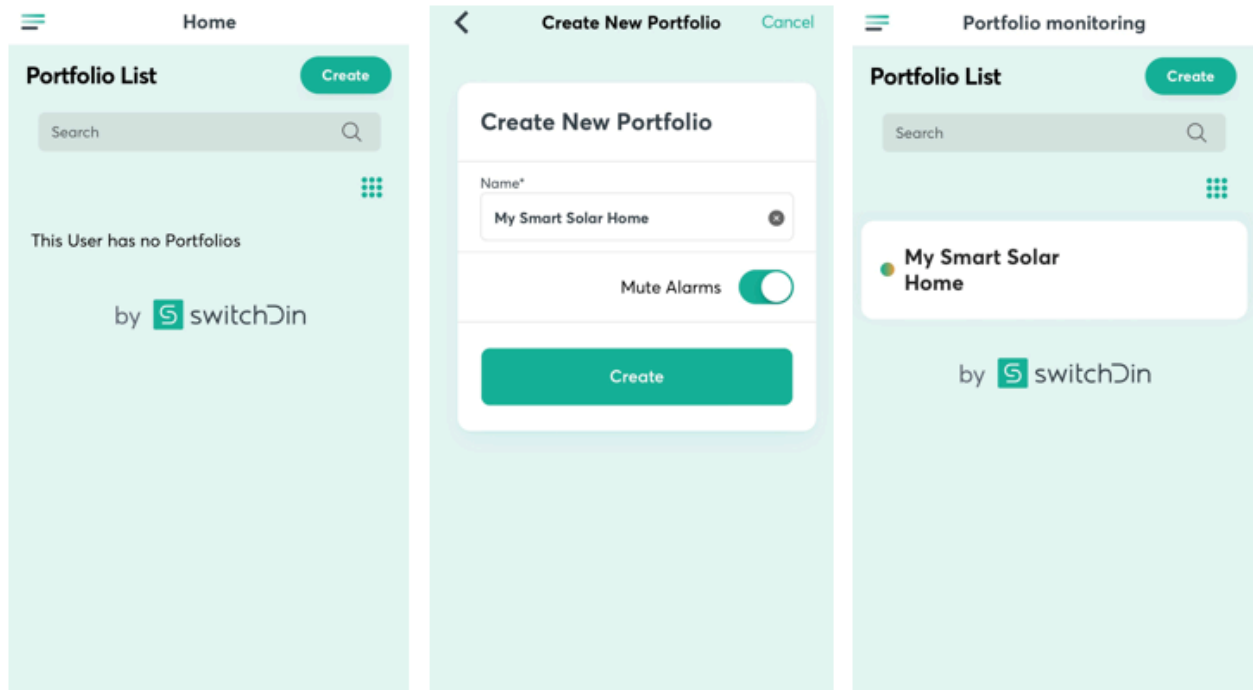
Sign In

Create account > Forgot password? >

by  switchDin

Create a portfolio

On first signing into the application, you can create a folder regrouping all the sites where you install SGDs. We call this folder a portfolio. As an installer, feel free to use the name of your business or area.



