



NBN[®] FIXED WIRELESS TROUBLESHOOTING GUIDE

Learn how to optimise the performance of your nbn Fixed Wireless service with this interactive tool.

This downloadable guide is designed to help you troubleshoot connection issues with your nbn Fixed Wireless service.

Created to be saved and used if problems occur, this handy reference guide explains issues you may experience and outlines the steps you can take to improve your connection.

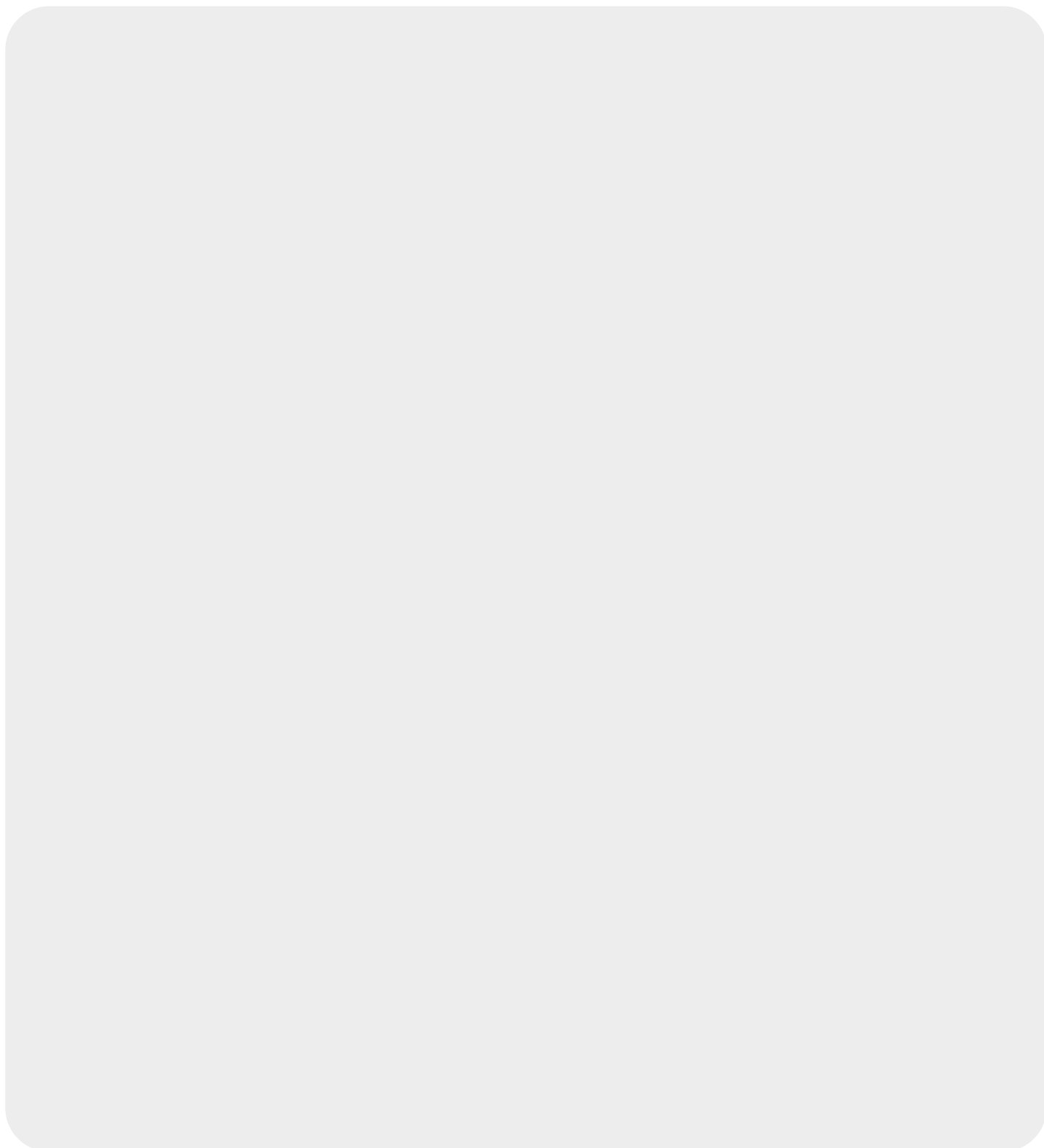
Start 

This is general advice only. For any urgent issues please contact your internet provider or IT support.

nbn would like to acknowledge the Traditional Custodians of the land, sea and skies and pay our respects to the Elders, both past, present and future.

Are you experiencing, or have you experienced, any of the following issues when trying to use your Fixed Wireless service?

Select an issue from the checklist below.





I CAN'T CONNECT

Common causes

- Wi-Fi is not enabled on the device, and/or the Wi-Fi password has not been entered correctly.
- Some appliances such as microwaves and fishtanks can interfere with in home Wi-Fi signals, so try moving your router a little further away to see if the signal improves.
- Out of date firmware on your router.
- Are you on the right plan for your needs, does it support the number of connected devices you use?
- An outage or network issue related to a weather event or other external factors (e.g. damage to equipment by animals).
- Your [nbn[®] connection box](#) (NTD) or other equipment is experiencing a fault or installation issue.
- Missing equipment - make sure you have all the [necessary nbn supplied equipment](#) including power cables, nbn connection box, router, Fixed Wireless antenna plus any equipment provided by your phone and internet service provider or yourself. If you are missing any of this equipment, contact your provider.
- Loss of power.
- Sometimes a service may be suspended due to a billing issue with your internet provider.
- If this is a new connection, your service may not be activated yet; or if you have recently changed plans or provider the update may still be processing in the system.

