

Ruckus H320

Wall-Mounted 802.11ac Wave 2 Wi-Fi Access Point and Switch



DATA SHEET



BENEFITS

AFFORDABLE ALL-IN-ONE

Combines the best of Wi-Fi with 802.11ac Wave 2 and great wired switching with two 100Mbps ports into one inexpensive wall-mounted unit.

GREAT PERFORMANCE

Mitigate interference and extend coverage with patented BeamFlex+ utilizing multi-dimensional antenna patterns

OPTIMIZED THROUGHPUT

Improve performance automatically with ChannelFly and machine learning which finds less congested Wi-Fi channels with dynamic RF channel selection

SERVICE MORE DEVICES

Support more devices simultaneously with two MU-MIMO spatial streams, while improving non-Wave 2 device performance

SUPPORT MORE SERVICES

Multiple SSIDs and switch ports help support services such as VoIP, IPTV, and high-speed Internet access and in-room device connectivity

KEEP YOUR SWITCHES AND CABLES

Designed to operate on existing PoE switches and CAT 5e cabling to minimize costs

GREAT APPLICATIONS

The H320 is more than just great Wi-Fi with support of onboarding with Cloudpath, locationing with SPoT, analytics with SCI and more

Wi-Fi is a critical amenity as users bring more devices into our hotel rooms, meeting rooms, and classrooms. However, providing great Wi-Fi performance in every room is cost-prohibitive.

The Ruckus H320 combines an 802.11ac Wave 2 Wi-Fi access point and wired switch into one wall-mount device. Designed specifically for per-room deployments, the H320 is compact, inconspicuous, secure, and easy to mount to an electrical junction box. Bottom facing Ethernet ports eliminate unsightly cabling and accommodates any furniture placement.

Easily supports converged wired and wireless services with one device, that include VoIP, IPTV, high-speed Internet access and in-room Wi-Fi device connectivity.

This 802.11ac Wave 2 Wi-Fi AP and switch incorporates patented technologies found only in the Ruckus Wi-Fi portfolio.

- Extended coverage with patented BeamFlex+ utilizing multi-directional antenna patterns
- Improved throughput with ChannelFly which dynamically find less congested Wi-Fi channels to use

The H320 supports Multi-User MIMO (MU-MIMO) which increases network throughput by transmitting to multiple clients simultaneously.

Support per-room wired IP devices from TVs to phones with 2 onboard Ethernet ports. Also, with built-in visual troubleshooting tools within Ruckus Wi-Fi controllers, administrators can accelerate resolution of trouble tickets.

Whether organizations are deploying ten or ten thousand APs, the H320 can be deployed as a standalone AP or centrally managed by SmartZone, ZoneDirector, or FlexMaster management platforms.



FEATURES

WIRELESS

- Integrated dual radio 2x2 802.11ac Wave 2 Wi-Fi AP and Ethernet wall switch supporting Multi-User MIMO (MU-MIMO)
- Ruckus patented BeamFlex+ adaptive antennas optimized for in-room performance and mobile clients
- Matched Band Coverage ensures similar Wi-Fi coverage for both 2.4 and 5 GHz client devices
- Multiple BSSIDs per radio with unique QoS and security policies
- WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i
- 802.1X support for RADIUS and Active Directory*

WIRED

- 1 x 1GbE uplink port
- 2 x 10/100Mbps Ethernet ports
- Cable channel for preserving legacy infrastructure (e.g. PBX phones)

POWER

- Powered by PoE

SOFTWARE

- Smart Positioning Technology (Locationing)
- Cloudpath (Enrollment System)
- SmartCell Insight (Analytics Engine)
- SmartCast QoS
- Dynamic PSK*



PHYSICAL CHARACTERISTICS	
Power	<ul style="list-style-type: none"> POE 802.3af
Physical Size	<ul style="list-style-type: none"> 89mm (L) x 136mm (W) x 29mm (H)
Weight	<ul style="list-style-type: none"> 195g 276g with bracket
Physical Ports	<ul style="list-style-type: none"> 2 x 10/100 Mbps Base-T 802.3, 802.3u, RJ-45 Ethernet access ports. 1 x 1GbE 802.3, 802.3u, 802.3ab, 802.3af PoE input, RJ-45
Mounting Options	<ul style="list-style-type: none"> Electrical wallbox; Standard US and EU single gang wall jack Optional bracket for offset & wall mount
Environmental Conditions	<ul style="list-style-type: none"> Operating Temperature: 0°C (32°F) - 40°C (104°F) Operating Humidity: 15% - 95% non-condensing
Power Draw	<ul style="list-style-type: none"> Idle: 3W Typical: 4W Peak: 6W

