RUCKUS H670

Wall Mounted Indoor Wi-Fi 7 (802.11be) Access Point with 9.34 Gbps Data Rate

BENEFITS

Wi-Fi 7 Wired & Wireless In-Room Connectivity
Provides exceptional end-user experience expanding the range of use cases for Wi-Fi 7 including guest rooms, MDU apartments, meeting rooms. Features 5GbE uplink and 4x 2.5GbE ports (two PoE enabled) for connected devices.

BeamFlex+ Adaptive Antenna Technology
RUCKUS BeamFlex+ patented smart antennas boost coverage, speed, and capacity—delivering stronger signals, fewer errors, and higher throughput for any client. They also enhance MIMO performance and maximize spatial multiplexing.

Converged Access Point
Unify Wi-Fi and non-Wi-Fi networks with built-in dual concurrent BLE/Zigbee radios (supporting Matter and Thread*).

Multiple Management Options
The H670 can be managed via RUCKUS One cloud controller, SmartZone on-premises physical or virtual appliances or controllerless with RUCKUS Unleashed. Centralized control enables auto-provisioning for faster deployments, simplified firmware upgrades, and a seamless, consistent network experience..

Enhanced Security
Protected access with WPA3 and RUCKUS DPSK3, combining advanced encryption with flexible, user-friendly personal user and device specific Wi-Fi passwords.

More Than Wi-Fi
Support solutions beyond Wi-Fi with RUCKUS IoT Suite, RUCKUS AI, RUCKUS One, RUCKUS Cloudpath Enrollment System and onboarding software.

* Supported in a future software release

Ultra-high-definition video, virtual reality, IoT devices, and an ever-growing number of connected gadgets place unprecedented demands on networks. In crowded environments, traditional Wi-Fi often falters, struggling with interference and congestion.

With groundbreaking advances in speed, capacity, latency, and reliability, Wi-Fi 7 unlocks next-generation experiences—from seamless UHD streaming and immersive AR/VR to real-time gaming and large-scale IoT—fueling smart buildings, MDUs, hospitality, and enterprise digital transformation.

RUCKUS H670: The New Benchmark for Wi-Fi 7 In-Room Connectivity

The RUCKUS H670 is a wall-mounted Wi-Fi 7 tri-band concurrent indoor AP that delivers 6 spatial streams (2x2:2 in 2.4GHz, 5GHz, and 6GHz). With Multi-Link Operation (MLO), Preamble Puncturing, 4K QAM, and 320MHz channels, it achieves a combined data rate up to 9.34 Gbps, ensuring exceptional performance in any environment.

A 5 Gbps Ethernet port ensures smooth, high-speed backhaul performance, while four 2.5 Gbps (two PoE-enabled) ports power in-room devices like IP phones, security cameras, and smart IoT endpoints. This makes the H670 a true converged edge device; delivering both wireless and wired connectivity in a single, elegant and easy to deploy wall-mounted unit.

Converged IoT Access

The H670 features **dual concurrent IoT radios—BLE and Zigbee**—enabling seamless integration of smart locks, sensors, and building automation systems. By converging Wi-Fi and IoT access in a single device, it reduces deployment complexity and cost while supporting scalable, smarter environments.

