

2000 Mbps 802.11ac Wireless Mesh Extender

High-Speed, Complete Wireless Solution

Air4830 is a **4x4 802.11ac and 2x2 802.11n dual band concurrent** AP supporting MU-MIMO and advanced AirTies technologies. It provides ultra-reliability, unprecedented high speed for real-time video and data transmission in the home. While streaming UHD videos over 5GHz with the **super-fast 802.11ac** technology, it also provides the best possible wireless performance for legacy wireless devices which support only 2.4GHz at the same time.

AirTies Mesh Technology

AirTies Mesh technology has been developed to circumvent coverage, robustness and capacity limitations imposed on wireless home networks by the conventional star topology (single AP-to-multiple clients). By delivering traffic over high-capacity AP-to-AP links until the last hop to the client, Mesh topology significantly **extends coverage** while also **increasing the capacity** that can be delivered to all devices in the home – making possible a true “premium Wi-Fi” experience.

AirTies Mesh **increases the efficiency** of air time and is particularly beneficial for real time wireless video distribution. It utilizes “per-packet” routing via the most direct path from “server” (which may be the Internet, or another mesh point such as a set-top box) to each client. In this way, the wireless network map is completely fluid and flexible, never using potentially wasteful static routes. It constantly re-evaluates clients, applications and data flows to maximize wireless network capabilities.

AirTies Client Steering

For best wireless network performance, it is as crucial to associate clients to right AP as client traffic routing. However, steering a client purely based on link phy-rates to the AP it would connect would not give optimum performance in multi-AP environments. Path-aware, end to end cost calculation is necessary to make the right decision. **AirTies Client Steering technology** calculates end-to-end throughput for all potential client-AP associations and decides the best AP for each client optimizing performance. While clients which support 802.11v are guided leveraging the standard, legacy clients are also managed efficiently through AirTies Steering engine’s guiding actions. AirTies Steering is completely client agnostic and requires no client side component.

AirTies Mesh with Ethernet Backhaul

As the next stage in the evolution of Wi-Fi home networks, **Ethernet Backhaul** technology overcomes the limitations of operating the home network in a single collision domain (i.e., wireless medium), leveraging Ethernet links between Mesh nodes for backhaul transmissions. Thus, Ethernet Backhaul augments the total capacity, coverage and robustness of the home network, already raised to a “premium” level by AirTies Wi-Fi-only Mesh.

Ethernet Backhaul lends itself perfectly to **automatic set-up**. All an end user needs to do is to plug in any existing Ethernet wiring after setting up Wi-Fi Mesh network. All advanced AirTies features work seamlessly over Ethernet Backhaul.

Hassle Free Migration to Premium Wi-Fi

Factory pre-paired packs requires no configuration. As soon as cables are plugged in, installation is done. Additional nodes can be added to existing Mesh network at the touch of a button. Newly added nodes will automatically be configured with the settings of the existing Mesh network.

Configuration change on a single device automatically propagates to whole network. For example, if Wi-Fi password is changed on a device change is applied to whole network.

Resilient, Reliable Wi-Fi

Nothing more frustrating than lost connections. In AirTies Mesh network, alternative routes are always on. If an AP is powered down or a link is not usable for any reason, packets will be re-routed through alternative paths immediately.

Unified Solution for Video and Data

AirTies’ advanced **QoS packet classification** technologies enables latency-sensitive traffic such as multicast IPTV streams and data traffic over the same Wi-Fi network throughout the house.



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Advanced Interference Avoidance

Air 4830 scans all channels, monitors traffic and noise in each channel and dynamically changes channels to avoid interference if necessary. Being a certified device, Air4830 has the ability to enable DFS to take advantage of additional channel options, while listening for radar communication to dynamically update radio settings if necessary.

Application Support

Air 4830 comes with a set of software tools (i.e. applications) for easy installing, managing and diagnosing the wireless home network.

AirTies App (AirTies WiFi)

AirTies WiFi app is available on iOS and Android platforms for immediate download by end user after purchase helping to visualize and manage wireless home network established with Air 4830.

Through AirTies WiFi app, end user is assisted step by step during the installation phases. The app reaches the AP's and configure them making the installation a quick and easy experience.

Once the Home WiFi Network is established, AirTies WiFi app allows the end user to access several network info that will improve the WiFi experience.