Try these troubleshooting tips

1 Check your nbn connection box indicator light

- Check the [indicator lights](#) on your nbn[®] connection box (also called the nbn network termination device or NTD).
- Check the **Outdoor Unit** Indicator light. It should show a green light.
Note - if your outdoor unit is more than 2m off the ground, please contact your internet provider for assistance.
- Check the **'STATUS' LED** Indicator light. It should be green.
- Watch the indicators for approximately 60 seconds to ensure they are not changing/resetting.
- If the above lights are not green, contact your phone and internet provider. nbn Fixed Wireless providers can be contacted by phone, email or online (provided you have a back up connection).

2 Perform a full power cycle routine

- This will force the nbn connection box to refresh its current settings which can remedy some basic problems.
- It is important to turn the devices off and on again, in the following order.
 - Turn off all devices.
 - Wait 2-3 minutes.
 - Turn on the devices in the following order.
 - 1. The nbn connection box.**
Wait until the indicator lights turn back on. The power and status indicator lights should be green.
 - 2. Your router.**
Wait until all the lights have come back on.
 - 3. Your device – e.g. computer, tablet or phone.**
Test again – are you able to access the internet now?

3 Check for any network outages

- If you are still experiencing connection issues after performing a 'power cycle' on your nbn connection box (see step 2), you may wish to check for a network outage.
- Be sure to check for outages on both your internet provider's network as well as the nbn [Network Outage Page](#).
- **Tip:** Save your internet provider's phone number so you are able to contact them in the event of an outage.
- nbn Fixed Wireless providers can be contacted by phone, email or online (provided you have a back up connection).

4 Check cables

- Network cables may become faulty over time. You can try plugging in a new network cable from the router to the [nbn connection box](#) to see if this restores your connection.
- Check that the cable is plugged into UNI-D 1 of the [nbn connection box](#) and the light is green unless instructed otherwise by your internet provider.
- Check all the cables are installed correctly including the ethernet cable from the router to your computer or device. You should hear a solid 'click' sound when the cable is connected properly.
- Visually check cables for damage such as cuts, frayed plastic shielding, exposed wires, sharp bends or kinks. Any cables with this type of damage should be replaced.
- Check the connection between your outdoor antenna and the [nbn connection box](#) by looking at the wall plate.
- If you have a [non-standard fixed wireless installation](#), check if there is any damage to your ground mount pole or cable trenching.
- If you have a [solar mount solution](#), check your power supply, point to point Wi-Fi link and solar panel battery status.
- If you find the power cable to your [nbn connection box](#) is damaged, you should report it to your internet provider immediately. Never use damaged power cables.

Reminder: In the event of a power loss at your premises, restoring the power with an alternative power option will usually allow you to reconnect to the nbn Fixed Wireless service. However, if one of the nbn Fixed Wireless towers is also experiencing a power loss, there may be further delays in reconnecting your service. Have a discussion with your current internet provider about your existing landline services. If you have an existing landline phone line it is important to consider keeping it in service for emergency communications, especially if you don't have good mobile phone coverage at your home or business.

5 Check the weather and other external factors

- If you are experiencing severe weather at your location or nbn network incidents, this can impact your nbn Fixed Wireless connection.
- Without climbing on the roof, see if you can spot any antenna damage from wind, fallen branches, birds or rodents.
- If you can see damage or have experienced an extreme weather event, you will need to contact your internet provider. Please do not attempt to repair the equipment yourself.
- External factors such as local vegetation, tree density, or even new larger buildings constructed recently, can prevent a sufficiently strong signal being achieved.
- If there have been changes since your nbn Fixed Wireless service was installed and you believe something may now be obstructing the line of sight to your nbn Fixed Wireless tower, contact your internet provider.
- Certain weather events, particularly in the summer seasons can cause a degradation in cell performance. nbn is continuing to monitor these events and uses mitigation techniques to reduce the impact of the interference.
- Contact your internet provider if you believe your service has been affected.

6 Check your devices

- Can you access the internet with another device, phone, tablet or laptop using the same connection?
- If you can, you may need to update the Wi-Fi device drivers, or the Wi-Fi adapter may need to be uninstalled and reinstalled on your device that cannot access the internet. You may need to contact your local computer specialist for help with device driver updates.

7 New connections and plan changes

- New connections may take some time to activate after they are installed. If you have a new plan – or have made changes to your existing service and the activation is taking longer than expected, please contact your internet provider.
- If you are missing a power cord, contact your internet provider to organise a new one.

8 Plug directly into the nbn connection box

- **Note:** If your provider requires you to use a username and password before you connect to the internet, log in using those details before following the below process. If you are unsure of how to do this, or are struggling to get access, contact your service provider directly.
- If your device has an Ethernet port, you can plug it directly into the [nbn connection box](#) using an Ethernet cable rather than a router. To do this, you can unplug the router from the nbn connection box and use that cable to plug in to your device.
- Repeat a full power cycle routine (see step 2). If this fixes your problem, the router may be causing your problems.
- If your router was provided by your internet provider, you will need to contact them, otherwise you will need to contact the manufacturer of the router directly for support.
- If this is a new connection, your router may not be compatible, speak to your provider.
- If you do have another router you can use, try connecting it and repeating the steps above.

Tips

If you are having power issues you may want to investigate an alternate power source such as a UPS or generator.

You may also wish to use a surge power protection device as an added precaution to protect your own equipment and nbn's.

If you have completed these steps and are still experiencing issues, please speak with your internet provider.

We recommend you have the following information handy before contacting your internet provider.

- Check your latest bill/statement to find out who your internet provider is and locate your account number.
- The address that is experiencing the issue (including property name, street number, street name, suburb or town).
- Your nbn connection box ID number which is located on top of the connection box next to the nbn logo.
- The nbn connection box light status. Watch the indicators for approximately 60 seconds to ensure they are not changing/resetting. Note down each colour and state (steady or blinking) for each LED Indicator.
- If you believe there may be damage to the nbn outdoor antenna, take a photo to send to your provider for their assessment.

