ZoneFlex H500
Multiservice 802.11ac Wired/Wireless Wall Switch

RUCKUS™
Simply Better Wireless.

BENEFITS

CONVERGED IP SERVICES

Multiple SSIDs, port-based VLANs and robust authentication options make the ZoneFlex H500 ideal for supporting concurrent IP-based services such as VoIP, IPTV, high-speed Internet access and in-roomdevice connectivity — both wired and wireless

ADDITIVE PERFORMANCE WITH BEAMFLEX+

BeamFlex+ adaptive antennas improve Wi-Fi signal quality by adapting to device location and orientation, which is ideal for better performance on handheld mobile devices

STANDALONE OR CENTRALLY MANAGED

The ZoneFlex H500 can be deployed in standalone mode or centrally managed by the Ruckus ZoneDirector, SmartZone, vSCG and SCG, or Ruckus FlexMaster systems

FLEXIBLE DEPLOYMENT OPTIONS

The ZoneFlex H500 requires a single POE cable drop, reducing cabling, switch ports and power sourcing equipment

SLEEK, INCONSPICUOUS COMPACT FORM FACTOR FOR BEST AESTHETICS

Installs into any standard electrical outlet box creating a low profile, secure design and front port access which eliminates unsightly cabling and disruptive furniture placement

INTEGRATED POE SUPPORT ELIMINATES MORE WIRES

POE out to power devices such as IP-based VoIP phones eliminates the need for more power cords and clutter

802.11AC INTEGRATED WIRED/WIRELESS WALL SWITCH

The H500 is using Ruckus' patented BeamFlex+ adaptive antenna technology to deliver high-speed 802.11ac Wi-Fi in an ultra-sleek, low-profile design that can be quickly and discretely installed in a standard electrical junction box. Ideal for offering converged services in hotel guest rooms, student residences, and multi-dwelling units, the ZoneFlex H500 provides an easy way to offer multiple connections to a single room without multiple cables.

The ZoneFlex H500 features dual-polarized BeamFlex+ antennas, which adapt in real time to client device locations and physical orientations delivering consistent Wi-Fi performance.

Equipped with four Ethernet ports for in-room access, the ZoneFlex H500 can be used to connect a range of wired network devices such as IPTV set top boxes, IP telephones, or networked minibars while simultaneously providing dual band 802.11ac wireless LAN coverage. An IEEE 802.3afcompliant Power-over-Ethernet (PoE) port on the H500 allows devices such as IP telephones to be powered directly from the wall switch. The H500 itself may be powered via standard PoE or a DC power adapter.

The ZoneFlex H500 is completely inconspicuous and secure, minimizing the protrusion off the wall to make in-room cabling and furniture arrangement simple. Cable channels on the back of the H500 support legacy cabling which enable new cable pulls to override existing services, streamlining installation options and reducing costs.

The H500 can be deployed as a standalone device or centrally managed by SmartZone, ZoneDirector, or FlexMaster management platforms.

