AWAIR

Building IAQ Score
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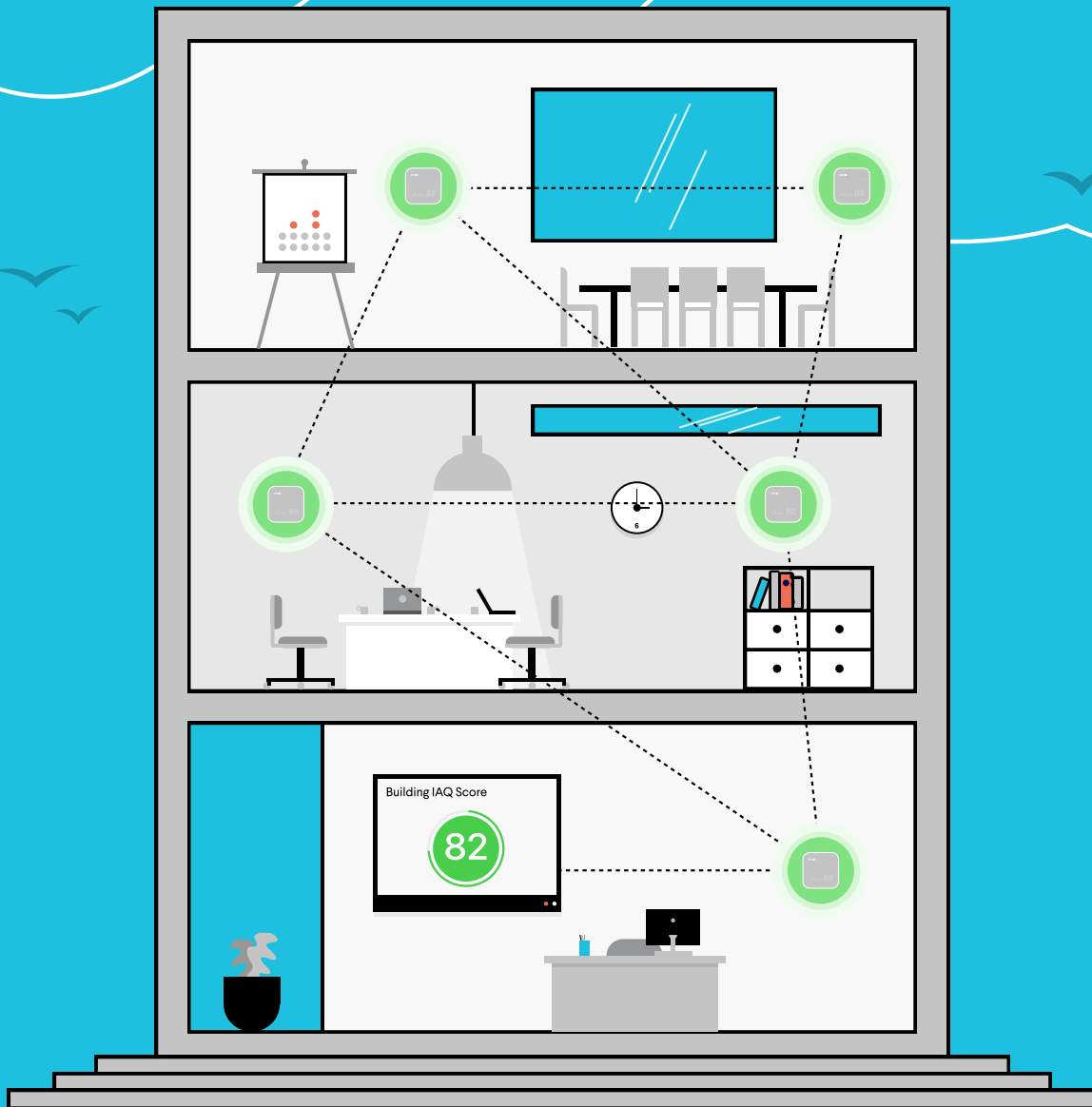
Say hello to AwairNet

A simple, secure mesh network for your smart building

AwairNet's mesh network allows your Omnis to communicate with each other to optimize coverage. As the network hops data between devices, if one device fails, data is simply rerouted to another node in range. This makes your network extremely secure and reliable, whilst also extending reach.

