DATA SHEET

Modern hotel rooms, residence halls, and apartments need to function as full-featured technology hubs. Users expect fast, reliable wireless connectivity for all of their personal devices, along with voice, TV, and other wired and wireless services. But for operators of these venues, trying to deliver all of that over separate infrastructures is an installation nightmare—and a huge expense.

The Ruckus H500 combines industry-leading Ruckus 802.11ac wireless access point performance with a wall-mounted wired switch in a single, secure, and inconspicuous form factor. With integrated 2.4GHz and 5GHZ concurrent radios, four wired Ethernet ports, Power-over-Ethernet (PoE) output, and pass-through features for connecting legacy devices, it's an all-in-one in-room connectivity solution.

The H500 is perfect for hotel guest rooms, student residences, and multi-dwelling units that require simple connectivity for multiple devices in a single room, without multiple cables. It features an ultra-sleek, low-profile design that can be quickly and discretely installed in a standard electrical junction box. The H500 can connect a wide range of wired devices such as IPTV set top boxes, IP telephones, or networked mini-bars. At the same time, it draws on Ruckus wireless innovations to deliver extended range, reduced interference, and the industry's highest-performing 802.11ac coverage.

The H500 wall-mounted 802.11ac Wi-Fi AP incorporates patented technologies found only in the Ruckus Wi-Fi portfolio.

- Extended coverage with patented BeamFlex+ utilizing multi-directional antenna patterns.
- Improve throughput with ChannelFly, which dynamically finds less congested Wi-Fi channels to use.

Additionally, the H500 features a USB port to support IoT devices such as Bluetooth Low Energy (BLE), and IEEE 802.3af-compliant PoE to directly power devices such as IP telephones from the wall switch. Cable channels in the H500 also support legacy cabling for devices such as digital phones that require access to a PBX system.

Whether you're deploying ten or ten thousand APs, the H500 is also easy to manage through Ruckus' appliance, virtual, and cloud management options.

BENEFITS

GREAT ALL-IN-ONE

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

GREAT WI-FI PERFORMANCE

Provide a great user experience no matter how challenging the environment with BeamFlex+™ adaptive antenna technology using a multi-directional antenna patterns.

GET OPTIMAL THROUGHPUT

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

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 costly upgrades.

EXPANDABLE CAPABILITIES

Augment AP capabilities through the onboard USB 2.0 port to support additional technologies like BLE.

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.

171 mm

29 mm

90 mm

LAN1+POE LAN2 LAN3 LAN4

Gigabit POE
Uplink Port

901-H500-WW00
S/N: 931574604069
MAC: D4684D2B2A30

Ruckus
H500 Access Point
Default IP Address: 192.168.0.1
User name:super Password:sp-admin

FCC ID: S9GZ1500
IC: 5917A-H500
48V≡ 0.62A 48V特有 0.62安培
Made in China
Model: H500
Ruckus Wireless, Inc.

POE Out Port

FEATURES

WIRELESS

- Integrated dual radio 2x2 802.11ac Wi-Fi AP and Ethernet wall switch
- 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
- High Performance Wi-Fi and HSIA
- Wi-Fi Redundancy, in-room coverage as well as corridor and adjacent room
- WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i
- 802.1X support for RADIUS and Active Directory*
- Multiple BSSIDs per radio with unique QoS and security policies

INTERFACES

- RJ-45 for uplink Ethernet port
- Four Ethernet access ports offers
- Cable channel for preserving legacy infrastructure (e.g. PBX phones)

