ZoneFlex R600

Dual-Band 802.11ac 3X3:3 Smart Wi-Fi Access Points

Ruckus
Simply Better Wireless.

DATA SHEET

BENEFITS

EXTENDED RANGE REQUIRES FEWER APS

Adaptive antenna technology delivers up to 2x increase in Wi-Fi signal coverage minimizing the number of APs required to service any area

SLEEK, LOW PROFILE ENCLOSURE FOR EASE-OF-DEPLOYMENT

Aesthetically-pleasing design and a range of mounting options

CHANNEL SELECTION OPTIMIZES THROUGHPUT

ChannelFly dynamic channel management, based on throughput measurements, not just interference, chooses the best channel to give users the highest possible throughput

SUPER SIMPLE CONFIGURATION AND MANAGEMENT

The industry's simplest configuration and management through a Web-based wizard

FLEXIBLE DEPLOYMENT OPTIONS

Standalone or controller-based migration

ADAPTIVE POLARIZATION DIVERSITY (PD-MRC)

Dual-polarized antennas that are dynamically selected provide better reception for hard to hear clients and more consistent performance as clients constantly change orientation

HASSLE FREE MIGRATION TO HIGHER SPEED WI-FI

Support for standard 802.3af power over Ethernet allows enterprises to use existing PoE switches without costly upgrades

UNLEASH THE PERFORMANCE

In the Unleashed version, the ZoneFlex R500 is capable of supporting controller-less deployments for up to 25 access points and 512 client devices

802.11AC HIGH PERFORMANCE MID-RANGE 3X3:3 SMART WI-FI ACCESS POINTS WITH ADAPTIVE ANTENNA TECHNOLOGY

Ruckus R600 Unleashed enables controller-less Wi-Fi architecture for small business environments with superior performance, lower costs and simplified management. Separate controllers and access point licenses are no longer needed, significantly reducing upfront costs. Set-up is also easy, thanks to a simplified web interface that helps businesses configure Wi-Fi in just 60 seconds.

The ZoneFlex R600 Unleashed combines patented adaptive antenna technology and automatic interference mitigation to deliver consistent, predictable performance at extended ranges with up to an additional 6dB of BeamFlex gain on top of the physical antenna gain and up to 15dB of interference mitigation.

The R600 is ideal for wireless networks servicing mobile devices with dual-polarized antennas that adapt in real time to maximize performance for the mobile enterprise.

Performance is further enhanced as the ZoneFlex R600 Unleashed integrates Ruckus' patented BeamFlex, a software-controlled, high gain adaptive antenna technology. The ZoneFlex R600 Unleashed automatically selects channels for highest throughput potential using Ruckus ChannelFly dynamic channel management, adapting to environmental changes.

A sleek and low-profile design, the ZoneFlex R600 Unleashed was purpose-built for small-medium enterprises requiring reliable high speed client connectivity. It is ideal for a variety of medium density enterprise and hotspot environments including SMB's such as independent hotels, local retailers and non franchise restaurants, etc. outlets, and branch offices.

© 2016 RUCKUS WIRELESS, INC. COMPANY PROPRIETARY INFORMATION

PATENTED BEAMFLEX™ TECHNOLOGY EXTENDS SIGNAL RANGE, IMPROVES STABILITY OF CLIENT CONNECTIONS

All ZoneFlex R600 Smart Wi-Fi access points integrate a software-controlled smart antenna with PD-MRC (polarization diversity) that delivers up to an additional 6 dB of BeamFlex gain and 15 dB of interference mitigation. This is especially beneficial to enhance the performance of mobile devices which are constantly in motion and changing orientation.

ADVANCED WLAN APPLICATIONS

Each ZoneFlex R600 Unleashed supports a wide range of value-added applications such as guest networking, Dynamic PSK, hotspot authentication, wireless intrusion detection and many more. In a controller-less configuration, the ZoneFlex R600 Unleashed works with a wide range of authentication servers including Microsoft's Active Directory, and AAA/RADIUS.

