Benefits

AFFORDABLE ALL-IN-ONE
Deliver great in-room Wi-Fi and concurrent wired IP connectivity with 802.11ac Wave 2 speed and a built-in 2-port switch.

STUNNING PERFORMANCE
Extends coverage with patented BeamFlex+™ adaptive antenna technology while mitigating interference by utilizing multi-directional antenna patterns.

MULTIPLE MANAGEMENT OPTIONS
Manage the H320 from the cloud, or with on-premises physical/virtual appliances.

AUTOMATE OPTIMAL THROUGHPUT
ChannelFly dynamic channel technology uses machine learning to automatically find the least congested channels. You always get the highest throughput the band can support.

SERVICE MORE DEVICES
Connect more devices simultaneously with two MU-MIMO spatial streams and concurrent dual-band 2.4/5GHz radios while enhancing 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.

MORE THAN WI-FI
Support services beyond Wi-Fi with Cloudpath security and onboarding software, SPoT Wi-Fi locationing engine, and SCI network analytics.

Wi-Fi is a critical amenity as users bring more devices into 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 or ZoneDirector management platforms.
RUCKUS H320
Wall-Mounted 802.11ac Wave 2 Wi-Fi Access Point and Switch
Access Point Antenna Pattern

Ruckus' BeamFlex+ adaptive antennas allow the H320 AP to dynamically choose among a host of antenna patterns in real-time to establish the best possible connection with every device. This leads to:

- Better Wi-Fi coverage
- Reduced RF interference

Traditional omni-directional antennas, found in generic access points, oversaturate the environment by needlessly radiating RF signals in all directions. In contrast, the Ruckus BeamFlex+ adaptive antenna directs the radio signals per-device on a packet by-packet basis to optimize Wi-Fi coverage and capacity in real-time to support high device density environments. BeamFlex+ operates without the need for device feedback and hence can benefit even devices using legacy standards.

Note: The outer trace represents the composite RF footprint of all possible BeamFlex+ antenna patterns, while the inner trace represents one BeamFlex+ antenna pattern within the composite outer trace.
Wi-Fi Standards
- IEEE 802.11a/b/g/n/ac Wave 2

Supported Rates
- 802.11ac: 6.5 to 867Mbps (MCS0 to MCS9, NSS = 1 to 2 for VHT20/40/80)
- 802.11n: 6.5Mbps to 150Mbps (MCS0 to MCS7)
- 802.11a/g: 54, 48, 36, 24, 18, 12, 9, 6Mbps
- 802.11b: 11, 5.5, 2 and 1 Mbps

Supported Channels
- 2.4GHz: 1-13
- 5GHz: 36-64, 100-144, 149-165

MIMO
- 1x1 2.4GHz
- 2x2 MU-MIMO 5GHz

Spatial Streams
- 1 Stream 2.4GHz
- 2 Streams SU/MU-MIMO 5GHz

Radio Chains and Streams
- 2x2:2

Channelization
- 20, 40, 80MHz

Security
- WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i, Dynamic PSK
- WIPS/WIDS

Other Wi-Fi Features
- WMM, Power Save, Tx Beamforming, LDPC, STBC, 802.11r/k/v
- Captive Portal
- Hotspot
- Hotspot 2.0
- WiSP

* Channel availability is country dependent according to the local regulations.

RF

Antenna Type
- BeamFlex+ adaptive antennas with polarization diversity
- Adaptive antenna that provides multiple-antenna patterns per band

Antenna Gain (max)
- Up to 3dBi

Peak Transmit Power (aggregate across MIMO chains)
- 2.4GHz: 16dBm
- 5GHz: 20dBm

Minimum Receive Sensitivity
- -99dBm

Frequency Bands
- ISM (2.4-2.484GHz)
- U-NII-1 (5.15-5.25GHz)
- U-NII-2A (5.25-5.35GHz)
- U-NII-2C (5.47-5.725GHz)
- U-NII-3 (5.725-5.85GHz)