POWER

- Powered by either POE or 48VDC
- Supplies POE power for in-room devices such as VoIP phones
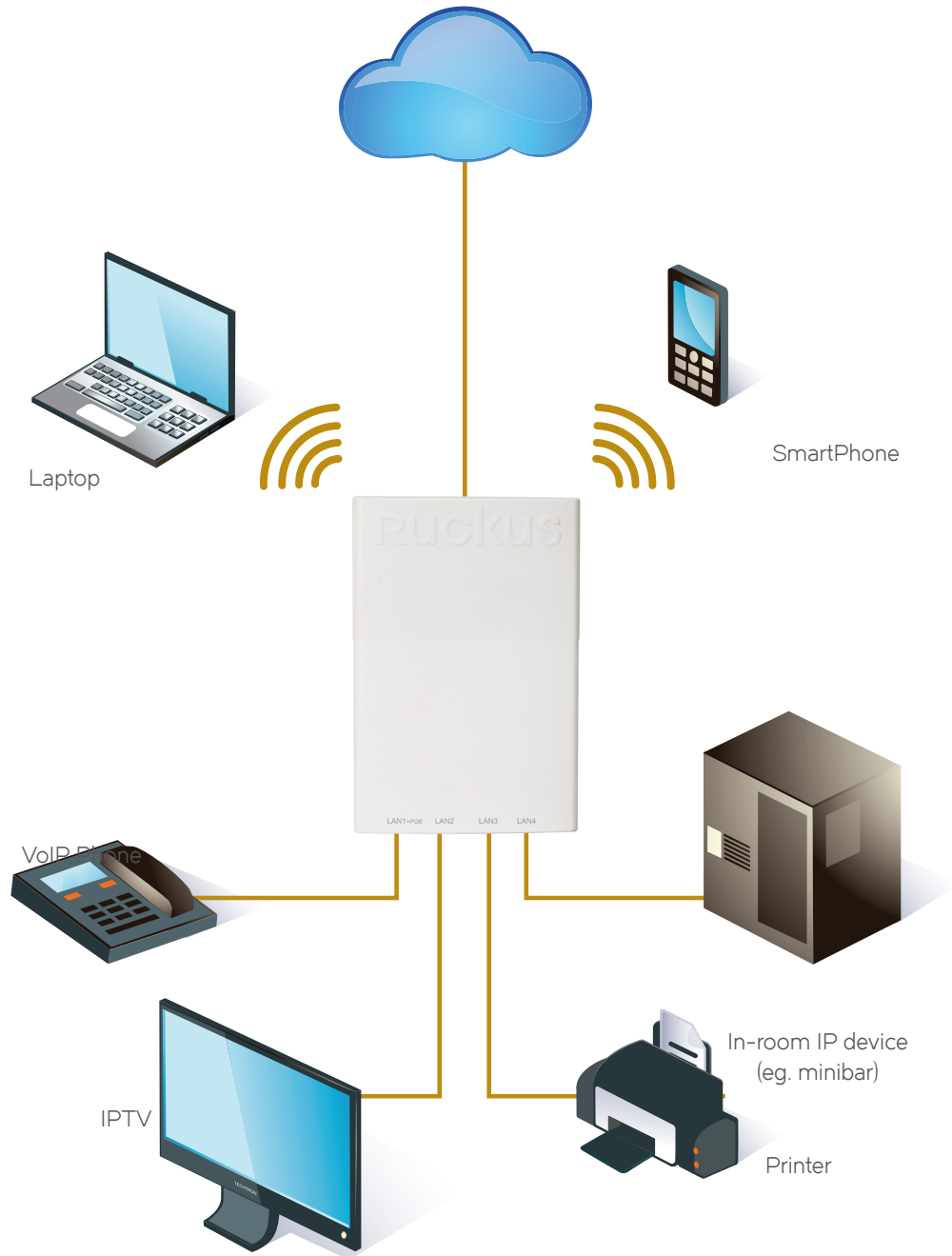
ACCESSORIES

- Mounts into standard US and EU single gang wall jack

SOFTWARE

- Smart Positioning Technology (Real-time location engine and analytics software)
- Cloudpath (Security and management software)
- SmartCell Insight (Networks analytics engine) Zero-IT and Dynamic PSK*
- Captive portal and guess accounts*
- Application recognition and control*
- SmartCast QoS
- SmartMesh Networking*