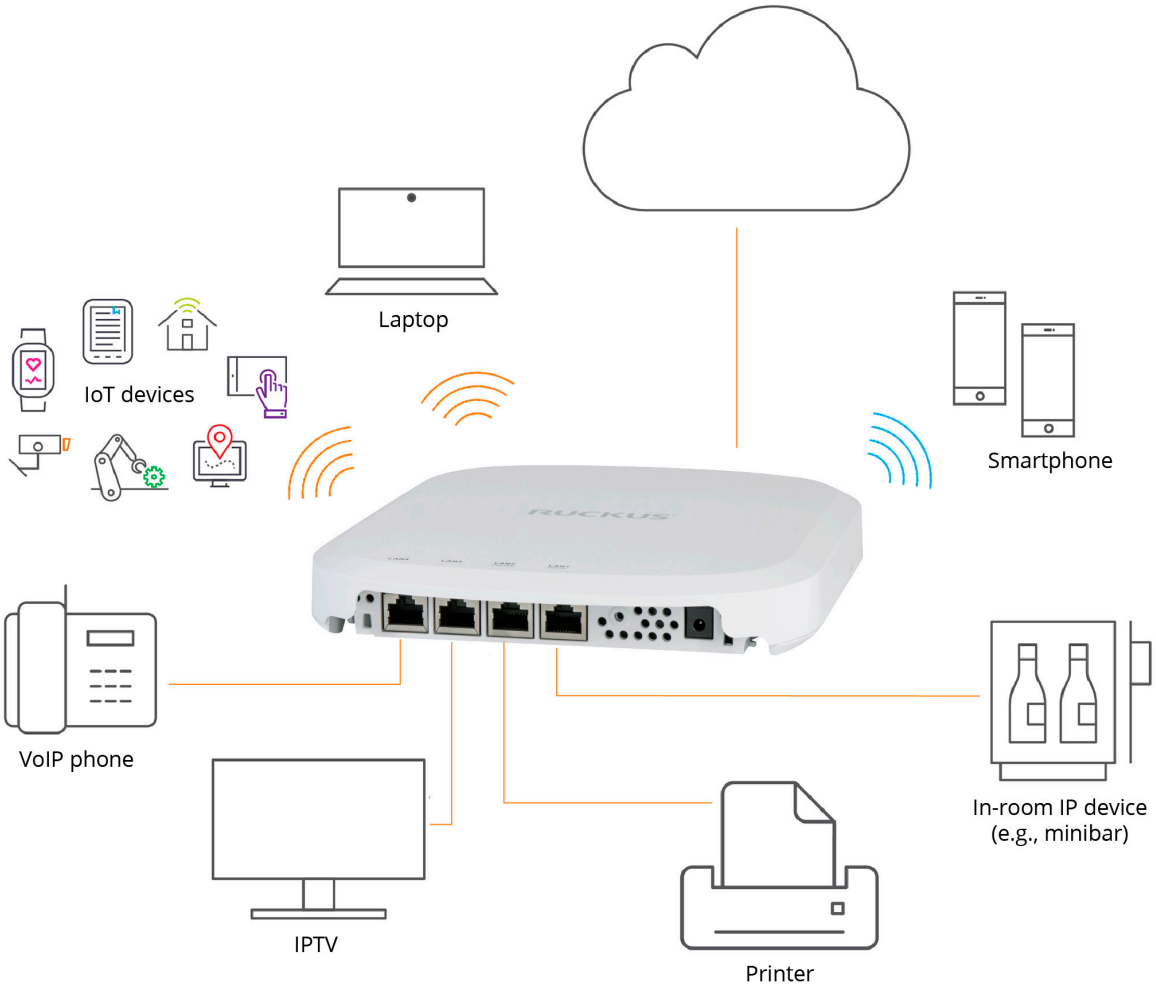
Key Highlights

- **AI-Driven Wi-Fi 7 innovation:** Faster speeds, lower latency, higher capacity
- **Wall-mounted simplicity:** Ideal for hotel rooms, student housing, and MDUs
- **Wired + wireless connectivity:** 5GbE uplink and 4x 2.5GbE ports for connected devices
- **Future-ready IoT:** Dual concurrent BLE/Zigbee radios
- **Secure design:** TPM 2.0 and Secure Boot safeguard the edge
- **RUCKUS® ONE AI:** powered diagnostics and corrective actions
- **IntentAI™:** Outcome-focused, purpose driven automation
- **RUCKUS Advanced RF Technology:** BeamFlex+, SmartMesh, SmartRoam, ChannelFly®

The RUCKUS H670 brings next-generation Wi-Fi 7 performance and in-room connectivity together, delivering unmatched experiences for residents, guests, and employees alike

About RUCKUS Purpose-Driven Networks

RUCKUS takes a purpose-driven approach to networking, delivering not just connectivity, but measurable business outcomes and exceptional user experiences. Our solutions are built to solve real-world challenges, from keeping students connected on campus to enabling seamless guest experience in hospitality and MDUs and mission-critical enterprise operations.