Create a unit

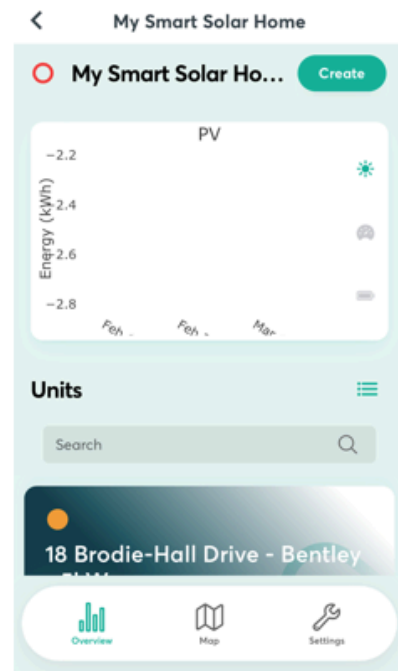
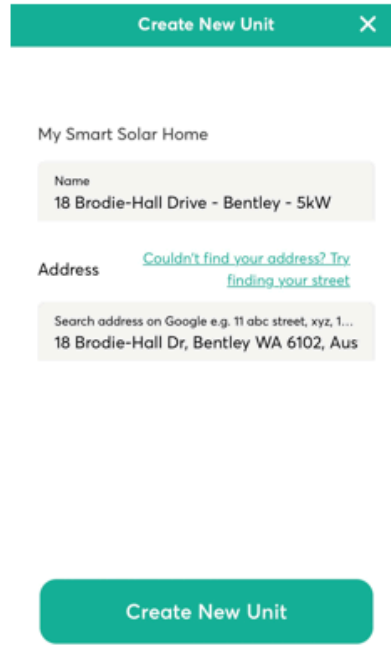
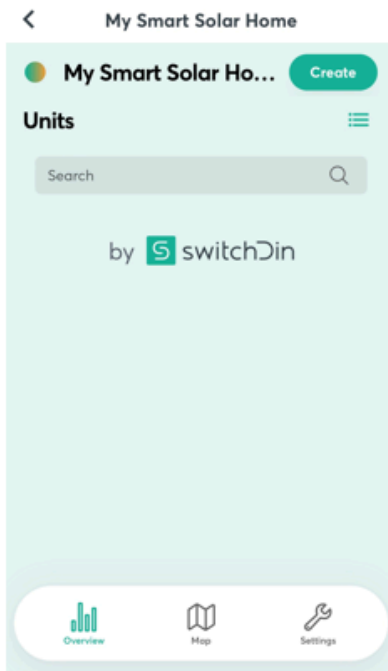
Tap on your portfolio to create your first unit. Tap on 'Create' in the top right corner.

In the Unit Name field, please use the following naming convention:
Street address or significant place name - Town - Inverter size (kW)

For example:

1. 12 Test Road - Onslow - 5kW
2. Broome Test School - Broome - 25kW

Then enter the address in the Street Address field and tap Create New Unit.

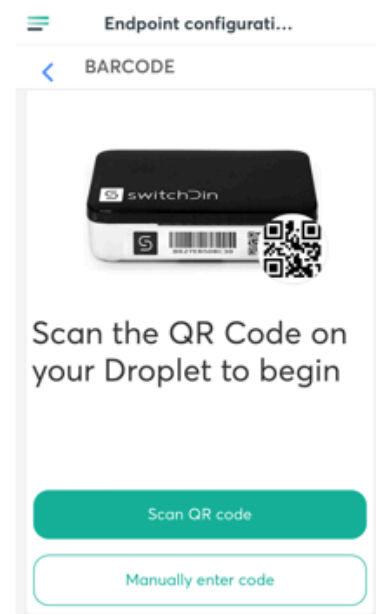
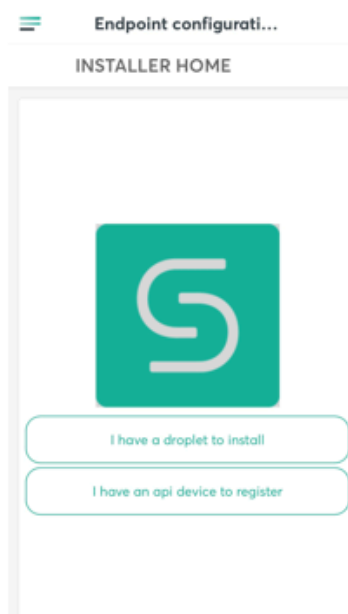
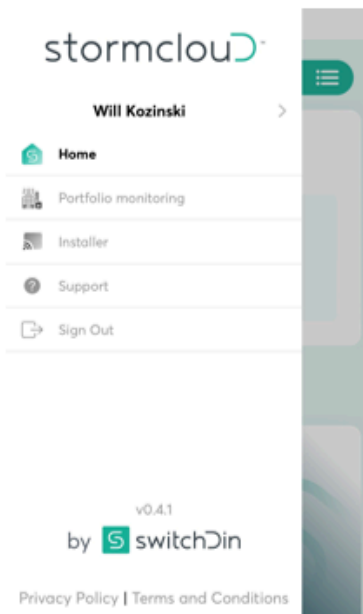