29 mm

171 mm

90 mm
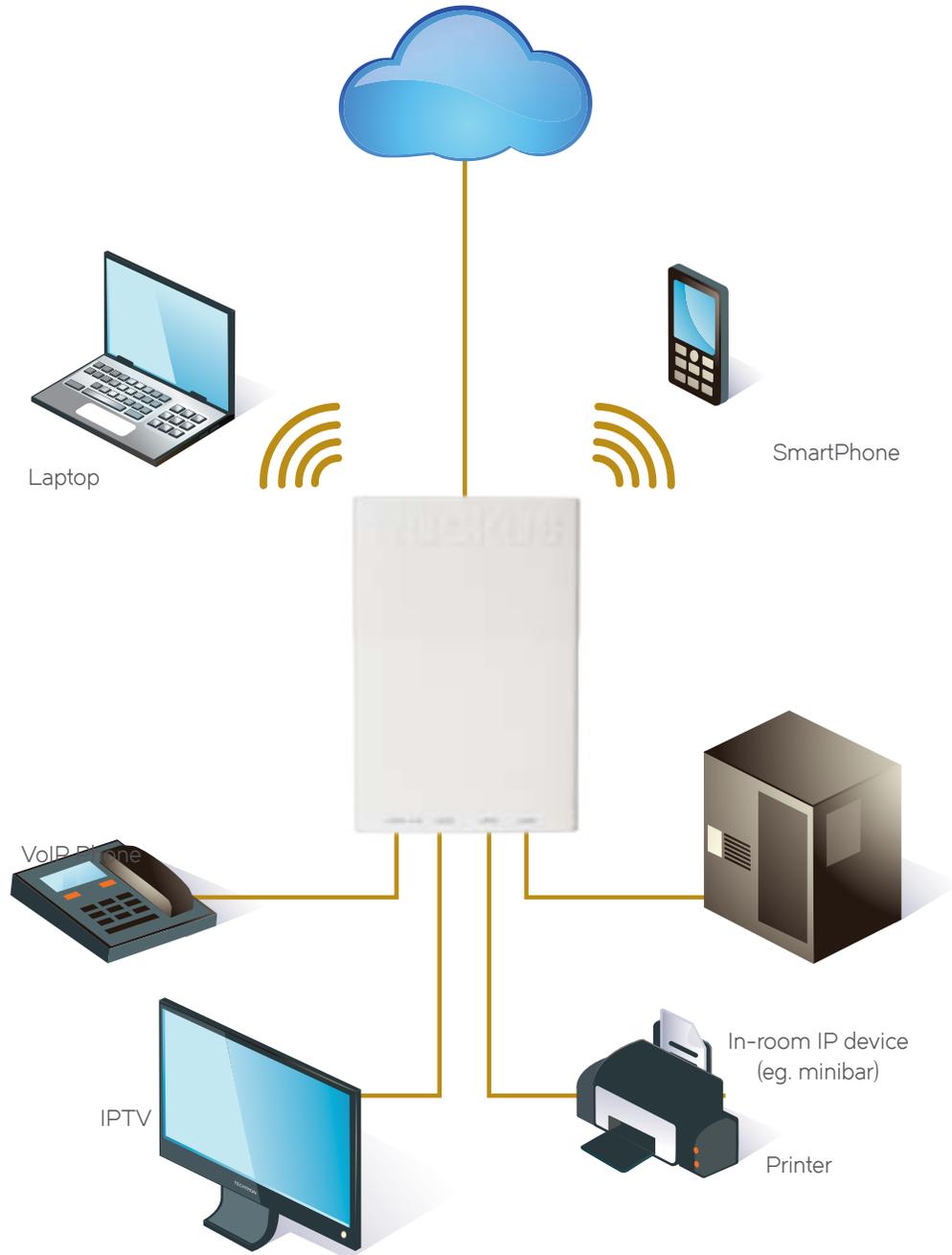
Gigabit POE
Uplink Port

POE Out Port

FEATURES

- 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

- Integrated dual radio 2x2 802.11ac Wi-Fi AP and Ethernet wall switch

- High Performance Wi-Fi and four Ethernet access ports offers HSIA

- Wi-Fi Redundancy, in-room coverage as well as corridor and adjacent room

- Powered by either POE or 48VDC

- Supplies POE power for in-room devices such as VoIP phones

- SmartCast QoS

- 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*

- Zero-IT and Dynamic PSK*

- Captive portal and guess accounts*

- Application recognition and control*

- Mounts into standard US and EU single gang wall jack

- RJ-45 for uplink Ethernet port

- Cable channel for preserving legacy infrastructure (e.g. PBX phones)

- SmartMesh Networking*

* with management

CONVERGED WIRED AND WIRELESS SERVICES

Laptop

SmartPhone

VoIP Phone

IPTV

In-room IP device
(eg. minibar)

Printer

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
ZoneFlex 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 ZoneFlex 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

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