Make sure you receive a support ticket or fault number and make a note of this number and the date.



I can't access some websites/platforms

Common causes

- The website address wasn't entered correctly, or scripting was added to a link.
- The website isn't working, or could be experiencing high traffic from multiple users.
- Your current web browser is not compatible and needs to be updated.
- Your internet provider or security software, such as antivirus or firewall, may be blocking the site.
- A network outage or similar issue.
- There's an issue with the platform you are trying to access.

Try these troubleshooting tips

1 Check your nbn® connection box indicator light

[Click here](#) to see the steps.

2 Try a different web browser or device

- Try using a different web browser on your same device to access the website (e.g. Google Chrome, Firefox or Microsoft Edge).
- Sometimes browsers are congested with spare files called 'cookies' or older copies of a webpage, located in your cache. Try clearing cookies or your cache to see if this helps.
- Try accessing the website from a different device - phone, tablet or laptop.

3 Perform a full power cycle routine

[Click here](#) to see the steps.

4 Plug directly into the nbn connection box

[Click here](#) to see the steps.

Reminder: In the event of a power loss at your premises, restoring the power with an alternative power option will usually allow you to reconnect to the nbn Fixed Wireless service. However, if one of the nbn Fixed Wireless towers is also experiencing a power loss, there may be further delays in reconnecting your service. Have a discussion with your current internet provider about your existing landline services. If you have an existing landline phone line it is important to consider keeping it in service for emergency communications, especially if you don't have good mobile phone coverage at your home or business.

5 Check that your computer doesn't have any issues

- Try rebooting your computer.
- Check for spyware, viruses, and malware. These are easily downloaded and installed, without your knowledge, while you're on the internet.
- There are various free and subscription-based utilities available that can help detect, eradicate and prevent these programs from being downloaded and installed.
- If you can now load the website, then you may have something wrong with your antivirus software.

6 Check your devices

- Can you access the internet from another device, phone, tablet or laptop using the same connection?
- If you can, you may need to update the Wi-Fi device drivers or the Wi-Fi adapter may need to be uninstalled and reinstalled, on your device that cannot access the internet. You may need to contact your local computer specialist for help with device driver updates.

Tips

- Be sure to check for outages on both your internet provider's network as well as the nbn [Network Outage Page](#).
- nbn Fixed Wireless providers can be contacted by phone, email or online (provided you have a back up connection).
- Do you know anyone else who uses the website or platform? Ask them if they are also experiencing issues.

If you have completed these steps and are still experiencing issues, please speak with your internet provider.

We recommend you have the following information ready before contacting your internet provider.

- Check your latest bill/statement to find out who your internet provider is and locate your account number.
- The address that is experiencing the issue (including property name, street number, street name, suburb or town).
- Your nbn connection box ID number which is located on top of the connection box next to the nbn logo.
- nbn connection box light status. Watch the indicators for approximately 60 seconds to ensure they are not changing/resetting. Note down each colour and state (steady or blinking) for each LED Indicator.
- Details of any troubleshooting you have already conducted.
- Is there a particular time of day that the issue occurs?
- Are you experiencing any other issues, such as slow speeds or dropouts?
- How many people are using the internet at the same time?
- Are you using a Virtual Private Network (VPN)?
- The platform or website you are accessing that is experiencing issues.

Some questions you can ask your internet provider.

- Can I have a support ticket or fault number for this request? (Be sure to make a note of the number and date of your enquiry).
- Have you (the internet provider) contacted nbn about this issue?
- Are others experiencing the same issue?



MY SPEED IS SLOW

Common causes

- Use of a Virtual Private Network (VPN).
- The devices you are using to connect to the internet.
- Distance between the router and your device - try placing the router in a central, elevated location.
- External factors such as severe weather.
- Viruses/Malware on your devices.
- Your device is not connected to the correct Wi-Fi network.
- [nbn connection box](#) or other equipment faults or installation issues.

Try these troubleshooting tips

1 Perform a full power cycle routine

[Click here](#) to see the steps.

2 Are you using a Virtual Private Network (VPN)?

Using a VPN can slow your internet speeds. You can test this by turning off your VPN and conducting a speed test.

3 Do a speed test

If you are also experiencing slow speeds with dropouts, you can perform an easy online test.

1. If your device has an Ethernet port, connect your device to your [nbn connection box](#) using an Ethernet cable.
2. You can check your speed through your internet providers dashboard or by using an online speed test tool such as www.speedtest.net.
3. When you complete the speed test, make a note of your download and upload speed results. The easiest way to do this is by taking a screenshot of the results and saving it to a folder with the date and time of the speed test recorded.
4. Repeat steps 1 – 3 at different times of the day (for example: morning, afternoon and evening). If you notice that your speed is affected more at a particular time of the day make a note for your internet provider.
5. If you notice a poor result at any time of the day contact your internet provider for assistance. If you are using more than one device, it is helpful to do a speed test on all of your devices (for example: Laptop, Tablet and Mobile Phone). If possible, ensure they are connected to the nbn connection box, using an Ethernet cable.

* Keep in mind running a speed test does use data.

4 Check your devices

- Can you access the internet with another device, phone, tablet or laptop using the same connection?
- If you can, you may need to update the Wi-Fi device drivers, or the Wi-Fi adapter may need to be uninstalled and reinstalled on your device that cannot access the internet. You may need to contact your local computer specialist for help with device driver updates.

5 Check that your computer doesn't have any issues

- Try rebooting your computer.
- If you can now load the website, then you may have something wrong with your antivirus software (try disabling the web shield in your antivirus software to see if there is an improvement).
- Check for spyware, viruses, and malware. These are easily downloaded and installed, without your knowledge, while you're on the internet.
- There are various free and subscription-based utilities available that can help detect, eradicate and prevent these programs from being downloaded and installed.