RF	
Minimum Rx Sensitivity	<ul style="list-style-type: none"> Up to -99dBm
Beamflex* Sinr Tx Gain	<ul style="list-style-type: none"> 2dB
Beamflex* Sinr Rx Gain	<ul style="list-style-type: none"> 3-5dB (PD-MRC)
Interference Mitigation	<ul style="list-style-type: none"> 5dB

* BeamFlex gains are statistical system level effects translated to enhanced SINR based on observations over time in real-world conditions with multiple APs and many clients

PERFORMANCE AND CAPACITY	
Concurrent users	<ul style="list-style-type: none"> 100 per AP
Voice Calls	<ul style="list-style-type: none"> 30
BSSID	<ul style="list-style-type: none"> 8 BSSIDs per radio

MULTIMEDIA AND QUALITY OF SERVICE	
802.11e/WMM	<ul style="list-style-type: none"> Supported
Software Queues	<ul style="list-style-type: none"> Per traffic type (4), per client
Traffic Classification	<ul style="list-style-type: none"> Automatic, heuristics and TOS based or VLAN-defined
Rate Limiting	<ul style="list-style-type: none"> Dynamic, per-user or per-WLAN

NETWORK ARCHITECTURE	
IP	<ul style="list-style-type: none"> IPv4, IPv6, dual-stack
VLANs	<ul style="list-style-type: none"> 802.1Q (1 per BSSID or dynamic, per user based on RADIUS) Port-based
802.1X For Ethernet Ports	<ul style="list-style-type: none"> Authenticator Supplicant

MANAGEMENT	
Deployment Options	<ul style="list-style-type: none"> Standalone (individually managed) Managed by ZoneDirector Managed by SmartZone Managed by FlexMaster
Configuration	<ul style="list-style-type: none"> Web User Interface (HTTP/S) CLI (Telnet/SSH), SNMP v1, 2, 3

WI-FI	
Standards	<ul style="list-style-type: none"> IEEE 802.11a/b/g/n/ac
MIMO Configuration	<p>2.4GHz</p> <ul style="list-style-type: none"> 1x1 : 1 SU-MIMO <p>5GHz</p> <ul style="list-style-type: none"> 2x2 : 2 SU-MIMO 2x2 : 2 MU-MIMO
Supported Data Rates	<ul style="list-style-type: none"> 802.11n/ac: 6.5Mbps - 173.4Mbps (20MHz) 13.5Mbps - 400Mbps (40MHz) 29.3Mbps - 867Mbps (80MHz) 802.11a: 54, 48, 36, 24, 18, 12, 9 and 6Mbps 802.11b: 11, 5.5, 2 and 1Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps
Rf Power Output* (Aggregate)	<ul style="list-style-type: none"> 2.4GHz: 16dBm 5.0GHz: 20dBm
Channelization	<ul style="list-style-type: none"> 20MHz, 40MHz, 80MHz
Frequency Band	<ul style="list-style-type: none"> IEEE 802.11 b/g/n: 2.4 - 2.484GHz IEEE 802.11a/ac: 5.15 - 5.25 GHz; 5.25 - 5.35GHz; 5.47 - 5.725 GHz; 5.725 - 5.85GHz
Operating Channels	<ul style="list-style-type: none"> 2.4GHz : 1-13 5GHz : 36-64, 100-140, 149-165 Channel availability is country dependent according to the local regulations
Wireless Security	<ul style="list-style-type: none"> WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i Authentication via 802.1X with ZoneDirector, SmartZone, local authentication database, support for RADIUS, LDAP, and Active Directory

* Maximum power varies by country
 **See price list for latest country certifications

PRODUCT ORDERING INFORMATION

MODEL	DESCRIPTION
Ruckus H320 Wi-Fi Wall Switch	
901-H320-XX00	Dual band Wave 2 802.11ac Wi-Fi Wall Switch. Does not include power adapter or PoE injector
Optional Accessories	
902-0126-0000	<ul style="list-style-type: none"> Optional Surface-mount bracket
XX: US/KS/JP/Z2/WW For explanation of XX - please consult current Ruckus System Pricelist Region availability subject to Certification Date per region	