* with management

CONVERGED WIRED AND WIRELESS SERVICES

Laptop

SmartPhone

RUCKUS

LAN1+PoE LAN2 LAN3 LAN4

VoIP Phone

IPTV

Printer

In-room IP device
(eg. minibar)

PHYSICAL CHARACTERISTICS

Power	• POE 802.3af/802.3at • 48VDC input
Physical Size	• 90 mm x 171 mm, 29 mm
Weight	• 210 g (.46 Lbs.) • 282 g (.62 Lbs.) with bracket
Data Ports	• 4 10/100 Mbps Base-T 802.3, 802.3u, RJ-45 Ethernet access ports. • 1 10/100/1000Mpbs Base-T 802.3, 802.3u, 802.3ab, 802.3af (802.3at class 4) PoE input, RJ-45 • USB 2.0 (max power 0.5 w)
Mounting Options	• Electrical wallbox; Standard US and EU single gang wall jack • Optional bracket for offset & wall mount
Environmental Conditions	• Operating Temperature: 32°F (0°C) - 104°F (40°C) • Operating Humidity: 15% - 95% non-condensing
Power Draw	• Idle: 5W • Typical: 6.5W • Peak: 9.5W

RF

Minimum RX Sensitivity	• -99dBm
Beamflex* SINR TX Gain	• 2dB
Beamflex* SINR RX Gain	• 3-5dB (PD-MRC)
Interference Mitigation	• Up to 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	• 100
Voice Calls	• 30

MULTIMEDIA AND QUALITY OF SERVICE

802.11e/WMM	• Supported
Software Queues	• Per traffic type (4), per client
Traffic Classification	• Automatic, heuristics and TOS based or VLAN-defined
Rate Limiting	• Dynamic, per-user or per-WLAN

NETWORK ARCHITECTURE

IP	• IPv4, IPv6, dual-stack
VLANs	• 802.1Q (1 per BSSID or dynamic, per user based on RADIUS) • Port-based
802.1X For Ethernet Ports	• Authenticator • Supplicant
Tunneling	• L2TP, PPPoE

MANAGEMENT

Deployment Options	• Standalone (individually managed) • Managed by ZoneDirector 1200, 3000, and 5000 (9.10 & above) • Managed by vSCG and SmartZone 100 (3.0.3 & above) • Managed by FlexMaster
Configuration	• Web User Interface (HTTP/S) • CLI (Telnet/SSH), SNMP v1, 2, 3

WI-FI

Standards	• IEEE 802.11a/b/g/n/ac
MIMO Configuration	• 2 x 2 : 2
Supported Data Rates	• 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 1 Mbps • 802.11g: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps
RF Power Output* (Aggregate)	• 2.4 GHz: 19 dBm • 5.0 GHz: 22 dBm
Channelization	• 20MHz, 40MHz, 80MHz
Frequency Band	• IEEE 802.11 b/g/n: 2.4 – 2.484 GHz • IEEE 802.11a/ac: 5.15 – 5.25 GHz; 5.25 – 5.35 GHz; 5.47 – 5.725 GHz; 5.725 – 5.85 GHz
Operating Channels	• US/Canada: 1-11 • EU (ETSI X30): 1-13 • Channel availability is country dependent according to the local regulations • 5 GHz Channels - country dependent • 5GHz UNII-1 (2014)
BSSID	• 8 BSSIDs per radio
Power Save	• Supported
Wireless Security	• WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i • Authentication via 802.1X with ZoneDirector, 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
H500 Wi-Fi Wall Switch	
901-H500-XX00	Dual band 802.11ac Wi-Fi Wall Switch
Optional Accessories	
902-0170-XX0	• Power Supply (Qty. 1)
902-0162-XX00	• PoE injector (Qty. 1)

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

Warranty: Sold with a limited lifetime warranty.
For details see: http://support.ruckuswireless.com/warranty

RUCKUS
Simply Better Wireless.