6 Check the weather and other external factors

[Click here](#) to read more.

7 Plug directly into the nbn connection box

[Click here](#) to see the steps.

Tips

- nbn Fixed Wireless providers can be contacted by phone, email or online (provided you have a back up connection).
- At nbn, we have a [range of wholesale speeds designed to suit different households' needs](#), whether you have multiple people streaming content at once, or you simply like using the internet to email friends or send photos.
- It's important to learn about the actual speeds you can expect to experience once you make the switch to an nbn powered plan, particularly during peak usage times. To discover more about the specific speed tiers available in your location, speak to your preferred internet provider or visit their website for further information.
- Please note, not all speed tiers are available everywhere. The availability of speed tiers depends on the type of technology you are connected to and the speed tiers your internet provider offers.
- Head to the nbn website (nbn.com.au) and enter your address in the search bar to learn more about speeds available at your premises today and in the future.

Reminder: In the event of a power loss at your premises, restoring the power with an alternative power option will usually allow you to reconnect to the nbn Fixed Wireless service. However, if one of the nbn Fixed Wireless towers is also experiencing a power loss, there may be further delays in reconnecting your service. Have a discussion with your current internet provider about your existing landline services. If you have an existing landline phone line it is important to consider keeping it in service for emergency communications, especially if you don't have good mobile phone coverage at your home or business.

If you have completed these steps and are still experiencing issues, please speak with your internet provider.

We recommend you have the following information ready before contacting your internet provider.

- Check your latest bill/statement to find out who your internet provider is and locate your account number.
- The address that is experiencing the issue (including property name, street number, street name, suburb or town).
- Your nbn connection box ID number which is located on top of the connection box next to the nbn logo.
- The nbn connection box light status. Watch the indicators for approximately 60 seconds to ensure they are not changing/resetting. Note down each colour and state (steady or blinking) for each LED Indicator.
- Any troubleshooting that you have already conducted.
- Is there a particular time of day that the issue occurs? Include previous speed test results from various times throughout the day.
- Does this issue occur during or after certain weather events?
- Are you experiencing any other issues, such as dropouts?
- How many people are using the internet at the same time?
- Are you using a Virtual Private Network (VPN)?

Make sure you receive a support ticket or fault number and make a note of this number and the date.

Reminder: In the event of a power loss at your premises, restoring the power with an alternative power option will usually allow you to reconnect to the nbn Fixed Wireless service. However, if one of the nbn Fixed Wireless towers is also experiencing a power loss, there may be further delays in reconnecting your service. Have a discussion with your current internet provider about your existing landline services. If you have an existing landline phone line it is important to consider keeping it in service for emergency communications, especially if you don't have good mobile phone coverage at your home or business.



MY CONNECTION DROPS OUT

Common causes

- An outage or network issue.
- A weather event or other external factors (e.g. damage to equipment by animals).
- Your nbn® connection box, or other equipment is experiencing a fault or installation issue.

Try these troubleshooting tips

Check your nbn® connection box indicator lights

- Check the Indicator lights on your [nbn connection box](#).
- Check the **Outdoor Unit** Indicator light. It should show a green light.
- Check the **'STATUS' LED** Indicator light. It should be green.
- Watch the indicators for approximately 60 seconds to ensure they are not changing/resetting.
- If the above lights are not green like they are supposed to be, contact your internet provider.

1 Perform a full power cycle routine

[Click here](#) to see the steps.

2 Connect your Wi-Fi device or relocate your device closer to the access point

Keep your Wi-Fi/router:

- In a raised, central location.
- Clear of thick walls or furniture.
- Away from other electronics (e.g. microwaves).
- Consider whether your router has adequate Wi-Fi coverage for the size of your dwelling.

3 Optimise your Wi-Fi

You may want to re-assess your Wi-Fi setup and check your router's firmware is currently up-to-date and still able to perform updates. Consider upgrading or replacing older devices.

You may need a Wi-Fi extender or mesh device to improve the coverage at your location – especially if the problem is solved when you are closer to your Wi-Fi router.

You can further help optimise your connectivity by reading our [in home optimisation tips](#).

4 Check your devices

- Can you access the internet with another device, phone, tablet or laptop using the same connection?
- If you can, you may need to update the Wi-Fi device drivers or the Wi-Fi adapter may need to be uninstalled and reinstalled, on your device that cannot access the internet. You may need to contact your local computer specialist for help with device driver updates.

5 Check cables

Network cables may become faulty or loose over time, [click here](#) to learn more about the steps you can take to rectify any issues.

6 Check the weather and other external factors

What's the weather like? Are you experiencing any severe weather at your location? [Click here](#) to learn more about the steps you can take to troubleshoot possible causes.

7 Plug directly into the nbn connection box

[Click here](#) to see the steps.

Tips

- nbn Fixed Wireless providers can be contacted by phone, email or online (provided you have a back up connection).
- Connect to the right Wi-Fi band. There are typically two Wi-Fi bands on most routers, each with their own pros and cons. For more information about Wi-Fi bands, check our [in home optimisation tips](#).
- Consider using an app that tracks your internet quality over time on your device - for example: Ping Plotter or Sam Knows. You can use these apps to get information about when dropouts are occurring to pass on to your internet provider.

Reminder: In the event of a power loss at your premises, restoring the power with an alternative power option will usually allow you to reconnect to the nbn Fixed Wireless service. However, if one of the nbn Fixed Wireless towers is also experiencing a power loss, there may be further delays in reconnecting your service. Have a discussion with your current internet provider about your existing landline services. If you have an existing landline phone line it is important to consider keeping it in service for emergency communications, especially if you don't have good mobile phone coverage at your home or business.

