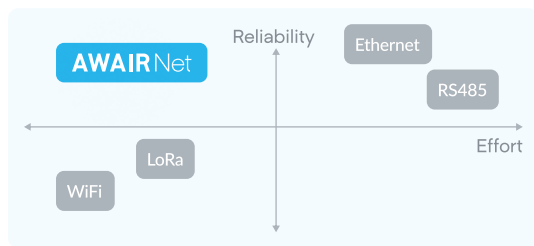# AWAIR Net
Technical Document

What is AwairNet?

A Powerful, Long Range, Wireless Connectivity Solution

Experience unprecendented reliability with minimum effort through Mesh Technology

High Reliability

Consistently delivers the data at regular intervals

Low Effort

Less installation steps generally leading to less installation costs

Blanket entire warehouses or floors in your building with **up to 1km** line of sight range between devices

Wifi		
AwairNet		

10-100m with WiFi

VS. **Up to 1km with AwairNet**

No gateway required. AwairNet hardware can take any role in the network

Leader
- Manages the AwairNet network
- Onboards new AwairNet devices
- Sends AwairNet data to the Cloud via Ethernet Internet Connection

Node
- Send sensor data through the mesh
- Forwards data on behalf of other nodes

Onboard in Less than 5 Seconds

1. Press front button on leader
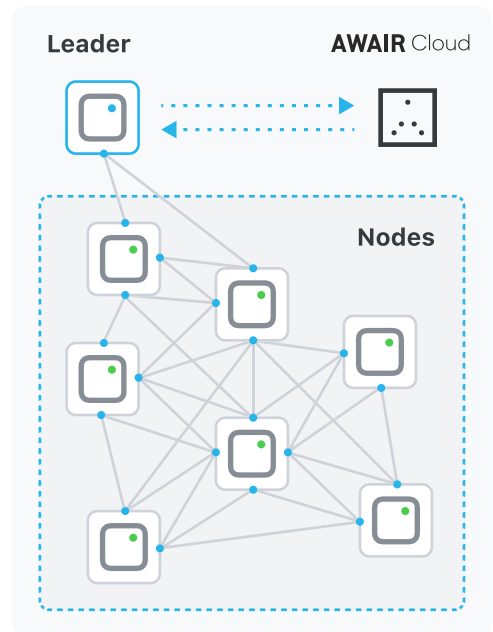2. Bring a powered nodes face-to-face with the leader
3. Wait 2 seconds for a beep

🔒 Industry-Leading Security and Encryption

Technical Requirements

A Long-Range Wireless Connectivity Solution

- Supported Network IP Assignment (DHCP Only)
- Network provided DNS or Use of Google DNS

Google DNS IP	8.8.8.8

- Recommend whitelisting MAC of AwairNet leader

Sensor Data	messaging.awair.is	Updates	ota.awair.is
Misc	iot.awair.is		

Power Leader and Nodes
- USB-C 100/240VAC (50/60Hz)
- Power Over Ethernet (PoE)
  - 802.3 af/at
- Power over Electrical Wiring
  - 5-26VAC (50/60Hz)
  - 7~37VD

Network Connectivity Leader Only
- Ethernet (LAN/WAN) 100mbps
- BACnet (IP) - **Coming Q4 2022**
- WiFi (2.4GHZ 802.11 b/g/n) - **Coming Q1 2023**