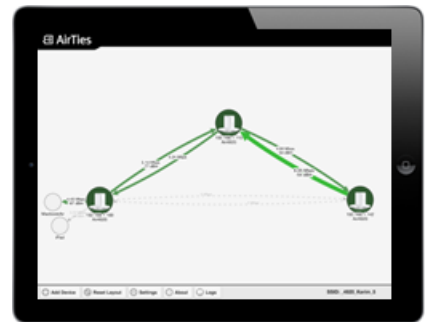
The clients those exist on the Home WiFi network are listed with their throughput and signal levels as well as the whole network topology is shown with the same metrics. Guest SSID settings and power saving options with the nodes' operating hour settings are some of the features available on the app.

While the end user manages the Home WiFi with the AirTies WiFi app, it also allows network diagnostics and troubleshooting in case a problem occurs.

AirTies App Pro

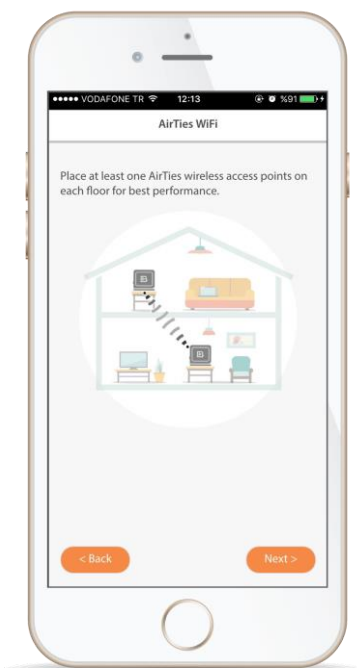
Another important application of AirTies Network Management Environment is the AirTies Network Visualizer app that displays what happens in Wi-Fi network. This app's targetted users are the installers who setup the AirTies WiFi network.

In this app, network topology, link strengths and data rates are visually presented. This detailed map view helps installers and test engineers to understand and pin-point problems real-time. Based on the feedbacks from the app, the installer will determine the number of the nodes to be used and where they should be placed for the best WiFi network performance.



Remote Management

Cloud base application provides extensive data analytics for business intelligence, pro-active and real-time troubleshooting for call center agents addressing customer complaints after deployment



Main Features

- **All-in-one Solution:** 2000 Mbps dual band concurrent wireless mesh extender.
- **Wireless Connection:** 1700 + 300 Mbps dual band wireless mesh extender compliant with 802.11ac & 802.11n standard
- **Remote Management:** CWMP (TR-069, TR-098) support.
- **Energy Efficiency:** Complies with Code of Conduct v5
- **Ethernet:** 1 Gigabit LAN port
- **Dual Band Concurrent:** Works at both 2.4GHz and 5GHz bands simultaneously
- **WPS:** Simple setup button to securely connect supported devices
- **Extending Wireless Coverage at the Touch of a Button:** Easy to setup an AirTies Mesh Network and extend wireless coverage
- **AirTies Mesh Technology:** Circumvents coverage, robustness and capacity limitations imposed on wireless home networks by the conventional star topology
- **Backward Compatible:** Compatible with 802.11a/b/g wireless standards
- **MSSID (Multi SSID)** Multiple SSIDs can be created to allow different users access to the Internet / network
- **IPTV-ready:** QoS, IGMP support
- **Advanced Wireless Security:** WPA2-PSK, WPA2-802.1x, WPA-PSK, WPA-802.1x
- **Automatic Firmware Upgrade:** Automatic firmware upgrade capability with the http, TR-069 and the user interface.

Technical Properties

- **Ports:** 1 Gb Ethernet LAN (RJ45), Power
- **LEDs:** Power, 2.4GHz WLAN, 5GHz WLAN, WPS
- **Wireless Security Options:** WPA2-Enterprise, WPA2-Personal, WPA-Enterprise, WPA-Personal
- **Wireless Standards:** IEEE 802.11b, 802.11g, 802.11a, 802.11n, 802.11ac, 802.11d, 802.11h, 802.11e, 802.11i standards compliant
- **Frequency Range:** 2.400 to 2.485 GHz, 5.150 to 5.250 GHz, 5.250 to 5.350 GHz, 5.470 to 5.725 GHz, 5.725 to 5.850 GHz
- **Reset Button:** to return to factory settings
- **WPS Button:** for simple setup and secure connection with WPS supported wireless devices
- **UPnP:** Universal Plug & Play Internet Gateway Device
- **Certificates and Standards:** CE, FCC, IDA, Wi-Fi Alliance, Code of Conduct Energy Efficiency

Physical Characteristics

- **Dimensions:** 100mm(H) x 108.4mm(D) x 41.5mm(W)
 - **Power:** 12V DC 1.0A
 - **Adapter Operating Voltage:** 100V-240V AC
 - **Operating Temperature:** 0°C ~ 40°C
 - **Storage Temperature:** -40°C ~ 70°C
 - **Operating Humidity:** %10 ~ %90
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