FLEXIBLE DEPLOYMENT OPTIONS

Ruckus Unleashed is custom-designed to help small business owners grow their business, deliver an excellent customer experience and manage costs while supporting Wi-Fi and a variety of mobile devices with minimal IT staff.

Unleashed access points have built-in controller capabilities, including user access controls, guest networking functions, advanced Wi-Fi security and traffic management.

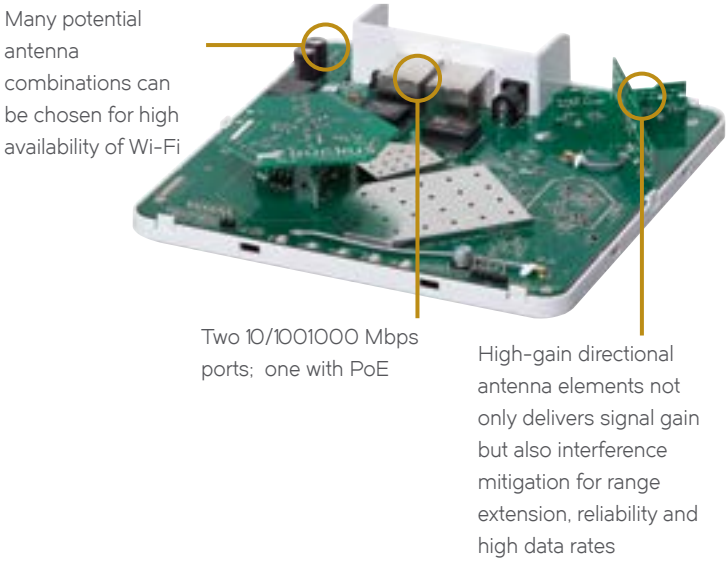
As businesses grow to multiple sites or a larger scale deployment, Ruckus offers an easy migration path to controller-based Wi-Fi, using the same Wi-Fi access points.

COMPLETE LOCAL AND REMOTE MANAGEMENT

ZoneFlex R600 Unleashed can be securely managed from anywhere at anytime using any browser on any device.

FEATURES

- Dual-band concurrent (2.4GHz/5GHz)
- Adaptive antenna technology and advanced RF management
- Up to an additional 6dB BeamFlex gain / 15dB interference mitigation / 3 dBi physical antenna gain
- Automatic interference mitigation, optimized for high-density environments
- Integrated smart antenna technology
- Standard 802.3af Power over Ethernet (PoE)
- DHCP services
- IP multicast video streaming support
- Advanced QoS packet classification and automatic priority for latency-sensitive traffic
- Dynamic, pre-user rate-limiting for hotspot WLANs
- WPA-PSK (AES), 802.1X support for RADIUS and Active Directory
- BYOD, Zero-IT and Dynamic PSK
- Admission control/load balancing
- Band steering and airtime fairness support
- Rich and customizable guest access services
- Application recognition and control
- SmartWay Bonjour gateway
- SecureHotspot
- Band balancing