If you have completed these steps and are still experiencing issues, please speak with your internet provider.

We recommend you have the following information ready before contacting your internet provider.

- Check your latest bill/statement to find out who your internet provider is and locate your account number.
- The address that is experiencing the issue (including property name, street number, street name, suburb or town).
- Your nbn connection box ID number which is located on top of the connection box next to the nbn logo.
- Watch the indicators on your nbn connection box for approximately 60 seconds to ensure they are not changing/ resetting. Note down each colour and state (steady or blinking) for each LED Indicator.
- Any troubleshooting that you have already conducted.
- Is there a particular time of day that the issue occurs? Take a record of the number of dropouts and when they occur (time and day).
- Are you experiencing any other issues, such as slow speeds?
- How many people are using the internet at the same time?
- Are you using a Virtual Private Network (VPN)?
- Do you have any new electronic equipment or appliances running in your home that may interfere with your Wi-Fi signal?
- Does this issue occur during or after certain weather events?
- If you believe you may have damage to your antenna it may help to take a photo of the area to share with your internet provider.

Some questions you can ask your internet provider.

- Can I have a support ticket or fault number for this request? (Be sure to make a note of the number and date of your enquiry).
- Have you (the internet provider) contacted nbn about this issue?
- Are others experiencing the same issue?



MY CONNECTION BUFFERS

Common causes

- A network outage or similar issue.
- The devices you are using to connect to the internet may not be running at optimum levels.
- Too many users sharing the one connection, meaning you may require a higher speed plan to support devices and usage.
- Your streaming service provider is experiencing issues.
- A weather event or other external factors (e.g. damage to equipment by animals).
- The set-up of some applications or software such as Virtual Private Network (VPN).
- Your [nbn connection box](#) (also called the nbn network termination device or NTD), or other equipment is experiencing a fault or installation issue.

Try these troubleshooting tips

1 Your streaming service

- Check the streaming services website or social media to see if they have reported any current streaming or technical issues.
- Try streaming from a different device on an alternative network. This will determine if the issue is specific to your internet provider.
- Try a different streaming service (e.g. Disney+, Netflix, Stan, ABC iview etc) to determine if the technical error is related to the streaming platform or your set up.
- Turn off video autoplay settings for websites with embedded streaming content.

2 Do a speed test

You can perform an easy online test by following these steps [here](#).

3 Connect your Wi-Fi device or relocate your device closer to the access point

Keep your Wi-Fi/router:

- In a raised, central location.
- Clear of thick walls or furniture.
- Away from other electronics (e.g. microwaves).

Consider whether your router has adequate Wi-Fi coverage for the size of your dwelling. For more information, [check out our in home optimisation tips](#).

4 Perform a full power cycle routine

[Click here](#) to read more.

5 Check your devices

- Can you access the internet with another device, phone, tablet or laptop using the same connection?
- If you can, you may need to update the Wi-Fi device drivers or the Wi-Fi adapter may need to be uninstalled and reinstalled, on your device that cannot access the internet. You may need to contact your local computer specialist for help with device driver updates.

6 Check the weather and other external factors

What's the weather like? Are you experiencing any severe weather at your location? [Click here](#) to learn more about the steps you can take to troubleshoot possible causes.

Tips

- If you are experiencing low video quality on video streaming services, like Netflix and YouTube, you may want to change your settings from low definition to standard definition (SD) or high definition (HD) (1080p).
*Note that changing these settings will increase your data usage when using these apps.
- nbn Fixed Wireless providers can be contacted by phone, email or online (provided you have a back up connection).
- Make sure your streaming apps are up to date - you can check in the settings or updates section of your smartphone, smart TV or other devices.

Reminder: In the event of a power loss at your premises, restoring the power with an alternative power option will usually allow you to reconnect to the nbn Fixed Wireless service. However, if one of the nbn Fixed Wireless towers is also experiencing a power loss, there may be further delays in reconnecting your service. Have a discussion with your current internet provider about your existing landline services. If you have an existing landline phone line it is important to consider keeping it in service for emergency communications, especially if you don't have good mobile phone coverage at your home or business.

If you have completed these steps and are still experiencing issues, please speak with your internet provider.

We recommend you have the following information handy before contacting your internet provider.

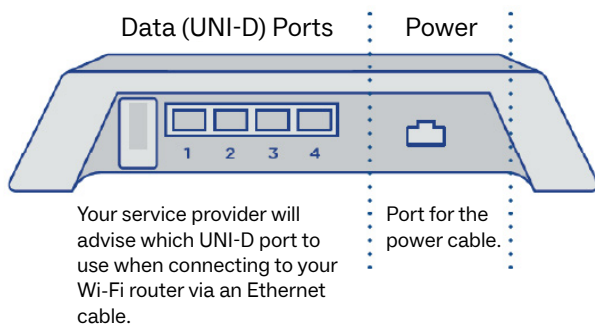
- Check your latest bill/statement to find out who your internet provider is and locate your account number.
- The address that is experiencing the issue (including property name, street number, street name, suburb or town).
- Your nbn connection box ID number which is located on top of the connection box next to the nbn logo.
- The nbn connection box light status. Watch the indicators for approximately 60 seconds to ensure they are not changing/ resetting. Note down each colour and state (steady or blinking) for each LED Indicator.
- Backup connections. Some internet providers will provide a 4G backup connection in the case of an nbn dropout. Check with your internet provider if you believe you may have been connected to a backup network.
- Any troubleshooting that you have already conducted.
- Is there a particular time of day that the issue occurs?
- Are you experiencing any other issues, such as slow speeds or dropouts?
- How many people are using the internet at the same time?
- Are you using a Virtual Private Network (VPN)?
- Does this issue occur during or after certain weather events?
- The details of the platforms/websites that are buffering.

Some questions you can ask your internet provider.