Add the SGD to the unit

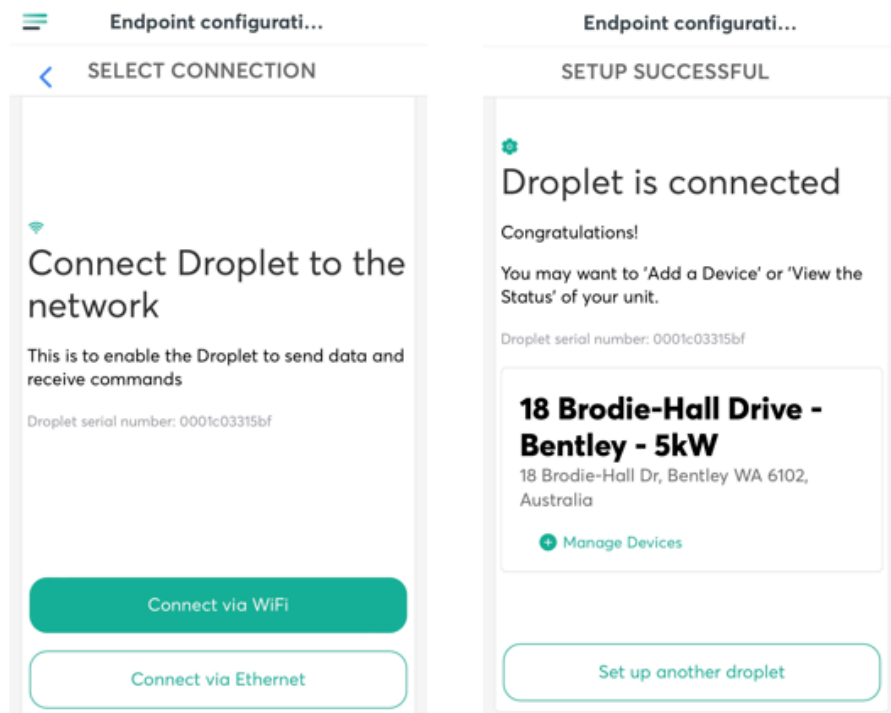
Start the Installer application from your mobile application's top left menu bar.

Select 'I have a droplet to install'

Scan the QR code on the SGD or manually enter the serial number (located below the bar code on the SGD). If you cannot reach the QR code or serial number on the SGD, it can also be found on the packaging it arrived in.