BeamFlex+ Adaptive Antenna Technology

The RUCKUS® H670 comes with BeamFlex+® adaptive antennas, enabling the AP to dynamically select from more than 4,000 possible antenna patterns in real time. This adaptive capability optimizes the signal path for each connected device to deliver the strongest possible link quality.

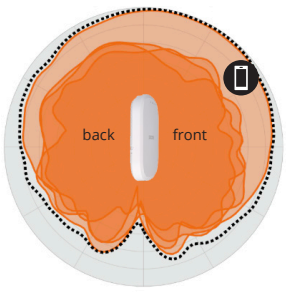
Key benefits include:

- **Improved Wi-Fi coverage:** Focused signal energy extends range and enhances connectivity through obstacles and reflections.
- **Reduced RF interferenc**e: Intelligent pattern selection minimizes interference from neighboring devices and access points.

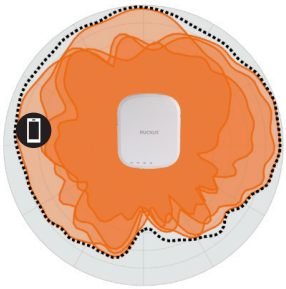
In contrast to traditional omni-directional antennas that radiate energy uniformly in all directions—often oversaturating the environment—BeamFlex+ adaptively directs radio energy per device, on a packet-by-packet basis. This approach maximizes Wi-Fi efficiency and capacity in high-density environments such as hotels, apartments, and student housing.

BeamFlex+ operates independently of client capability, ensuring performance improvements even for legacy Wi-Fi devices that do not support modern beamforming protocols.

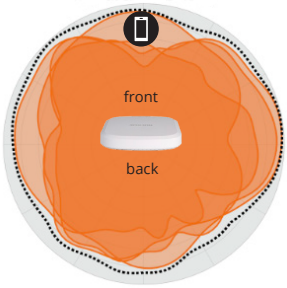
Examples of BeamFlex+ Patterns



Side view



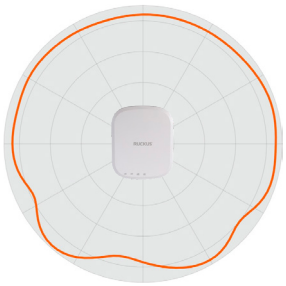
Front view



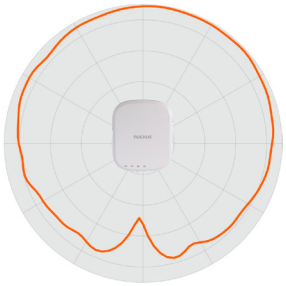
Top view

Note: The outer trace represents the composite RF footprint of all possible BeamFlex+ antenna patterns, while each inner trace represents one BeamFlex+ antenna pattern within the composite outer trace.

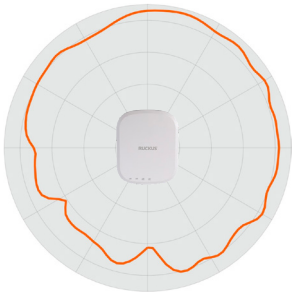
Client | Composite Pattern | BeamFlex+



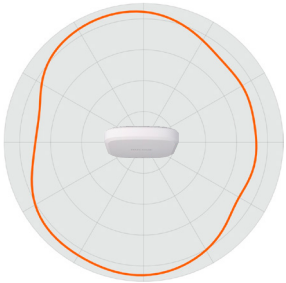
Composite Azimuth Outer Trace at 2.4 GHz



