

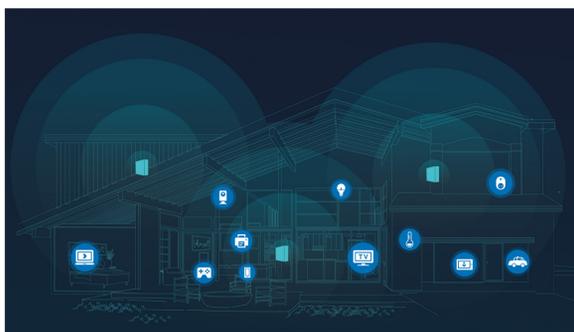
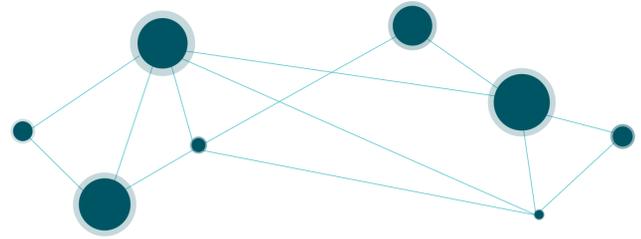
Mesh Network

A new whole-home Wi-Fi networking



What is a Mesh Network ?

As a technology, mesh networking has been around for a long time, mostly used by the military, hospitals, and for large scale commercial applications. Mesh networking simply refers to a wireless distributed system. In other words, all mesh nodes can cooperate and contribute to the distribution of data in a network. This is particularly useful in solving the problems of dead spots in homes. It gives homes the ability to have multiple access points (nodes), and these access points can cooperate to expand Wi-Fi coverage. What is unique and attractive about mesh networks is that only a single SSID is broadcast and it provides seamless roaming across an area.



Why We Need a Mesh Wi-Fi System ?

With the explosion in popularity of smart home devices and countless streaming media services like Hulu, Netflix, and Spotify, whole-house Wi-Fi coverage has become a must. Many of the latest wireless routers can provide strong coverage to most rooms of a typical medium-size house, but larger homes and dwellings with dense walls, multiple floors, metal and concrete substructures, and other structural impediments may require additional components to bring Wi-Fi to areas that the router can't reach.

Your Mesh Network Need to Meet these Characteristics :

- Self-Configuring – Each mesh device acts as an autonomous basic service set (BSS). There are no pre-configured roles to the nodes, which makes the network highly flexible and simplifies the deployment.
- Self-Managing – Automatic performance degradation detection and dynamic band steering that serves devices across bands for optimized network capacity.
- Self-Healing – If there's a bandwidth bottleneck or a hang-up on an existing connection, the network switches access points to continue delivering optimal performance.
- Adaptive Path Selection – RE should make smart decision to connect to next RE/Root based the calculation the metric of RSSI, Hop Counts, Estimated Link Rate and Estimated Bandwidth. Best Uplink Node Selection and Failover.



Self-Configuring



Self-Managing



Self-Healing



Adaptive
Path Selection



What does the Future Hold ?

- Seamless & Smart Network - Mesh Wifi System had not only transformed the concept of the wifi connectivity but also providing the consumers with new level of CONTROL over all devices in the smart network.
- Integration Platform - Integrated single platform as CENTRALIZED MANAGEMENT and security is a priority.
- Cloud Remote Operation – Data Analysis for marketing, monitoring human behaviour or even national security