



Tri-band WiFi 7 Extender/Router

with Voice Option

ARIA3321, ARIA3321V



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 3 Wi-Fi bands, utilizing channel widths up to 320MHz, 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 (5GHz and 6 GHz), creating a single aggregated data connection to deliver the optimal performance, even in congested areas.

Key Features

- Simultaneous Tri-band Wi-Fi 7
 - 2x2 2.4GHz 802.11be
 - 2x2 5GHz 802.11be
 - 2x2 6GHz 802.11be
- 4096 QAM support on all bands (2.4GHz / 5GHz / 6GHz)
- 320MHz channel support on 6GHz band
- 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
- Two 2.5 GigE
- Two FXS Voice Ports (ARIA3321V)
- TR-069, TR-369, USP Support
- Bluetooth Onboarding

Interfaces

- 2x RJ-45 2.5GBase-T Ethernet Ports
- 2x RJ-11 HD Voice Ports (*ARIA3321V only*)

Wi-Fi

Wi-Fi Characteristics

- 802.11a/b/g/n/ac/ax/be
- 2T2R 6GHz 11be (5.7Gbps) + 2T2R 5GHz 11be (2.8Gbps) + 2T2R 2.4GHz 11be (688Mbps)
- 20/40/80/160/320MHz Channel Bandwidth
- High Power Design for Multi-radio Co-location
- Supports Standard 5GHz and 6GHz UNII Bands
- Bluetooth v5.0 Class 2

Wi-Fi Features

- Up to 4 SSIDs per Radio
- Prioritized QoS: WMM/WMM-PS
- 4096 QAM support on all bands (2.4GHz / 5GHz / 6GHz)
- 320MHz channel support on 6GHz band
- 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), 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 (*ARIA3321V only*)

General Voice Features

- SIP v2 Call, SIP v2 Call Control
- MGCP
- DNS SRV
- Hook Flash Event Signaling
- RTP Audio Transport
- RFC2833 RTP Payload
- SIP INFO
- InBand DTMF Mode
- HD Voice Ports 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

Network Security

- Firewall with Stateful Inspection (IPv4/IPv6)
- Hacker Intrusion Prevention and Detection
- Application Content Filtering (IPv4/IPv6)
- Complete NAT Software Implemented as per RFC 1631 with Port and Address Mapping (IPv4)
- Port Blocking
- Keyword Filtering
- Device Filtering
- Instant Device Pause

Mechanical

- LEDs: One Multi-colored Status LED
- Factory Default Reset Button
- Pair Button

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)

Regulatory

- 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
- cUL
- ICES-003
- CAN/CSA C22.2 No. 62368-1-14
- CE