- Can I have a support ticket or fault number for this request? (Be sure to make a note of the number and date of your enquiry).
- Have you (the internet provider) contacted nbn about this issue?
- Are others experiencing the same issue?

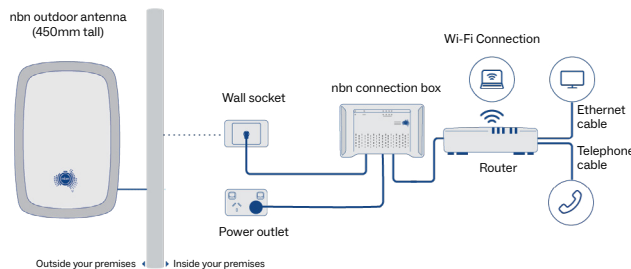
INFORMATION ON THE NBN® CONNECTION BOX.

nbn Fixed Wireless connections require an nbn connection box to be installed at the point where the cable from the nbn outdoor antenna enters the premises.



The nbn connection box is wall-mounted and has four Ethernet ports that can deliver internet data. It requires power to operate and can only be installed by an nbn approved technician.

Note: Your nbn connection box ID number is located on top of the box next to the nbn logo.



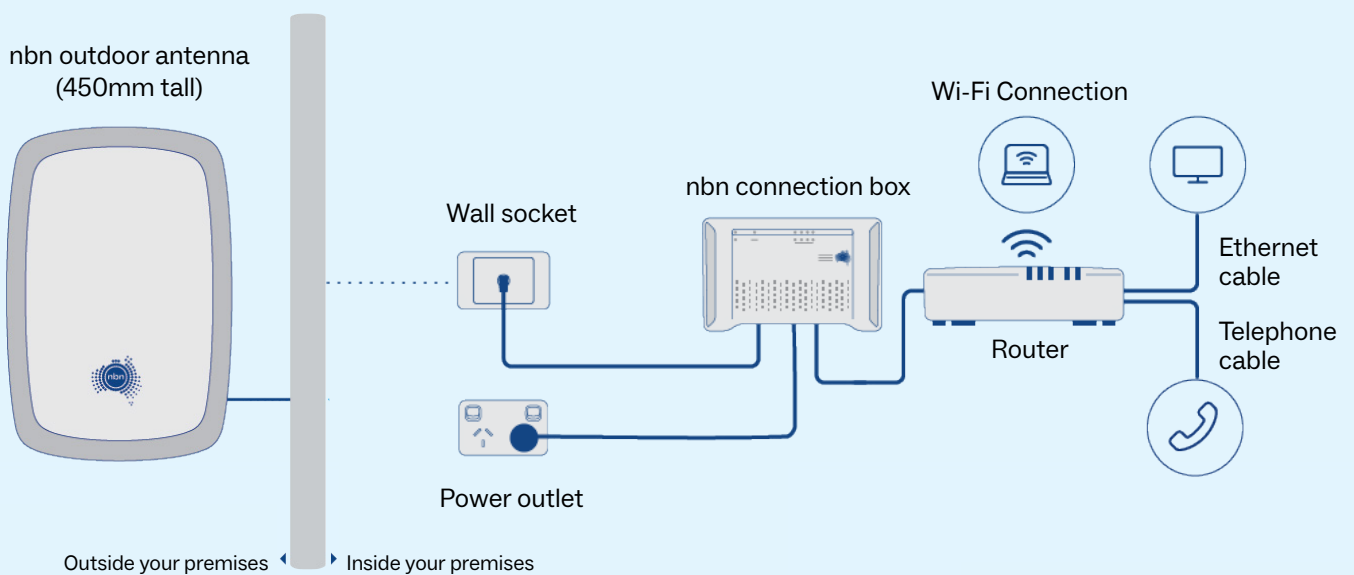
End users can connect their devices directly to the nbn connection box via an Ethernet cable. If they prefer to connect via Wi-Fi, they'll need to connect their own router, or one supplied by their Retail Service Provider, to the nbn connection box.

*If you move house, please ensure nbn equipment remains at your property.

NBN® FIXED WIRELESS CONNECTION BOX AND A TYPICAL OUTDOOR ANTENNA SET-UP

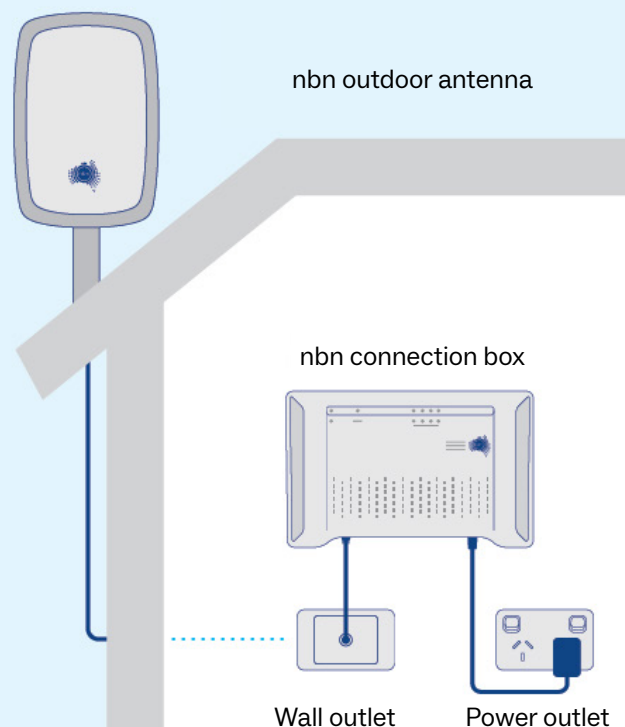
The nbn® Wireless Network Termination Device (WNTD) is made up of an outdoor unit (the nbn outdoor antenna) and an indoor unit (the nbn connection box).