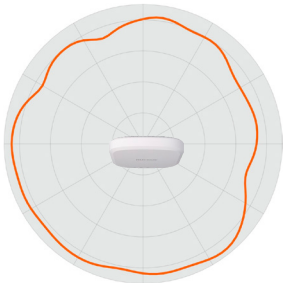
Composite Azimuth Outer Trace at 5 GHz



Composite Azimuth Outer Trace at 6 GHz



Composite Elevation Outer Trace at 2.4 GHz



Composite Elevation Outer Trace at 5 GHz

Composite Elevation Outer Trace at 6 GHz

Note: The outer trace represents the composite RF footprint of all possible BeamFlex+ antenna patterns

Specifications

WI-FI	
Wi-Fi Standards	• IEEE 802/11a/b/g/n/ac/ax/be, Wi-Fi 7†
Supported Rates	• 802.11be: 4 to 5765 Mbps • 802.11ax: 4 to 4804 Mbps • 802.11ac: 6.5 to 866 Mbps • 802.11n: 6.5 to 300 Mbps • 802.11a/g: 6 to 54 Mbps • 802.11b: 1 to 11 Mbps
Supported Channels	• 2.4GHz: 1-13 • 5GHz: 36-64, 100-144, 149-165 • 6GHz: 1-233
MIMO	• 2x2 SU-MIMO in tri-band mode. • 2x2 MU-MIMO in tri-band mode.
Spatial Streams	• 2 in tri-band mode
Radio Chains and Streams	• 2x2:2 in all 3 bands
Channelization	• 20, 40, 80, 160, 320 MHz
Security	• WEP, WPA, WPA-PSK, WPA2, WPA2-PSK, WPA3, WPA3-SAE, OWE, PMF (802.11w), Dynamic PSK, DPSK3 • WIPS/WIDS. TPM 2.0, Secure Boot

† Pending certification

RF	
Antenna Type	• BeamFlex+ adaptive antennas with polarization diversity • Adaptive antenna that provides 4,000+ unique antenna patterns per band
Antenna Gain (max)	• Up to 3dBi
Peak Transmit Power (Tx port/ chain + Combining gain)	• 2.4GHz: 19dBm (2x2) • 5GHz: 22dBm (2x2) • 6GHz: 22dBm (2x2)
Frequency Bands	• ISM (2.4-2.4835 GHz) • 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) • U-NII-5 (5.925–6.425GHz) • U-NII-6 (6.425–6.525GHz) • U-NII-7 (6.525–6.875GHz) • U-NII-8 (6.875–7.125GHz)

2.4GHZ RECEIVE SENSITIVITY (dBm)

HT20		HT40		VHT20		VHT40	
MCS0	MCS7	MCS0	MCS7	MCS0	MCS7	MCS0	MCS7
-97	-79	-94	-76	-97	-79	-94	-76
HE20/EHT20				**HE40/EHT40**			
MCS0	MCS7	MCS9	MCS11	MCS0	MCS7	MCS9	MCS11
-97	-79	-70	-64	-94	-76	-67	-61

5GHZ RECEIVE SENSITIVITY (dBm) in 2x2 tri-band mode

HT20/VHT20				HT40/VHT40				VHT80			
MCS0	MCS7	MCS8	MCS9	MCS0	MCS7	MCS8	MCS9	MCS0	MCS7	MCS8	MCS9
-95	-77	-74	-70	-92	-74	-70	-67	-89	-70	-67	-64
HE20/EHT20				**HE40/EHT40**				**HE80/EHT80**			**HE160/EHT160**
MCS0	MCS9	MCS13		MCS0	MCS9	MCS13		MCS0	MCS9	MCS13	MCS0	MCS9	MCS13
-95	-70	-59		-92	-67	-57		-89	-64	-55	-86	-61	-52

6GHZ RECEIVE SENSITIVITY (dBm)

HE20/EHT20			HE40/EHT40			HE80/EHT80		
MCS0	MCS9	MCS13	MCS0	MCS9	MCS13	MCS0	MCS9	MCS13
-95	-71	-58	-92	-68	-56	-89	-65	-53
HE160/EHT160				**EHT320**				
MCS0	MCS9	MCS11	MCS13	MCS0	MCS9	MCS11	MCS13	
-86	-62	-55	-50	-83	-59	-52	-47	

