

# R850 | RUCKUS R850 Indoor Access Point



## Ultra High Performance Wi-Fi 6 8x8:8 Indoor Access Point with 5.9 Gbps HE80/40 Speeds and Embedded IoT

- Connect More Devices Simultaneously - Improve device performance, by enabling more simultaneous device connections with built-in 8 spatial streams (dual-concurrent, 8x8:8 in 5GHz, 4x4:4 in 2.4GHz), MU-MIMO and OFDMA technology while enhancing non-Wi-Fi 6 client performance. Support for up to 1,024 clients
- Ultra-High-Density Performance - Provides exceptional end-user experience within stadiums, large public venues, convention centers and school auditoriums with the RUCKUS Ultra-High-Density Technology Suite
- Enhanced Security - Reinforce security with WPA3, the latest Wi-Fi security standard and receive enhanced protection from man-in-the-middle attacks
- Multi-Gigabit Access Speeds - Optimized multi-gigabit Wi-Fi performance delivered using built-in 5GbE/2.5GbE Ethernet ports to connect to multi-gigabit switches
- Device Management Options - Manage the R850 with on-premises physical/virtual appliances or the cloud
- Better Mesh Networking - Minimize complexity by reducing expensive cabling with SmartMesh that dynamically creates self-forming, self-healing mesh networks
- 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
- More than Wi-Fi - Support services beyond Wi-Fi with RUCKUS IoT Suite, Cloudpath security and onboarding software, SPoT Wi-Fi locationing engine, and RUCKUS analytics

The R850 is based on the latest Wi-Fi standard, Wi-Fi 6 and bridges the performance gap from 'gigabit' Wi-Fi to 'multi-gigabit' Wi-Fi in support of the insatiable demand for better and faster Wi-Fi. The R850 makes it easy to deliver reliable, secure, ultra-high-performance connectivity to large enterprises, public venues, convention centers, and other challenging environments.

The R850 is our highest capacity dual-band, dual-concurrent Wi-Fi 6 (802.11ax) access point (AP) that supports 12 spatial streams (8x8:8 in 5GHz, 4x4:4 in 2.4GHz). The R850, with OFDMA and MU-MIMO capabilities, efficiently manages up to 1,024 client connections with increased capacity, improved coverage and performance in ultra-high dense environments.

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Product Type</b>	Indoor access point
<b>Product Brand</b>	RUCKUS®

## General Specifications

<b>Antenna Patterns, per band</b>	4000+
<b>Antenna Gain</b>	Up to 2 dBi
<b>BeamFlex</b>	Yes
<b>ChannelFly</b>	Yes

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<b>Concurrent Users</b>	1024
<b>Controller Support</b>	RUCKUS Cloud™   RUCKUS SmartZone   RUCKUS ZoneDirector   Standalone
<b>Ethernet Ports</b>	1 x 1 / 2.5 / 5 GB/s   1 x 1 GbE
<b>IoT Support</b>	IoT Onboard
<b>PD-MRC</b>	Yes
<b>PHY Rate at 2.4 GHz, maximum</b>	1148 Mb/s
<b>PHY Rate at 5 GHz, maximum</b>	4800 Mb/s
<b>Radio Chains and Streams</b>	8x8:8 SU-MIMO and MU-MIMO
<b>Rx Sensitivity at 2.4 GHz</b>	-91 dBm
<b>Rx Sensitivity at 5 GHz</b>	-91 dBm
<b>SmartMesh</b>	Yes
<b>USB</b>	USB 2.0
<b>Venue Type</b>	Hospitality   Public Venue   Transportation
<b>Venue Sub-Type</b>	Convention Floor   Lecture Hall   Transit Stations   Venue Common Spaces
<b>Wi-Fi Interface Standard</b>	IEEE 802.11a/b/g/n/ac/ax
<b>Wi-Fi Interface Standard at 2.4 GHz</b>	802.11ax
<b>Wi-Fi Interface Standard at 5 GHz</b>	802.11ax

## Environmental Specifications

<b>Operating Temperature</b>	0 °C to +50 °C (+32 °F to +122 °F)
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