

# H320 Access Point

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



## DATA SHEET



### 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.

#### GET 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

Enhance your network with Cloudpath™ security and management software, SPoT™ real-time Wi-Fi location engine and analytics software, and SCI network analytics

Wi-Fi is a critical amenity as users bring more devices into our hotel rooms, meeting rooms, and classrooms. Today, with an ever increasing need for quality Wi-Fi, an AP in every room has increasingly become necessary.

The 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 accommodate any furniture placement.

The H320 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.



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## 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

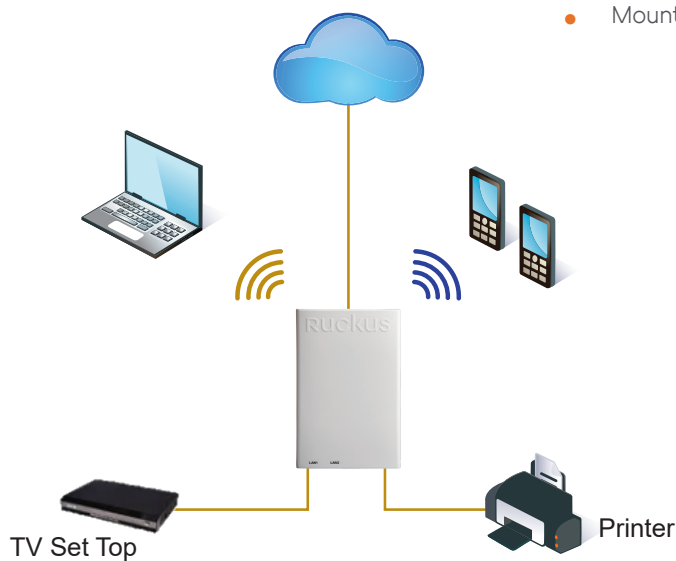
### SOFTWARE

- SPoT™ Real-time location engine and analytics software
- Cloudpath™ Security and management software
- SmartCell Insight (Network analytics engine)
- SmartCast™ QoS engine
- Dynamic PSK™\* technology
- Application recognition and control\*

\* with management

### Accessories

- Mounts over a standard US and EU single gang wall jack



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

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

\* 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"> <li>100 per AP</li> </ul>
Voice Calls	<ul style="list-style-type: none"> <li>30</li> </ul>
BSSID	<ul style="list-style-type: none"> <li>8 BSSIDs per radio</li> </ul>

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

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

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

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

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

## PRODUCT ORDERING INFORMATION

MODEL	DESCRIPTION
H320 Wi-Fi 802.11ac Wave 2 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	
902-1120-0000	Optional Surface-mount bracket
902-0162-YY00	Spare, PoE Adapter, 10/100/1000BaseT, with YY country code, Qty 1

XX: US/KS/JP/Z2/WW

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