



Dual-band WiFi 7 Extender/Router

with Voice Option

ARIA2231, ARIA2231V

Supercharge your subscriber's Wi-Fi, eliminate dead zones and WiFi-related support calls with Hitron Mesh Wi-Fi 7 Routers. These future-ready devices deliver the Wi-Fi coverage, capacity, and speed that your customers crave. With the power of Wi-Fi 7 and 2.5 Gigabit Ethernet ports, you can be confident that users will enjoy whole-home Wi-Fi for brilliant video streaming, fast online gaming, and trouble-free video conferencing anywhere in the house or yard. And with a simple app, it's easy to set up and manage Wi-Fi for everyone at home. Your subscribers will enjoy a consistently strong signal, along with more than enough capacity for every device – even when everyone in the house is online at the same time.

Exceptional Speed, Coverage and Capacity with Wi-Fi 7

These WiFi 7 Routers are equipped with 2 Wi-Fi bands, utilizing channel widths up to 160MHz, ensuring high level performance and reliable connectivity for all devices in the home.

The routers support 4K QAM which further increases throughput and capacity compared to 1K QAM on Wi-Fi 6. Preamble Puncturing efficiently uses the Wi-Fi band despite interference.

WiFi 7 Multi-Link Operation

Wi-Fi 7 introduces Multi-Link Operation that can increase throughput, reliability and reduce latency. MLO can use up to two Wi-Fi radios operating simultaneously in (2.4GHz and 5 GHz), creating a single aggregated data connection to deliver the optimal performance, even in congested areas.

Key Features

- Simultaneous Dual-band Wi-Fi 7
 - 2x2 2.4GHz 802.11be
 - 2x2 5GHz 802.11be
 - Two Spatial Streams
- 4096 QAM support on all bands (2.4GHz / 5GHz)
- Multi-Link Operation (Single radio / Dual radio)
- Seamless roaming using 802.11k, r, v
- Client steering & channel optimization
- MU-MIMO capable for simultaneous data streaming
- Supports EasyMesh
- One 2.5 GigE and four 1 GigE
- One FXS Voice Ports (*ARIA2231V only*)
- TR-069, TR-369, USP Support

Interfaces

- 1x RJ-45 100M/1G/2.5G BASE-T Ethernet Port
- 4x RJ-45 100M/1G BASE-T Ethernet Port
- 1x RJ-11 HD Voice Ports (ARIA2231V only)

Wi-Fi

Wi-Fi Characteristics

- 802.11a/b/g/n/ac/ax/be
- 2T2R 5GHz 11be (2.8Gbps)
- 2T2R 2.4GHz 11be (688Mbps)
- 20/40/80/160MHz Channel Bandwidth
- Supports Standard 5GHz UNII Bands

Wi-Fi Features

- Up to 4 SSIDs per Radio
- Prioritized QoS: WMM/WMM-PS
- 4096 QAM support on all bands (2.4GHz / 5GHz)
- Multi-Link Operation (Single radio / Dual radio)
- Transmit Power Control by Service Provider
- WPS (Wi-Fi Protected Setup) PBC, PIN
- Airtime Fairness (ATF)
- Band Steering (BS)
- Dynamic Frequency Selection (DFS)
- Wi-Fi Output Power Range: Max permitted by FCC/IC
- Roaming: 802.11r/k/v

Wi-Fi Security

- WPA2-PSK (TKIP/AES)
- WPA3-SAE
- WiFi Enhanced Open (OWE)

Routing Support

- Protocol Support: IGMP v3 for IPTV service capability
- MAC Address Filtering (IPv4/IPv6)
- IP Source/Destination Address Filtering (IPv4/IPv6)
- IP over Ethernet (IPOE)
- Point-to-Point Protocol over Ethernet (PPPoE)
- DHCP and TFTP clients (IPv4/IPv6)
- DHCP Server supports RFC 1541 (IPv4)
- DHCPv6 obtains Prefix from DHCPv6 Server through Prefix Delegation
- DNS Proxy
- Port Forwarding and DMZ
- UPnP
- DSLite Support for IPv4 In-home Support with IPv6 Backbone
- 6RD Support for Quick IPv6 Deployment over IPv4 Backbone
- RIPv2 for Static IP Support

Management

- Onboarding via Bluetooth, MyHitron+
- App Configuration, Control and Management
- Cloud Managed Backend Support and Optimization
- TR-069, TR-104, TR-143, TR-181, TR-369

Voice (ARIA2231V only)

General Voice Features

- SIP v2 Call, SIP v2 Call Control
- DNS SRV
- Hook Flash Event Signaling
- RTP Audio Transport
- RFC2833 RTP Payload
- SIP INFO
- InBand DTMF Mode
- HD Voice Port with 16kHz sampling rates

Voice Audio Codecs

- G.711 (a-law and mu-law)
- G.722 (HD codec)
- G.723.1
- G.726
- G.728
- G.729
- AMR (narrowband)
- Adaptive Jitter Buffer
- G.167 Acoustic Echo Cancellation

FAX Relay Protocols Compliance

- T.38 Pass-through and over IP Fax/Modem Detection Control
- T.28 (IP) Compliant Group 3 and SG3 Fallback to Transport T.30
- V.34 Fax and Modem Bypass
- Automatic Fallback to G.711 support

CLASS Calling Features

- Call Waiting
- Call Hold
- Call Resume
- Call Forward Unconditional, Call Forward on Busy
- Caller ID
- 3-Way Conference
- Call Consultant
- Call Transfer and Network-initiated Class Services - MWI messaging, VMWI via FSK

Mechanical

- LEDs: Power, Link speed for 1*2.5G LAN & 4*Gig LAN, 2.4G, 5G
- Power Button
- Factory Default Reset Button
- Pair Button
- Dimensions: 130mm(W)*58mm(D)*196mm(H)

Electrical

- Power Input: 12VDC Surge Protection
- Ethernet RJ-45 sustains at least 4KV

Environmental

- Operating Temperature: 0°C (32°F) ~ 40°C (104°F)
- Operating Humidity: 10% ~ 90% (Non-condensing)
- Storage Temperature: -40°C (-40°F) ~ 60°C (140°F)

Environmental

- RoHS Compliant
- FCC Part 15:2019, Subpart B, Class B
- FCC Part 15, Subpart C (Section 15.247)
- FCC Part 15, Subpart E (Section 15.407)
- FCC Part 2 (Section 2.1091) IEEE C95.3 -2002
- ANSI C63.4:2014
- ANSI C63.10:2013
- UL 62368-1
- ICES-003
- CAN/CSA C22.2 No. 62368-1-14
- CE