

WiFi or Whole Home WiFi systems consists of a main router that connects directly to your modem, and a series of satellite modules, or nodes, placed around your house for full WiFi coverage. They are all part of a single wireless network and share the same SSID and password, unlike traditional WiFi routers.

In addition to creating a strong, reliable Wi-Fi signal, mesh-router systems have a few other prominent benefits. Here are the pros.

1. Easy network management: Many mesh-router systems are totally automated, allowing for easy management through a mobile app, even when you're not at home. And setting up a mesh system with a smartphone app is far easier than plugging directly into a router and configuring a device through a browser dashboard.

Many mesh-router apps let users quickly scan their speeds, cut off Wi-Fi access to certain networks, create guest networks, test the quality between the various connection points and even connect to smart home devices. Some high-end traditional routers have similar features, but you'll usually have to be connected to the local network from a desktop web interface.

2. Streamlined connections: With traditional routers, devices known as range extenders are often used to repeat the signal so Wi-Fi can be accessed from long distances. However, even the best Wi-Fi extenders require you to create a separate network, with a separate name, for the range extender. This means you may have to switch Wi-Fi connections, sometimes manually, as you move around the house. A mesh-router system, on the other hand, doesn't require constant reconnection, even as you move from room to room. You also won't have to deal with as much lag, as the access points all broadcast the same signal, rather than having to route requests through multiple networks.

3. Tight security: Along with easy management, some residential mesh-router kits come with good security support. Easy network management; Your router devices are safe — many automatically check for, and install, firmware updates.

Wireless Backhaul

Wireless backhaul solutions are developed and implemented through microwaves and satellite communication infrastructure. In a typical scenario, the Internet, voice and video data that originates from consumer sites is transported by wireless backhaul systems to the primary Internet or communication backbone.

For example, the data from consumer sites includes residential and corporate Internet and telephony communication. This data is connected/transported to a Tier 1 Internet service provider or a central telecom exchange by a wireless backhaul infrastructure. Wireless backhaul is also used as an alternative communication medium when the primary link is unavailable.