

R730

Indoor 802.11ax 8x8:8 Wi-Fi Access Point
with Multi-gigabit Backhaul



DATA SHEET



The R730 is based on the latest Wi-Fi standard, 802.11ax 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 Ruckus R730 is our highest capacity dual-band, dual-concurrent 802.11ax AP that supports 12 spatial streams (8x8:8 in 5GHz, 4x4:4 in 2.4GHz). The R730, with OFDMA and MU-MIMO capabilities, efficiently manages more than 1K client connections with increased capacity, improved coverage and performance in ultra-high dense environments. Furthermore, 5 Gbps multi-gigabit Ethernet ports enhances backhaul capacity.

Additionally, the R730 is IoT- and LTE-ready, and supports wireless standards beyond Wi-Fi in combination with the Ruckus IoT Suite and our CBRS/OpenG modules.

The R730 addresses the increasing client demands in transit hubs, auditoriums, stadiums, conference centers, and other highly trafficked indoor spaces. It is the perfect choice for data-intensive streaming multimedia applications like 4K video transmissions, while supporting latency sensitive voice and data applications with stringent quality-of-service requirements.

The R730 when paired with the Ruckus Ultra-High density Technology Suite found only in the Ruckus Wi-Fi portfolio, dramatically improves network performance through a combination of patented wireless innovations and learning algorithms that includes:

- **Airtime Decongestion:** Increases average network throughput in heavily congested environments
- **Transient Client management:** Reduces interference traffic from unconnected Wi-Fi devices
- **BeamFlex+ Antennas:** Extended coverage and optimized throughput with patented multi-directional antennas and radio patterns

Whether you're deploying ten or ten thousand APs, the R730 is also easy to manage through Ruckus' appliance and virtual management options.

BENEFITS

CONNECT MORE DEVICES SIMULTANEOUSLY

Improve device performance, by enabling more simultaneous device connections with built-in 12 spatial streams (8x8:8 in 5GHz, 4x4:4 in 2.4GHz), MU-MIMO and OFDMA technology.

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

Upgrade to the latest Wi-Fi security standard with WPA3 and receive enhanced protection from man-in-the-middle attacks in the most secure way.

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 R730 with on premise physical/virtual appliances and control auto-provisioning for faster deployment and seamless firmware upgrades.

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 locating engine, and SCI network analytics.

WI-FI	
Wi-Fi Standards	<ul style="list-style-type: none"> IEEE 802.11a/b/g/n/ac/ax
Supported Rates	<ul style="list-style-type: none"> 802.11ax: 4 to 4800 Mbps 802.11ac: 6.5 to 3467 Mbps 802.11n: 6.5 to 600 Mbps 802.11a/g: 6 to 54 Mbps 802.11b: 1 to 11 Mbps
Supported Channels	<ul style="list-style-type: none"> 2.4GHz: 1-13 5GHz: 36-64, 100-144, 149-165
MIMO	<ul style="list-style-type: none"> 8x8 MU-MIMO 8x8 SU-MIMO
Spatial Streams	<ul style="list-style-type: none"> 8 MU-MIMO 8 SU-MIMO
Channelization	<ul style="list-style-type: none"> 20, 40, 80, 160 MHz
Modulation	<ul style="list-style-type: none"> OFDMA (up to 1024-QAM)
Security	<ul style="list-style-type: none"> WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i, Dynamic PSK WIPS/WIDS
Other Wi-Fi Features	<ul style="list-style-type: none"> WMM, Power Save, TxBF, LDPC, STBC, 802.11r/k/v Hotspot Hotspot 2.0 Captive Portal WISPr

RF	
Antenna Type	<p>2.4GHz Antenna</p> <ul style="list-style-type: none"> Omni: 2 Antennas BeamFlex+ Adaptive: 2 Antennas Polarization: 3 Vertical & 1 Horizontal <p>5GHz Antennas</p> <ul style="list-style-type: none"> Omni: 4 Antennas BeamFlex+ adaptive: 4 Antennas Polarization: 6 Vertical & 2 Horizontal
Antenna Gain (max)	<ul style="list-style-type: none"> 2.4GHz: 3 dBi 5GHz: 3 dBi
Frequency Bands	<ul style="list-style-type: none"> 2.4 - 2.484 GHz 5.17 - 5.33 GHz 5.49 - 5.71 GHz 5.735 - 5.835 GHz

PERFORMANCE AND CAPACITY	
Peak PHY Rates	<ul style="list-style-type: none"> 2.4GHz: 1.148 Gbps (11ax) 5GHz: 4.8 Gbps (11ax)
Client Capacity	<ul style="list-style-type: none"> Up to 1024 clients per AP
Simultaneous VoIP Clients	<ul style="list-style-type: none"> Up to 60 per AP
SSID	<ul style="list-style-type: none"> Up to 16 per radio

