

Frequently Asked Questions (FAQs)

CloudMesh

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What is the advantage of a CloudMesh Gateway over a more expensive 4x4 Wi-Fi Gateway?

A CloudMesh Gateway comes with Wi-Fi AutoPilot. It's an application that will dynamically drive the Wi-Fi radio to adapt to any Wi-Fi environment. Typically, other routers would only do this when they are powered on for the first time. While a more expensive 4x4 Wi-Fi gateway will show better throughput results in a lab, the CloudMesh Gateway will perform better in a busy, constantly changing Wi-Fi environment, typical to a modern household.

What is Wi-Fi AutoPilot?

CloudMesh™ Wi-Fi AutoPilot is an application that operates locally on the gateway, constantly scanning and analysing the Wi-Fi environment. If any detrimental changes are detected, the Wi-Fi AutoPilot will adjust the CPE Wi-Fi parameters. Any action taken is based on a patented and weighted algorithm ensuring that the internet connection experience is not compromised. The Wi-Fi AutoPilot is constantly synchronised with the Wi-Fi analytics cloud, using sophisticated machine learning techniques to detect and recognise historical patterns and then apply Wi-Fi changes, preventing future interference.

Wi-Fi AutoPilot Dynamic Optimization Features

The Wi-Fi AutoPilot uses number of features to determine the best course of action to take when attempting to optimize the radio environment for its AP groups and APs. Among these features are:

- Channel Optimization
- Power Optimization
- Neighbour Awareness
- RF Interference Detection/Mitigation

- AP Configuration – Analysis, Adjustment and Enforcement
- Fault/Event Detection/Mitigation
- Coverage Hole Detection/Mitigation
- Radio Band Steering
- SSID Steering

What gateway models support NS-01 CloudMesh Satellites?

Currently only the NF18MESH and NL1901MESH CloudMesh Gateway supports NS-01 Satellite devices.

What gateway models support NS-02 CloudMesh Satellites?

Currently only the NF20MESH CloudMesh Gateway supports NS-02 Satellite devices.

How do I pair my CloudMesh Satellite(s) with my CloudMesh gateway?

If these have not been paired by your ISP, the CloudMesh Satellite(s) can be paired with the CloudMesh gateway by pressing WPS on both the satellite and gateway within two (2) minutes of each other.

What are the Pairing Instructions?

- 1 Place the CloudMesh Satellite next to your CloudMesh Gateway.
- 2 Connect to power, switch **ON** and wait for both devices to power on.
- 3 If the CloudMesh Satellite **LED** light is still flashing blue after ten minutes, this confirms that you will need to pair it with the CloudMesh Gateway.
- 4 Ensure that the CloudMesh Gateway is connected to the Internet.
- 5 Press and release the **WPS** button on the rear of the CloudMesh Satellite.
- 6 The **LED** on the CloudMesh Satellite will flash purple to indicate that WPS pairing window has started and will last for two minutes.
- 7 Press and release the **5G WPS** button on the CloudMesh Gateway while CloudMesh Satellite LED is still flashing purple.
- 8 The pairing process can take up to ten minutes. It is normal for the CloudMesh Satellite **LED** to transition to flash blue to indicate that pairing is in progress.

- 9 When the pairing process is complete, CloudMesh Satellite's **LED** light will indicate signal strength, see the **LED** indicators section below.
- 10 Position the CloudMesh Satellite in a satisfactory location in your premises and begin using your new mesh.

How many CloudMesh Satellites (NS-01) can I use per CloudMesh Gateway (NF18MESH/NL19MESH)?

Up to two (2) CloudMesh Satellites can be supported per each CloudMesh gateway.

How many CloudMesh Satellites (NS-02) can I use per CloudMesh Gateway (NF20MESH)?

Up to three (3) CloudMesh Satellites can be supported per each CloudMesh gateway.

What topology can be used for CloudMesh Satellites when connecting to CloudMesh Gateway?

Star or Daisy Chain topologies are both supported. Once the gateway and satellites are paired, these devices will automatically apply the most appropriate topology for their environment.

Can I pair more than two CloudMesh Satellites(NS-01) with a CloudMesh Gateway(NF18MESH/NL19MESH)?

Multiple CloudMesh Satellites can be paired with a CloudMesh Gateway but only two (2) CloudMesh Satellites can be used at the same time.

Can I pair more than three CloudMesh Satellites(NS-02) with a CloudMesh Gateway(NF20MESH)?

Multiple CloudMesh Satellites can be paired with a CloudMesh Gateway but only three (3) CloudMesh Satellites can be used at the same time.

If I have more than one CloudMesh Satellite, does it matter which one I power on first?

Yes. When you have more than one CloudMesh Satellite connecting to the same CloudMesh Gateway, power on the satellite closest to the gateway first, and then power on the satellite furthest from gateway last.

When I pair a second CloudMesh Satellite to my CloudMesh Gateway using the WPS method, does it matter which CloudMesh Satellite is located further from the gateway than the other satellite?

No. The CloudMesh Gateway automatically pairs them regardless of location.

Will changes to the Wi-Fi password and/or Wi-Fi network name (SSID) disrupt service?

Yes, if you change your Wi-Fi password and/or your Wi-Fi network name (SSID) it will take up to seven minutes for the new settings to be propagated onto your mesh network. During this period your Wi-Fi services will be interrupted.

We recommend keeping the Wi-Fi password and Wi-Fi network name (SSID) same for both 2.4Ghz and 5Ghz band for optimum wireless roaming function.

What information is collected by my CloudMesh device?

A limited set of technical information is collected to improve your Wi-Fi experience. This includes:

- MAC/IP Address
- Serial Number/s
- WLAN Identifiers
- Model Numbers
- Device Health metrics
- Radio Spectrum parameters
- Network connection and Packet throughput statistics

No passwords, browsing information, application data or packet inspection details (beyond DHCP) are captured.

Miscellaneous

When does the Wi-Fi AutoPilot change the Wi-Fi channel or perform band steering?

The Wi-Fi AutoPilot will only change the Wi-Fi channel or perform band steering when the interfering Wi-Fi channel has heavy traffic and this is impacting on the CloudMesh devices' performance.

There are mechanisms put in place to make sure that the end-user experience is not impacted as much as possible during this change.

How can I connect non-wireless devices to my CloudMesh Satellite?

There are 2 yellow ports on the back of your CloudMesh Satellite(s) that can be used to connect non-wireless devices (such as desktop PC's and smart TV's) to your network.

Are Guest Wi-Fi networks supported?

No. Guest Wi-Fi SSIDs are not supported on CloudMesh Satellites.

However, guest Wi-Fi SSIDs can be set up on the CloudMesh Gateway, but communications via the guest Wi-Fi SSID will not be broadcast via the CloudMesh Satellites.

How do I update my CloudMesh Satellite's firmware?

Unless instructed, do not update the CloudMesh Satellite firmware yourself. Your ISP can update the CloudMesh Satellite firmware remotely.