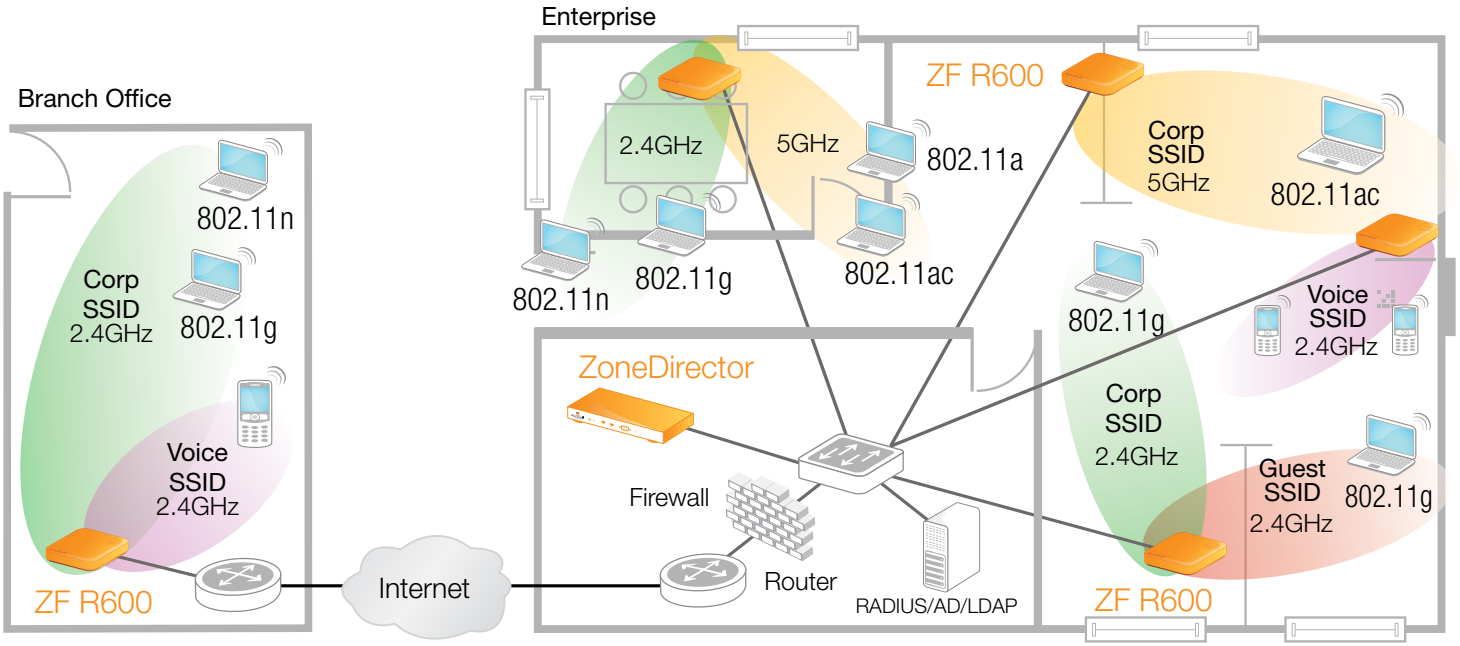
© 2016 RUCKUS WIRELESS, INC. COMPANY PROPRIETARY INFORMATION

ZoneFlex R600

Dual-Band 802.11ac 3X3:3 Smart Wi-Fi Access Points

DATA SHEET

The ZoneFlex R600 integrates with your existing network infrastructure, delivering best-in-class 802.11ac performance and reliability at a competitive price -- making it the ideal wireless solution for mid-range enterprise and branch office applications.

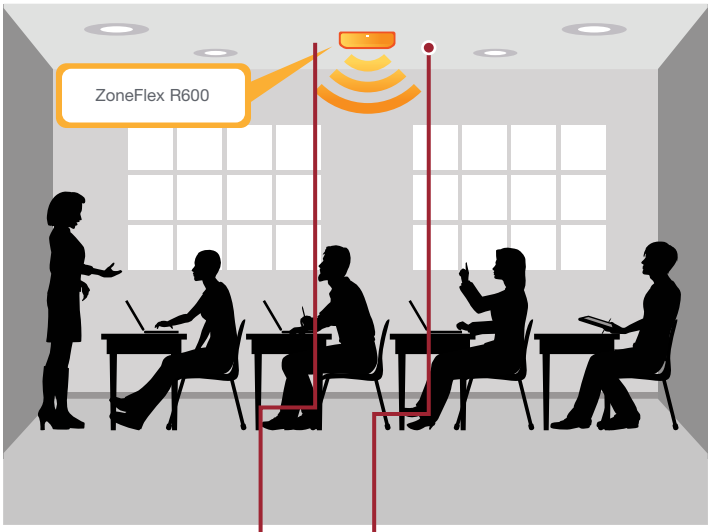


DEPLOYMENTS FOR CLASSROOMS AND LIBRARIES

The ZoneFlex R600 is ideal for deployment in education common areas providing high quality wireless access in high density locations

