# ZoneDirector<sup>™</sup> 1000

Centralized Ruckus AP Control System





The First "IT Lite"
Centralized Control System
for Multimedia Wireless LANs

The Ruckus ZoneDirector 1000 is the first centrally managed multimedia Wireless LAN (WLAN) solution controller developed specifically for small-to-medium businesses (SMBs) and hot zone operators. With the Ruckus ZoneFlex family of multimedia Wi-Fi access points, the ZoneDirector 1000 provides a complete, secure, robust and easily expandable WLAN solution at a low total cost of ownership.

Designed for simplicity and ease of use in mind, the Ruckus ZoneDirector 1000 can be deployed and operated by non-wireless experts and installed quickly an easily. Any small organization with limited IT staff and budget can create an industrial-strength, secure multimedia WLAN in a matter of minutes.

The Ruckus ZoneDirector 1000 is purpose-built to address the gap between standalone, feature-poor deficient consumers APs that must be individually managed and costly, and complex high-end enterprise systems that are overkill for most small business environments.

The Ruckus ZoneDirector is ideal for small businesses that require a robust and secure wireless LAN that can be easily deployed, centrally managed and automatically tuned. The ZoneDirector 1000 is also perfect for operators who want to offer business class hot spot services such as voice over Wi-Fi, IP-based video, secure enterprise access and tiered Wi-Fi services in venues such as hotels, airports, schools and public buildings.

The Ruckus ZoneDirector easily integrates with network, security and authentication infrastructure already in place and is easily configured through a point-and-click Web wizard. Ruckus ZoneFlex APs automatically discover and are configured by the ZoneDirector.

Redundant and secure, the Ruckus ZoneDirector provides WLAN-wide network, security, RF and location management within a single, easy-to-use and affordable WLAN system.

## **BENEFITS**

## Simple to use, simple to manage

Centralized management, quick setup, Minute Configuration™ and automatic, real-time optimization of entire WLAN

### IT lite deployment in 5 minutes or less

Web-based configuration wizard lets any computer user configure an entire WLAN in minutes. Ruckus ZoneFlex APs auto-discover the ZoneDirector

## Flexible deployment options

The ZoneDirector interacts with existing network and security infrastructure and provides dynamic RF management across APs to eliminate AP placement issues

#### Triple play ready

Smart antenna array and precision QoS support within the ZoneFlex APs enable the reliable transport of voice, video and data traffic

## Easy monitoring and troubleshooting

Customizable dashboard provides comprehensive at-a-glance network snapshot and allows , drill down to troubleshoot a wireless problems

#### **Automatic user security**

Eliminates the requirement to configure and update individual PCs client devices with unique encryption keys

## **Complete integration**

Combines network management, dynamic RF management, location management and AP control within a low-cost solution

### **Advanced WLAN features and functions**

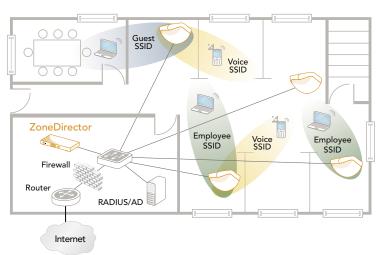
Role-based users policies, internal authentication database, rogue AP detection and client thresholds per AP

## **ZoneDirector 1000**

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## **Introducing the Ruckus ZoneDirector 1000**

The Ruckus ZoneDirector 1000 is a central management and real-time AP control platform for the Ruckus ZoneFlex, a new generation of Smart Wi-Fi multimedia access points. The Ruckus ZoneDirector fills the gap between low-end, feature-poor consumer APs and high-end costly and cumbersome WLAN systems. It is the first affordable, easy-to-use and feature-rich central WLAN control system designed specifically for small organizations. With the Ruckus ZoneDirector 1000, any non-IT staff can easily configure, deploy and manage up to 50 Ruckus ZoneFlex Smart Wi-Fi access points to create highly secure and robust multimedia WLAN.



## Minute Configuration<sup>™</sup> delivers unsurpassed simplicity

A Web-based wizard lets any computer user point-and-click their way through configuring all the necessary WLAN and security parameters in minutes. The Ruckus ZoneDirector authenticates and automatically applies the configuration for connected Ruckus ZoneFlex APs – providing the ability to centrally upgrade all APs. Managing up to 50 Ruckus ZoneFlex Smart Wi-Fi access points, the Ruckus ZoneDirector enables an entire ZoneFlex WLAN to be installed, configured and expanded easily without complex and expensive site surveys and topology planning. Software updates and configuration changes can easily be applied to multiple APs or the entire system simultaneously.

## Simple to Deploy

The Ruckus ZoneDirector integrates seamlessly with existing switches, firewalls, authentication servers and other network infrastructure. Ruckus ZoneFlex APs automatically discover the Ruckus ZoneDirector, self configure and become instantly manageable. All clients trying to associate to the WLAN are sent to the ZoneDirector for authentication and authorization before network access is granted. And ZoneFlex APs integrate sophisticated RF management to focus RF signal toward clients and away from interference thereby automatically maximizing performance and coverage and reducing the number of APs typically required.