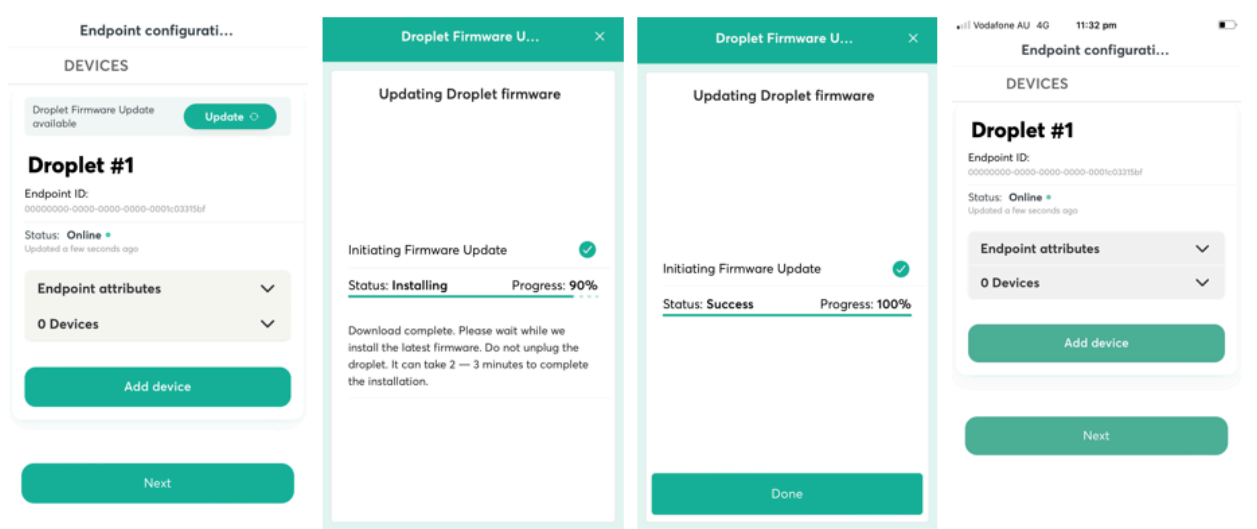


Then select 'Connect via Ethernet' as you should have plugged the USB/ETH adaptor into the local LAN and port USB3 of the SGD.



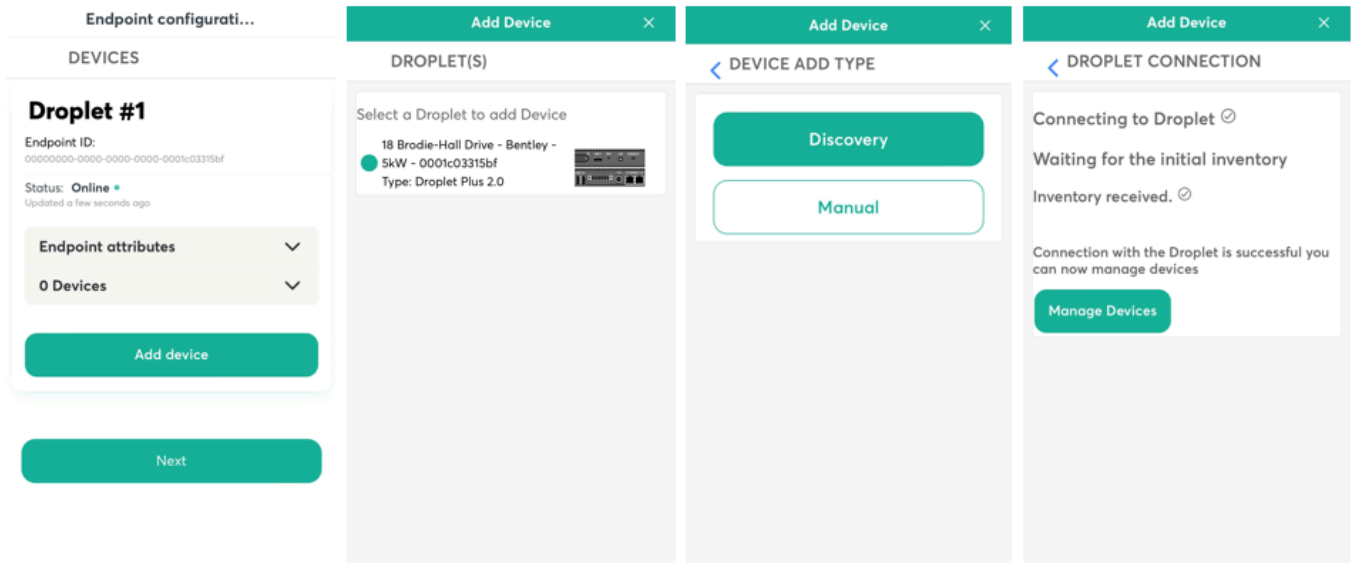
Update firmware

Select 'Manage Devices' and tap at the top of the screen to download the latest firmware update if available.



Manage Devices

Tap on Add device, tap on the droplet you want to select, then tap on 'Discovery'. Tap on 'Manage Devices'



Tap the settings button in front of the USB port you have used to connect the inverter to the SGD. Then select the model/type of inverter. Specify if you have a grid or load meter.

Optional: If you have connected a smart meter, you will configure it from selecting the other USB port you have used.



Add the Horizon Power Controller

Now that a device has been added to the SGD, you will be able to tap on 'Add Controller'. Select 'Horizon Power Controller' from the drop-down menu then 'Create'.