End users can connect their devices directly to the nbn connection box via Ethernet cable. If they prefer to connect via Wi-Fi, they'll need to connect their own router, or one supplied by their phone and internet provider, to the nbn connection box.



The nbn outdoor antenna is attached to the outside of a premises, in a location that provides direct line of sight to an nbn Fixed Wireless tower. A cable is then used to connect the outdoor antenna to the nbn connection box inside.

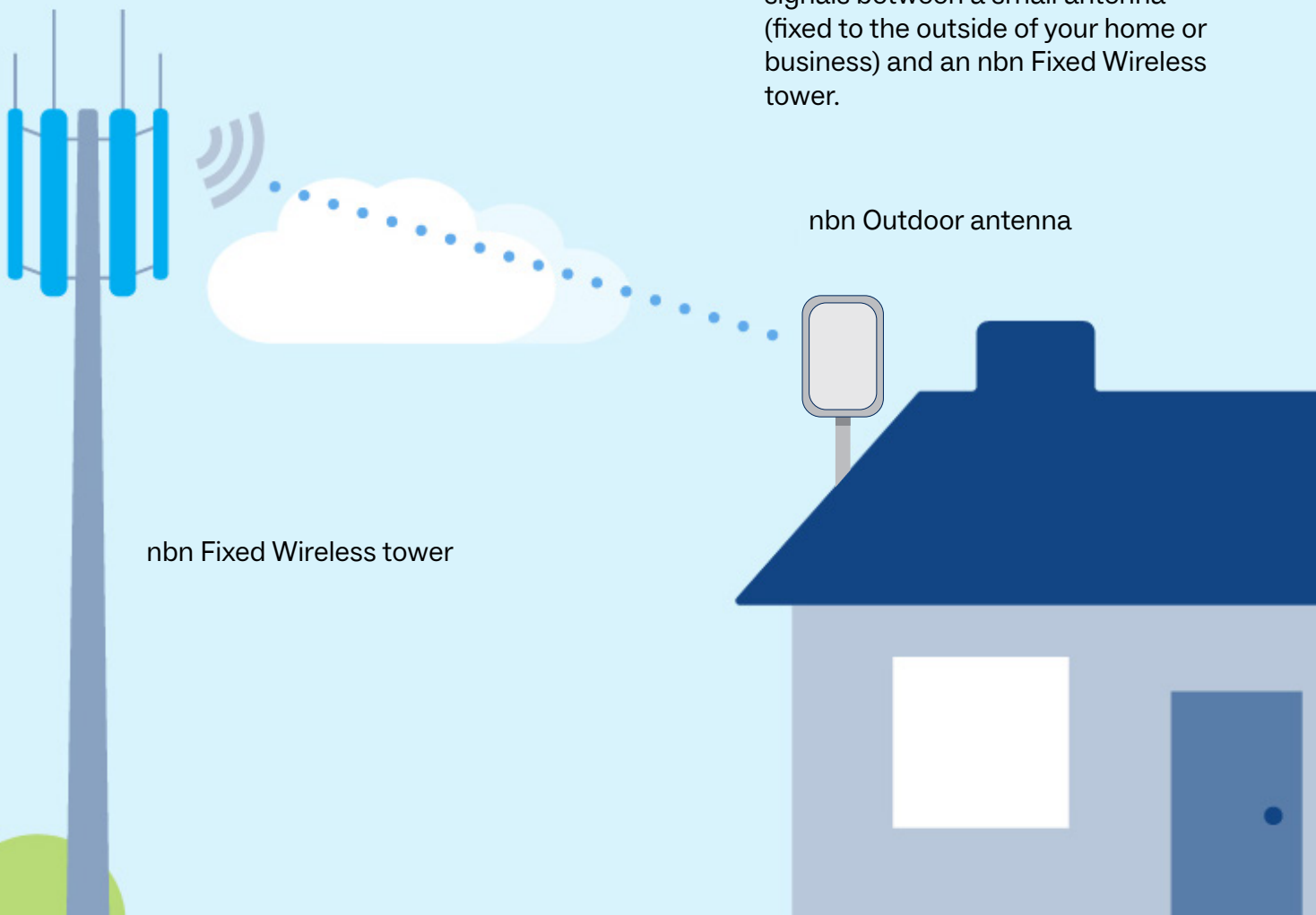
*If any of the above equipment is missing, please contact your nbn® Fixed Wireless internet provider.



NBN® FIXED WIRELESS TOWER AND ANTENNA SET UP

How does nbn® Fixed Wireless technology work?