## Simple to Manage

Once up and running the ZoneDirector automatically manages the ZoneFlex network of APs - automatically adjusting transmit power levels and RF channel assignments as needed to prevent adjacent APs from interfering and enable redundant coverage in the event of an AP failure. Configuration changes can easily be applied to multiple APs or the entire system simultaneously. A customizable dashboard provides instant access to a variety of client and network information and events and a real time heat map displays AP locations and signal coverage.



## **Completely Plug-and-Play**

- Web-based wizard provides IT-free configuration of a robust wireless LAN in a matter of minutes
- Auto-discovery from any PC using UPnP
- Auto-discovery of APs
- No complicated CLI
- Advanced WLAN features simplified



ZoneFlex 2925 and 2942 Multimedia 802.11g Smart Wi-Fi Access Points

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Simple to Secure

Unlike any product before, the Ruckus ZoneDirector automates the process of implementing robust wireless security mechanisms.

Ruckus patent-pending Dynamic PSK on the Ruckus ZoneDirector and ZoneFlex 2925 and 2942 automates this process to assure integrity of the user authentication system. First time users simply plug their computers into the LAN and specify a URL that directs them to a captive Web portal for a one-time authentication. Upon authentication, the ZoneDirector automatically configures the user's system with the designated SSID and a unique, dynamically generated encryption key. The key can be removed automatically upon expiration or manually when the user or the user's device is no longer trusted.

The Ruckus ZoneDirector centralizes authentication and authorization decisions for all APs providing secure admission control across the WLAN. It works with any backend authentication database such as RADIUS and ActiveDirectory and also comes with an internal authentication database.

## Avoid Interference, Maximize Performance and Extend Reach with Network BeamFlex

BeamFlex<sup>™</sup>, a Ruckus patented Wi-Fi beam-steering technology automatically delivers ensures predictable performance for multimedia traffic applications, and extended range to eliminate Wi-Fi deadspots. With the ZoneDirector, the value of BeamFlex is extended beyond a single access point to the system-wide WLAN.

With Network BeamFlex, the ZoneDirector and ZoneFlex APs are combined to automatically control the channels assignments, transmit power levels as well as Wi-Fi signal path selection. With this capability, the ZoneFlex system continuously picks the best path for every packet for traffic, automatically avoiding interference to guarantee the highest quality of service.

The ZoneDirector Dashboard is easily customizable through a unique drag-and-drop interface providing an at-a-glance view of the entire WLAN and the ability to easily drill down to troubleshoot a wireless problem.

## **FEATURES**

- Centralized configuration of up to 50 Ruckus ZoneFlex APs
- Centralized software upgrade
- Real-time client admission control
- Easy discovery from PC using UPnP
- Easy-to-use setup wizard
- Customizable dashboard
- Dynamic RF channel and power management
- Automatic client load balancing per AP
- Integrated captive portal
- Local authentication database
- ActiveDirectory and RADIUS support
- Guest accounts
- Dynamic PSK and IT-free configuration
- Rogue AP detection and graphical map view
- Event management
- Performance monitoring and statistics
- N+1 redundancy
- 2 GigEthernet ports for full redundancy

## **Specifications**

Physical Characteristics	
Power	<ul><li>External power adapter</li><li>Input: 110-240V AC</li><li>Output: 12V DC, 1A</li></ul>
Physical Size	• 25cm (L), 15.93cm (W), 3.86cm (H)
Weight	• 2.2 lbs (1 kilogram)
Ethernet Ports	• 2 ports, auto MDX, auto-sensing 10/100/100 Mbps, RJ-45
LED display	Power/status
Environmental conditions	<ul> <li>Operating Temperature: 32°F (0°C)         <ul> <li>122°F (50°C)</li> </ul> </li> <li>Operating humidity: 15% - 95% non-condensing</li> </ul>

Management	
Configuration	Web user interface
Statistics	<ul> <li>LAN, wireless and associated stations (available via UI)</li> </ul>
Auto AP software updates	• Supported
Captive portal	• Supported
Guest accounts	Supported
VLAN support	• 802.1Q (per BSSID)

Security	
Wireless Security	• WEP, WPA – TKIP, WPA2 - AES
Authentication	802.1X, local database, external AAA servers, ActiveDirectory, RADIUS
Local authentication	1000 user entries
Certifications	
Countries	<ul> <li>FCC (U.S.), IC (Canada), CE (EU), C-Tick (Aus/NZ), and OFTA (Hong Kong)</li> </ul>

Performance and Supported Configurations		
Number of managed APs	•	Up to 50
Concurrent stations	•	Up to 1250

## **Product Ordering information**

Model	Description	
ZoneDirector Smart WLAN Controllers		
901-1006-XX00	2-port ZoneDirector 1006 supporting up to 6 ZoneFlex APs	
901-1012-XX00	2-port ZoneDirector 1012 supporting up to 12 ZoneFlex APs	
901-1025-XX00	2-port ZoneDirector 1025 supporting up to 25 ZoneFlex APs	
ZoneFlex Smart Wi-Fi Access Points		
901-2942-XX01	2-port Smart Wi-Fi 802.11g access point with power over Ethernet, wall/ceiling mount	
901-2925-XX01	5-port Smart Wi-Fi 802.11g access point for user space deployment	

### PLEASE NOTE:

When ordering you must specify the destination region by indicating -US, -EU, -AU, -UN or -UK following the model number.

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Rev#: 010108



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