The best place to start

We're sure you're excited to dive in – we are! The first thing we recommend is reading this document. It will provide you with an overview of AwairNet mesh network.

Next, we will work together to:

1. Set up your Awair Dashboard
Review the Getting Started with Omni - Setting Up Your Devices, Dashboard & Data document.

2. Set up with the Awair Business App
Download the app from the **App Store** or the **Google Play Store**.

3. Set up AwairNet & install your Omnis
Review the installation guide for the Mesh Mount Kit for AwairNet.

4. Add your Omnis to your Awair Dashboard

A helping hand

We're here to help you every step of the way. Contact Sasha Stonard, AwairNet Pilot Team Lead at **sasha@getawair.com** if you have any questions or concerns.

It's all about the mesh

With AwairNet's mesh system, Omni indoor air quality sensors talk seamlessly to each other. If a single device fails, the network intelligently reroutes data to other devices in the network. No loss of network. No loss of data.
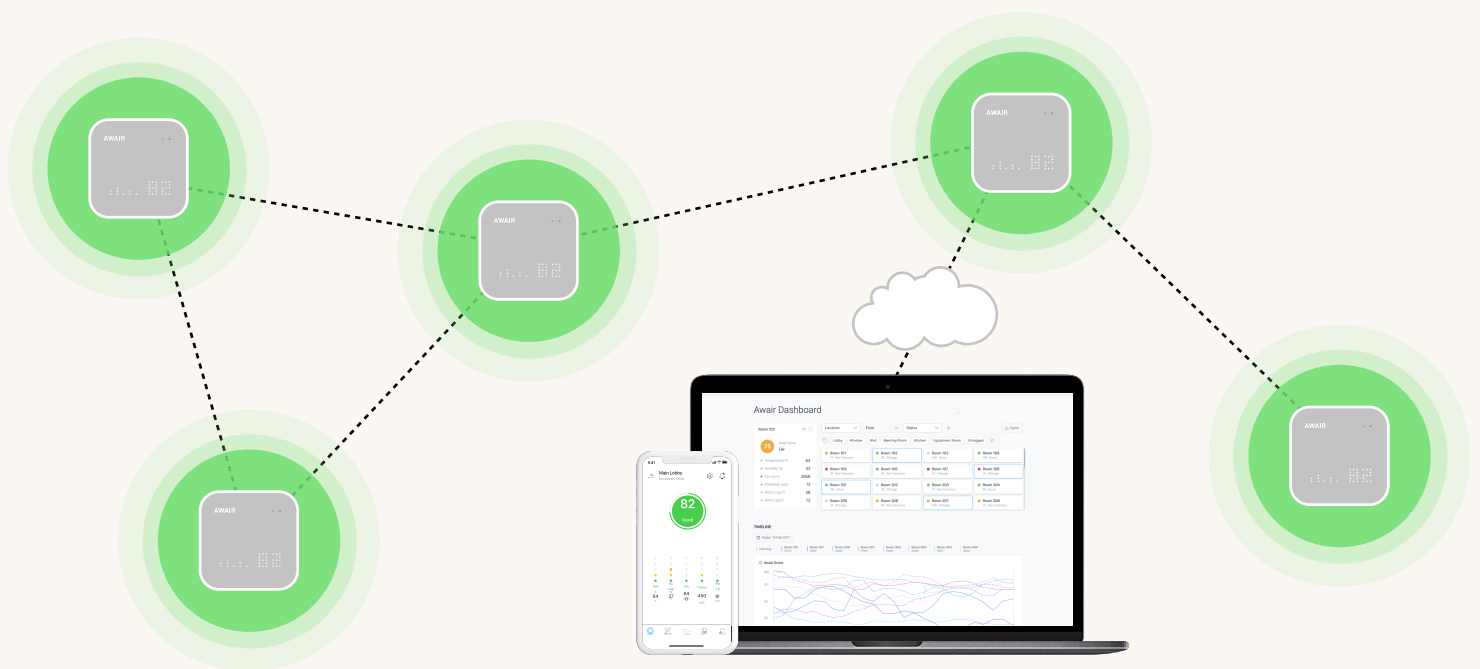
Corrects itself

If one device drops off, an alternative path is used for the data. The network becomes more robust with every Omni added. So you get the reliability of a hard-wired solution without the time, effort, and expense.