2.4GHz RECEIVE SENSITIVITY

<table>
<thead>
<tr>
<th>Rate</th>
<th>HT20</th>
<th>HT40</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCS0</td>
<td>-93</td>
<td>-90</td>
</tr>
<tr>
<td>MCS7</td>
<td>-75</td>
<td>-73</td>
</tr>
</tbody>
</table>

5GHz RECEIVE SENSITIVITY

<table>
<thead>
<tr>
<th>Rate</th>
<th>VHT20</th>
<th>VHT40</th>
<th>VHT80</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCS0</td>
<td>-93</td>
<td>-90</td>
<td>-87</td>
</tr>
<tr>
<td>MCS7</td>
<td>-76</td>
<td>-73</td>
<td>-71</td>
</tr>
</tbody>
</table>

1 Rx sensitivity varies by band, channel width and MCS rate.
RUCKUS H320
Wall-Mounted 802.11ac Wave 2 Wi-Fi Access Point and Switch

NETWORKING

Controller Platform Support
- SmartZone
- ZoneDirector
- Cloud Wi-Fi
- Unleashed
- Standalone

Mesh
- No Mesh support

IP
- IPv4, IPv6, dual-stack

VLAN
- 802.1Q (1 per BSSID or dynamic per use based on RADIUS)
- Port-based

802.1x
- Authenticator & Supplicant

Policy Management Tools
- Application Recognition and Control
- Access Control Lists
- Device Fingerprinting

SOFTWARE AND SERVICES

Location Based Services
- SPoT

Network Analytics
- SmartCell Insight (SCI)

Security and Policy
- Cloudpath

PHYSICAL INTERFACES

Ethernet
- One 1GbE port backhaul, PoE (802.11af/at)
- 2 x 10/100Mbps Ethernet switch ports

PHYSICAL CHARACTERISTICS

Physical Size
- 89 mm (W) x 136 mm (L), 29 mm (H)
- 3.5in (W) x 5.35in (L) x 1.1in (H)

Weight
- 195g without bracket (6.9oz)
- 276g with bracket (9.7oz)

Mounting
- Electrical wallbox; Standard US and EU single gang wall jack
- Optional bracket for offset & wall mount

Operating Temperature
- 0°C (32°F) - 40°C (104°F)

Operating Humidity
- Up to 95%, non-condensing

POWER

Power Supply
- 802.3af for Full AP Feature Support

Power Draw
- Idle: 3W
- Typical: 4W
- Peak: 6W

CERTIFICATIONS AND COMPLIANCE

Wi-Fi Alliance
- Wi-Fi CERTIFIED™ a, b, g, n, ac
- Passpoint®, Vantage

Standards Compliance
- EN 60950-1 Safety
- EN 60601-1-2 Medical
- EN 61000-4-2/3/5 Immunity
- EN 50121-1 Railway EMC
- EN 50121-4 Railway Immunity
- IEC 61373 Railway Shock & Vibration
- WEEE & RoHS
- ISTA 2A Transportation

ORDERING INFORMATION

901-H320-XX00
- Dual band Wave 2 802.11ac Wi-Fi Wall Switch. Does not include power adapter or PoE injector

PLEASE NOTE: When ordering Indoor APs, you must specify the destination region by indicating -US, -WW, or -Z2 instead of XX. When ordering PoE injectors or power supplies, you must specify the destination region by indicating -US, -EU, -AU, -BR, -CN, -IN, -JP, -KR, -SA, -UK, or -UN instead of -XX.

For access points, -Z2 applies to the following countries: Algeria, Egypt, Israel, Morocco, Tunisia, and Vietnam.

OPTIONAL ACCESSORIES

902-0162-XXYY
- PoE injector (24W) (Sold in quantities of 1, 10 or 100)

902-1120-0000
- Optional Surface-mount bracket

For expansion of XX and YY: Please consult current Ruckus Price List.
Region availability subject to Certification Date per region.

2 Refer to Unleashed datasheets for SKU ordering information.
3 Max power varies by country setting, band, and MCS rate.
4 For complete list of WFA certifications, please see Wi-Fi Alliance website.
5 For current certification status, please see price list.
CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world’s most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com.