2.4GHZ TX POWER TARGET (PER CHAIN)

Rate	Pout (dBm)
MCS0, HT20	16
MCS7, HT20	15
MCS9, VHT20	14
MCS11, HE40	13
MCS13, EHT40	12

5GHZ TX POWER TARGET (PER CHAIN)

	Pout (dBm)			
Rate	2OMHz	40MHz	80MHz	160MHz
MCS0	19	19	19	19
MCS7	15	14.5	14	13.5
MCS9	14	13.5	13	12
MCS11	13	12.5	12	11
MCS13	12	11.5	11	9

6GHZ TX POWER TARGET (PER CHAIN)

	Pout (dBm)				
Rate	20MHz	40MHz	80MHz	160MHz	320MHz
MCS0, HT40	19	19	19	18	18
MCS7, HT40	14	13	13	12	11
MCS9, VHT80	12	11.5	11.5	11	10
MCS11, HE160	11	10.5	10	9	8
MCS13, EHT320	10	9.5	9	8	6

Specifications

POWER CONSUMPTION			
Mode	**Max Power Consumption**	**System Configuration**	**Wi-Fi Radios**
DC Power	48.55W	• 5Gbps Ethernet Enabled • 4x 2.5Gbps LAN Ethernet Enabled • 2 IoT Radios Enabled • PoE Out (1xAT OR 2xAF)	• 2.4GHz (2x2) Tx 16dBm • 5GHz (2x2) Tx 19dBm • 6GHz (2x2) Tx 19dBm
802.3bt6 PoH, uPoE	45.74W Avg LLDP Request: 51W	• 5Gbps Ethernet Enabled • 4x 2.5Gbps LAN Ethernet Enabled • 2 IoT Radios Enabled • PoE Out (1xAT OR 2xAF)	• 2.4GHz (2x2) Tx 16dBm • 5GHz (2x2) Tx 19dBm • 6Ghz (2x2) Tx 19dBm
802.3at	25.5W	• 5Gbps Ethernet Enabled • 4x 2.5Gbps LAN Ethernet Enabled • 2 IoT Radios Enabled • No PoE out	• 2.4GHz (2x2) Tx 16dBm • 5GHz (2x2) Tx 19dBm • 6Ghz (2x2) Tx 19dBm

PERFORMANCE AND CAPACITY	
Peak PHY Rates	• 2.4GHz: 689 Mbps • 5GHz: 2882 Mbps • 6GHz: 5765 Mbps
Client Capacity	• Up to 768 clients per AP
SSID	• Up to 36 per AP

RUCKUS RADIO MANAGEMENT	
Antenna Optimization	• BeamFlex+ • Polarization Diversity with Maximal Ratio Combining (PD- MRC)
Wi-Fi Channel Management	• ChannelFly • Background Scan Based
Client Density Management	• Adaptive Band Balancing • Client Load Balancing • Airtime Fairness • Airtime-based WLAN Prioritization
SmartCast Quality of Service	• QoS-based scheduling, QoS Mirroring • Directed Multicast • L2/L3/L4 ACLs
Mobility	• SmartRoam
Diagnostic Tools	• Spectrum Analysis • SpeedFlex

NETWORKING	
Controller Platform Support	• SmartZone • RUCKUS Unleashed • RUCKUS One
Mesh	• SmartMesh™ wireless meshing technology. Self-healing Mesh in 2.4 GHz, 5GHz, and 6GHz
IP	• IPv4, IPv6, dual-stack
VLAN	• 802.1Q (1 per BSSID or dynamic per user based on RADIUS) • VLAN Pooling • Port-based
802.1x	• Authenticator & Supplicant
Tunnel	• GRE, Soft-GRE, VXLAN
Policy Management Tools	• Application Recognition and Control • Access Control Lists • Device Fingerprinting • Rate Limiting • URL Filtering
IoT Onboard	• Integrated BLE and Zigbee, (– Two IoT radios) • Matter & Thread Gateway capable