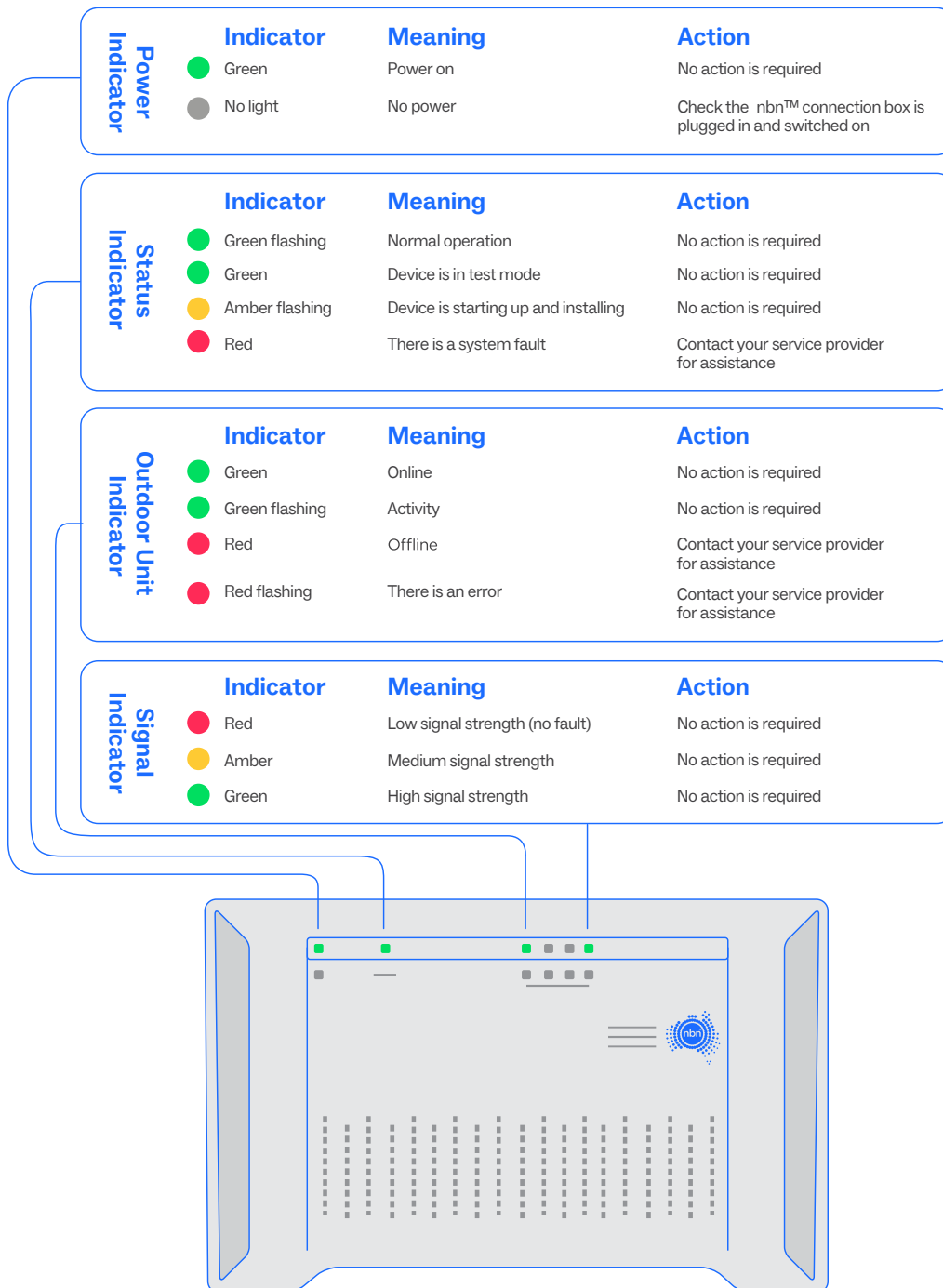
nbn Fixed Wireless technology is not a mobile service. It uses cellular technology to transmit LTE or 4G signals between a small antenna (fixed to the outside of your home or business) and an nbn Fixed Wireless tower.



External factors such as local vegetation, tree density, or even major building set-ups, can prevent a sufficiently strong signal from being achieved.

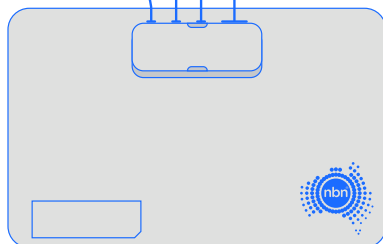
If there have been changes since your nbn Fixed Wireless service was installed and you believe something may now be obstructing the line of sight to your nbn Fixed Wireless tower, contact your internet provider.

NBN CONNECTION BOX INDICATOR LIGHTS (v1-v3)



NBN CONNECTION BOX INDICATOR LIGHTS v4

	Indicator	Meaning	Action
Power indicator	● Green	Power on	No action is required
	● No light	No power	Check the nbn connection box is plugged in and switched on
Status indicator	● Green flashing	Normal operation	No action is required
	● Green	Device is in test mode	No action is required
	● Amber flashing	Device is starting up & installing	No action is required
	● Red	There is a system fault	Contact your provider for assistance
	● No light	Operating in an unexpected state	Contact your provider for assistance
Outdoor unit indicator	● Green	Online	No action is required
	● Green flashing	Activity	No action is required
	● Red	Offline	Contact your provider for assistance
	● Red flashing	There is an error	Contact your provider for assistance
	● No light	Operating in an unexpected state	Contact your provider for assistance
Signal strength indicator	● Red	Low signal strength (no fault)	No action is required
	● Amber	Medium signal strength	No action is required
	● Green	High signal strength	No action is required



You can find LED indicator lights under the cover on the nbn connection box.

NBN® FIXED WIRELESS INSTALLATION TYPES

Types of Fixed Wireless installations include:



Standard installation

Standard installation of nbn Fixed Wireless equipment includes an antenna fitted to the roof by an nbn approved technician.

If you believe there is a fault with your nbn installed equipment please contact your provider.



Non-standard installation

A non-standard installation is used when an nbn approved technician is not able to achieve line of sight to the tower from your roof. In some cases, a ground mounted pole may be necessary to achieve a signal.

If you believe there is a fault with your nbn installed equipment please contact your provider.



Solar Mount Solution

A typical third-party Solar Mount Solution comprises of solar panels, an outdoor Wi-Fi point to point link, and a fixed concrete base with a mounted pole where the nbn outdoor antenna would be installed by an nbn approved installer after construction.

If you have a Solar Mount Solution and you believe there is a fault:

- Contact the company who built the solar structure to check if the Solar Mount Solution components (battery, solar panels, cooling fans installed inside the outdoor enclosure, point to point Wi-Fi link) are operating as designed.
- Contact your provider if there is a fault with your internet service or nbn equipment.

If you have a third-party Solar Mount Solution, please ensure you maintain and service the solar structure including the Wi-Fi point to point connection to the main premises.