

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

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|------------------------------|---|
| Regional Availability | Asia Australia/New Zealand EMEA Latin America North America |
| Product Type | Indoor access point |
| Product Brand | RUCKUS® |

General Specifications

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|-----------------------------------|-------------|
| Antenna Patterns, per band | 4000+ |
| Antenna Gain | Up to 2 dBi |
| BeamFlex | Yes |
| ChannelFly | Yes |

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

Environmental Specifications

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|------------------------------|------------------------------------|
| Operating Temperature | 0 °C to +50 °C (+32 °F to +122 °F) |
|------------------------------|------------------------------------|