PHYSICAL INTERFACES	
Ethernet	• 1x 100M/1/2.5/5GbE (PoE in) port • 4x 10M/100M/1/2.5GbE (up to 2x PoE out) port • Power over Ethernet In (802.3at/bt6) with Category 5e (or better) cable • Power Over Ethernet Out (optional: 1xAT or 2xAF) with DC or BT6 power, CAT5e (or better) cable • LLDP support
DC Power	• • 48V DC Power Jack

PHYSICAL CHARACTERISTICS	
Physical Size	• 182.6mm (7.19in) x 222.1mm (8.76in) x 32mm (1.26in)
Weight	• 808g (1.78lb) with bracket
Mounting	• Wall Bracket
Physical Security	• Secure bracket
Operating Temperature	• 0ºC (32ºF) to 40ºC (104ºF)
Operating Humidity	• Up to 95%, non-condensing

Specifications

CERTIFICATIONS AND COMPLIANCE	
Wi-Fi Alliance[1]	• Wi-Fi CERTIFIED™ a, b, g, n, ac, ax, be (Wi-Fi 6, Wi-Fi 7[3]) • Passpoint®, Vantage
Standards Compliance[2]	• IEC/EN/UL 60950-1 Safety • IEC/EN/UL 62368-1 Safety • EN 60601-1-2 Medical EMC • EN 61000-4-2/3/5 Immunity • EN 50121-1 Railway EMC • EN 50121-4 Railway Immunity • IEC 61373 Railway Shock & Vibration • UL 2043 Plenum • EN 62311 Human Safety/RF Exposure • WEEE & RoHS For a complete list of supported standards, see the declaration of conformity.

[1] For complete list of WFA certifications, please see Wi-Fi Alliance website.
[2] For current certification status, please see price list.
[3] Pending certification

SOFTWARE AND SERVICES	
Cloud Based Services	• RUCKUS One
Network Analytics	• RUCKUS AI (Formerly known as RUCKUS Analytics)
Security and Policy	• Cloudpath

ORDERING INFORMATION	
901-H670-XX00	RUCKUS H670 Wi-Fi 7 tri-band concurrent wireless Access Point with 2x2:2 (2.4GHz) + 2x2:2 (5GHz) + 2x2:2 (6GHz). Wi-Fi 7 in all three bands and 6GHz LPI mode, BeamFlex+, one 1/2.5/5GE backhaul PoH/uPoE/802.3bt6 support, 4x2.5GE LAN ports w/ optional 1xAT or 2xAF PoE_Out, onboard BLE and Zigbee selectable dual IoT radios, TPM 2.0, and Secure Boot. Wall mounting bracket included. Power adapter not included. Includes Limited Lifetime Warranty.

See RUCKUS price list for country-specific ordering information.

Warranty: Sold with a limited lifetime warranty.

For details see: http://support.ruckuswireless.com/warranty.

OPTIONAL ACCESSORIES	
902-1180-XX00	• Multigigabit PoE injector (1/2.5/5/10G) Base-T PoE port, 60W
902-0120-0000	• Spare, Accessory Mounting Bracket
902-1170-XX00	• Power Supply (48V, 1.04A, 50W)

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.

Product owner is responsible to abide by the country of deployment spectrum regulations when configuring and deploying this product/device.

The 6GHz band is enabled in countries where it is authorized by the local regulations. AP operates as per local regulations via country regulatory domain, otherwise 6GHz radio is disabled. Once this product is certified to operate in a particular country the 6GHz band may be enabled with a future software release.

About RUCKUS Networks

RUCKUS Networks builds and delivers purpose-driven networks that perform in the demanding environments of the industries we serve. Together with our network of trusted go-to-market partners, we empower our customers to deliver exceptional experiences to the guests, students, residents, citizens and employees who count on them.

www.ruckusnetworks.com

Visit our website or contact your local RUCKUS representative for more information.

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RUCKUS® NETWORKS