Powerful range

Powerful enough for any space. The mesh system builds a consistent, robust network flexible enough for any layout. Whether you have a single office or an entire floor, AwairNet's got you covered.

Gets better over time

You can grow your network by adding more Omni devices as needed. Over-the-air updates bring new features and improvements, so your network keeps getting better.
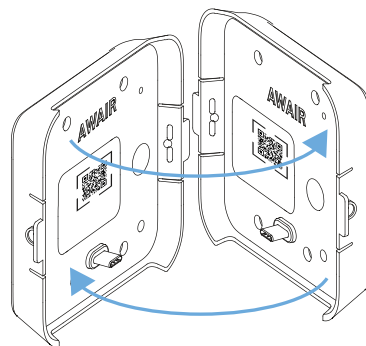
Setup is simple with tap to onboard

A simple and secure tap is all it takes to add devices to the network. Tap to onboard – supported by NFC technology – is easy, immediate, and convenient.
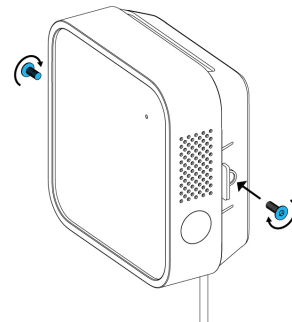
How to tap onboard
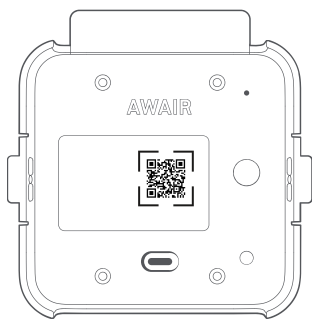
Set

Set any device to the status of Leader. The leader does the heavy lifting: creating and managing the mesh network.

Tap

Just bring your device face-to-face with the leader. No lengthy hand shaking, or data entry required.

Go

Onboarding is complete within seconds. Once onboarding is confirmed, simply plug and place your devices.

Smart security, too

Keep your network secure

Access to the network is restricted to devices that are credentialed – using NFC technology – during tap to onboard. This means that outside observers cannot decode any mesh transmissions.

Keep your data private

End-to-end encryption ensures only the source device and the Leader can read the data that is sent, and nobody else, not even the other devices on the network. All this happens automatically; no need to turn on special settings.

FAQ

1. What is a mesh network?

AwairNet creates a wireless mesh network.

A self-forming type of network, AwairNet automatically extends itself as needed. Each device in the network acts as a small transmitter – something like a wireless router – to help data move securely and reliably. Adding devices to the network boosts both range and stability.

If a device fails, the network intelligently corrects itself by rerouting the data to a different mesh device in range.

There are two roles in the network: a Leader and a Node.

The **Leader** creates and manages the mesh network. It relays information between your Omni sensors, the mesh network, and your network. It is also responsible for adding devices to the mesh network. It generates the network credentials and make them available to Nodes during onboarding.

Any Mesh Mount can be promoted to the Leader.

Nodes are all remaining devices that are part of the network. They can pass data to the Leader but cannot view the data nor send it out of the mesh network.

Tap to onboard is the process of onboarding devices using NFC technology that shares network credentials from the Leader to the Node.

2. Why use a mesh network?

Hard wiring is expensive. Wi-fi can be unreliable and range can be problematic. As devices in a mesh network help each other to communicate, mesh networks can extend themselves to cover very large areas. AwairNet can easily cover an entire floor of a building or even multiple floors.

3. What mesh protocols do you use?

AwairNet uses sub-1g radio frequencies in the same spectrum as LoRa, to achieve line of sight ranges of up to 1 mile. It is expected that range will decrease in office buildings, depending on the layout, and, further still, in spaces with an abundance of concrete.