RUCKUS RADIO MANAGEMENT	
Antenna Optimization	<ul style="list-style-type: none"> BeamFlex+ PD-MRC
Wi-Fi Channel Management	<ul style="list-style-type: none"> ChannelFly
Client Density Management	<ul style="list-style-type: none"> Band Balancing Client Load Balancing Airtime Fairness Airtime-based WLAN Prioritization
Queuing & Scheduling	<ul style="list-style-type: none"> SmartCast
Mobility	<ul style="list-style-type: none"> SmartRoam
Diagnostic Tools	<ul style="list-style-type: none"> Spectrum Analysis SpeedFlex
High Density Deployments (RF Innovations)	<ul style="list-style-type: none"> Perpacket Adaptive Power Adaptive Wi-Fi Cell Size Transient Client Management Airtime Decongestion

NETWORKING	
Controller Platform Support (initial release)	<ul style="list-style-type: none"> SmartZone ZD Standalone
Mesh	<ul style="list-style-type: none"> SmartMesh™ wireless meshing technology.
IP	<ul style="list-style-type: none"> IPv4, IPv6
VLAN	<ul style="list-style-type: none"> 802.1Q BSSID-based (16 BSSIDs / radio) Port-based Dynamic, per user based on RADIUS
802.1x	<ul style="list-style-type: none"> Wired & wireless Authenticator & Supplicant
Tunnel	<ul style="list-style-type: none"> RuckusGRE, SoftGRE
Policy Management Tools	<ul style="list-style-type: none"> Application Visibility & Control Access Control Lists Device Fingerprinting

OTHER RADIO TECHNOLOGIES	
IoT	<ul style="list-style-type: none"> BLE, Zigbee (Validation in progress)
LTE	<ul style="list-style-type: none"> OpenG/CBRS (Validation in progress)

PHYSICAL INTERFACES	
Ethernet	<ul style="list-style-type: none"> 1x 1/2.5/5 Gbps port, RJ-45 1x 10/100/1000 Mbps port, RJ-45
USB	<ul style="list-style-type: none"> 1 USB 2.0 port, Type A

PHYSICAL CHARACTERISTICS	
Physical Size	<ul style="list-style-type: none"> • 22.19 x 24.96 x 5.8 cm • 8.74 x 9.83 x 2.28 in.
Weight	<ul style="list-style-type: none"> • 1.6 kg • 3.52 lbs
Mounting	<ul style="list-style-type: none"> • Wall, Acoustic ceiling, Desk • Secure Bracket (sold separately)
Physical Security	<ul style="list-style-type: none"> • Hidden Latching Mechanism • Kensington Lock Hole • T-Bar Torx
Operating Temperature	<ul style="list-style-type: none"> • -10°C (14°F) to 50°C (122°F)
Operating Humidity	<ul style="list-style-type: none"> • Up to 95%, non-condensing

CERTIFICATIONS AND COMPLIANCE	
Countries	<ul style="list-style-type: none"> • U.S., Europe, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, Hong Kong, India, Indonesia, Israel, Japan, Korea, Malaysia, Mexico, New Zealand, Peru, Philippines, Saudi Arabia, Singapore, South Africa, Taiwan, Thailand, UAE, Vietnam
Wi-Fi Alliance	<ul style="list-style-type: none"> • Wi-Fi CERTIFIED™ a, b, g, n, ac, ax • Passpoint® • Vantage
Standards Compliance	<ul style="list-style-type: none"> • EN 60950-1 Safety • EN 60601-1-2 Medical • EN 61000-4-2/3/5 Immunity • EN 50121-1 Railway EMC • EN 50121-4 Railway Immunity • IEC 61373 Railway Shock & Vibration • EN 62311 Human Safety/RF Exposure • UL 2043 Plenum • WEEE & RoHS • ISTA 2A Transportation

SOFTWARE AND SERVICES	
Location Based Services	<ul style="list-style-type: none"> • SPoT
Network Analytics	<ul style="list-style-type: none"> • SmartCell Insight (SCI)
Security and Policy	<ul style="list-style-type: none"> • Cloudpath
IoT	<ul style="list-style-type: none"> • Ruckus IoT Suite

Copyright © 2018 Ruckus Networks, an ARRIS company. All rights reserved. No part of this content may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from Ruckus Networks ("Ruckus"). Ruckus reserves the right to revise or change this content from time to time without obligation on the part of Ruckus to provide notification of such revision or change.

The Ruckus, Ruckus Wireless, Ruckus logo, Big Dog design, BeamFlex, ChannelFly, Edgelron, FastIron, HyperEdge, ICX, IronPoint, OPENG, and Xclaim and trademarks are registered in the U.S. and other countries. Ruckus Networks, Dynamic PSK, MediaFlex, Simply Better Wireless, SmartCast, SmartCell, SmartMesh, SpeedFlex, Unleashed, and ZoneDirector are Ruckus trademarks worldwide. Other names and brands mentioned in these materials may be claimed as the property of others.

Ruckus provides this content without warranty of any kind, implied or expressed, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Ruckus may make improvements or changes in the products or services described in this content at any time. The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice.



350 West Java Dr., Sunnyvale, CA 94089 USA

www.ruckusnetworks.com