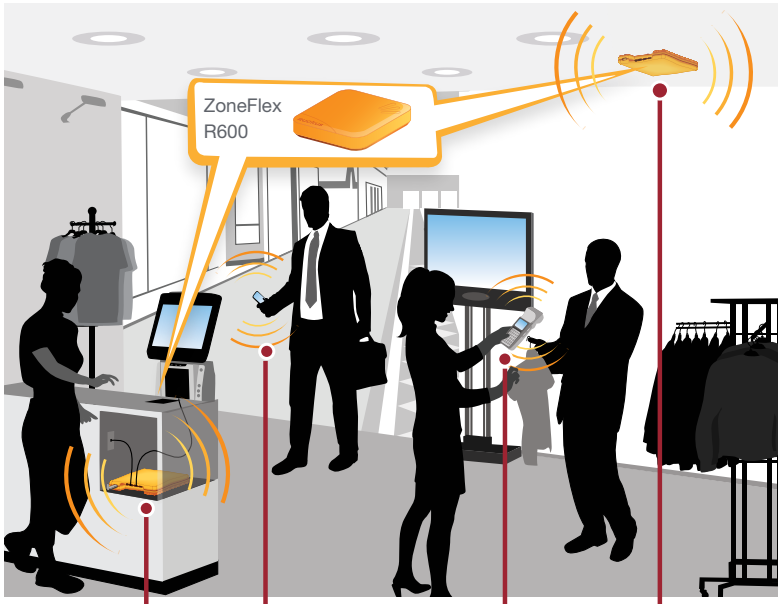
DEPLOYMENT FOR RETAIL/BRANCH OFFICES

The ZoneFlex R600 is ideal for deployment in retail stores to provide inconspicuous wireless connection tohigh quality video, wireless IP phones and data accessfor handheld PoS barcode scanners



Dual-band (2.4/5GHz) support allows for concurrent

Sleek, elegant design easily



Wired ports to connect devices such as cash registers, printers, etc.

Multiple SSIDs for differentiated user services (e.g., guest Wi-Fi, point of sale, voice)

Reliable Wi-Fi connectivity for point of sale devices

5GHz band and smart antenna system ideal for 11ac clients

© 2016 RUCKUS WIRELESS, INC. COMPANY PROPRIETARY INFORMATION

ZoneFlex R600

Dual-Band 802.11ac 3X3:3 Smart Wi-Fi Access Points

DATA SHEET

PHYSICAL CHARACTERISTICS	
Power	• DC Input: 12 VDC 1.0A • Power over Ethernet 802.3 af
Physical Size	• 15.8 cm x 15.8 cm x 4 cm (6.2 in x 6.2 in x 1.57 in)
Weight	• 364 g (0.8 lb.)
Data Ports	• 2 auto MDX, auto-sensing 10/100/1000 Mbps, RJ-45, POE port (on one port)
Mounting Options	• Electrical wallbox; Standard US and EU single gang wall jack • Optional bracket for offset & wall mount
Lock Options	• Hidden latching mechanism • Kensington Lock Hole • T-bar Torx • Bracket (902-0108-0000) Torx screw & padlock (sold separately)
Environmental Conditions	• Operating Temperature: 0°C - 40°C • Operating Humidity: 10% - 95% non-condensing
Power Draw	• Idle: 4W • Typical: 6.2W • Peak: 11.2W

PERFORMANCE AND CAPACITY	
Concurrent Stations	• Up to 512 clients per AP
Simultaneous Voip Clients	• Up to 30

RF	
ANTENNA	• Adaptive antenna that provides up to 512 unique antenna patterns per radio • Full omnidirectional polarization diversity
PHYSICAL ANTENNA GAIN	• Up to 3 dBi
BEAMFLEX* SINR TX GAIN	• Up to 6 dB
BEAMFLEX* SINR RX GAIN	• 3-5 dB (PD-MRC)
INTERFERENCE MITIGATION	• Up to 15 dB
MINIMUM RX SENSITIVITY	• Up to -101 dBm

* 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

MANAGEMENT	
Deployment Options	• Standalone (individually managed) • Managed by ZoneDirector (9.8.1 & Above) • Managed by SmartZone (3.0 & above) • Managed by FlexMaster • Managed by SmartCell™ Gateway 200 (2.5 & above)
Configuration	• Web User Interface (HTTP/S) • CLI (Telnet/SSH), SNMP v1, 2, 3 • TR-069 vis FlexMaster
Auto Ap Software Updates	• FTP or TFTP, remote auto available

* some features not supported - e.g., mesh

WI-FI	
Standards	• IEEE 802.11a/b/g/n • 2.4GHz and 5GHz
Supported Data Rates	• 802.11n/ac: 6.5Mbps – 260Mbps (20MHz) • 13.5Mbps – 600Mbps (40MHz) • 29.3Mbps – 1300Mbps (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
Radio Chains	• 3 x 3
Spatial Streams	• 3
RF POWER OUTPUT (Aggregate)	• 28 dBm for 2.4GHz† • 27 dBm for 5GHz†
Channelization	• 20MHz, 40MHz, 80MHz
Operating Channels	• US/Canada: 1-11, Europe (ETSI X30): 1-13, Japan X41: 1-13 • 5 GHz channels: Country dependent
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
Power Save	• Supported
Wireless Security	• WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i • Authentication via 802.1X with the ZoneDirector, local authentication database, support of RADIUS, and ActiveDirectory
Certifications**	• US, Europe, Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, Egypt, Hong Kong, India, Indonesia, Israel, Japan, Korea, Malaysia, Mauritius, Mexico, New Zealand, Pakistan, Peru, Philippines, Russia, Saudi Arabia, Singapore, South Africa, Taiwan, Thailand & UAE. • WEEE/RoHS compliance • EN-60601-1-2 (Medical) • Wi-Fi Alliance • EN50121-1 Railway EMC • EN50121-4 Railway Immunity • IEC 61373 Railway Shock & Vibration • UL 2043 plenum rated • 5GHz UNII-1 (2014)

† Maximum power varies by country
** For current certification status please see price list

PRODUCT ORDERING INFORMATION

MODEL	DESCRIPTION
ZoneFlex R600 Smart Wi-Fi 802.11ac Access Point	
901-R600-XX00	Concurrent dual band 802.11ac Access Point, no power adapter
Optional Accessories	
902-0108-0000	• Spare, Accessory Mounting Bracket
902-0173-XXYY	• Power Adapter, AC/DC wall plug,100-240Vac 50/60Hz
902-0162-XXYY	• PoE injector (sold in quantities of 10 or 100)

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

Copyright © 2016, Ruckus Wireless, Inc. All rights reserved. Ruckus Wireless and Ruckus Wireless design are registered in the U.S. Patent and Trademark Office. Ruckus Wireless, the Ruckus Wireless logo, BeamFlex+, ZoneFlex, MediaFlex, FlexMaster, ZoneDirector, SpeedFlex, SmartCast, SmartCell, ChannelFly and Dynamic PSK are trademarks of Ruckus Wireless, Inc. in the United States and other countries. All other trademarks mentioned in this document or website are the property of their respective owners.
16-08-B

Ruckus™ Simply Better Wireless.

Ruckus Wireless, Inc. | 350 West Java Drive | Sunnyvale, CA 94089 USA | T: (650) 265-4200 | F: (408) 738-2065
ruckuswireless.com