Ruckus ZoneDirector™ 1200
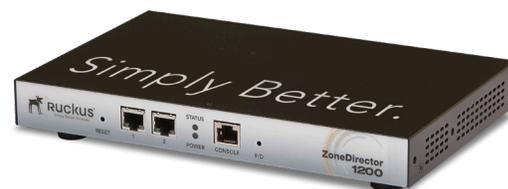
Enterprise-Class Smart Wireless LAN Controller

Full-Featured Smart Wireless LAN Controller

The Ruckus Wireless ZoneDirector 1200 is Ruckus' centrally managed Smart Wireless LAN (WLAN) system developed specifically for small-to-medium enterprises (SMEs).

With simplicity and ease of use in mind, the Ruckus ZoneDirector 1200 is purpose-built to address the gap between standalone, feature-deficient access points (APs) that must be individually managed and the costly, complex high-end enterprise systems that are overkill for most small business environments.

Benefits

SIMPLE TO USE, SIMPLE TO MANAGE
- Centralized management, quick setup, IT-Lite and automatic, real-time optimization of entire WLAN

WiFi 6 Ready
- ZoneDirector 1200 is Wifi 6 ready as well as backwards compatible with all existing Ruckus access points

IT LITE DEPLOYMENT IN 5 MINUTES OR LESS
- A web-based configuration wizard lets any computer user configure an entire WLAN in minutes. Ruckus APs auto-discover the ZoneDirector. Centralized management and automatic, real-time optimization of entire WLAN

ADVANCED WLAN FEATURES AND FUNCTIONS
- Advanced wireless networking features include rogue AP detection, interference detection, band steering, airtime fairness, role-based user policies, per-user rate-limiting, hotspot, guest networking services, VLAN pooling, application recognition and control

SMART MESH NETWORKING STREAMLINES COSTLY AND COMPLEX DEPLOYMENT
- Integrated Smart Mesh Networking technology automates deployment, eliminates the need to run Ethernet cable to every Smart Wi-Fi access point. Adaptable architecture with Hybrid Mesh extends the wireless network through Ethernet-connected APs, increasing system performance through better spatial reuse

AUTOMATIC USER SECURITY
- Dynamic PSK eliminates the requirement to configure and update individual PC client devices with unique encryption keys. Dynamic VLAN assignment seamlessly extends existing security policies to the WLAN

DISTRIBUTED FORWARDING ARCHITECTURE
- Maximizes data throughput by sending all data traffic directly from the access points to the wired network

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The Ruckus ZoneDirector is ideal for small businesses that require a robust and secure WLAN that can be easily deployed, centrally managed and automatically tuned.

The ZoneDirector 1200 is also perfect for businesses who want to provide 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 ZoneDirector 1200 integrates the Ruckus application engine that delivers advanced features such as smart wireless meshing, high availability, hotspot authentication, elegant guest networking and dynamic Wi-Fi security.

The Ruckus ZoneDirector 1200 can be deployed and operated by non-wireless experts and installed quickly and easily. Any organization with limited IT staff and budget can create a robust and secure multimedia WLAN in a matter of minutes.

The Ruckus ZoneDirector easily integrates with network, security and authentication infrastructure already in place and is easily configured through a point-and-click web-based wizard. Ruckus 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.
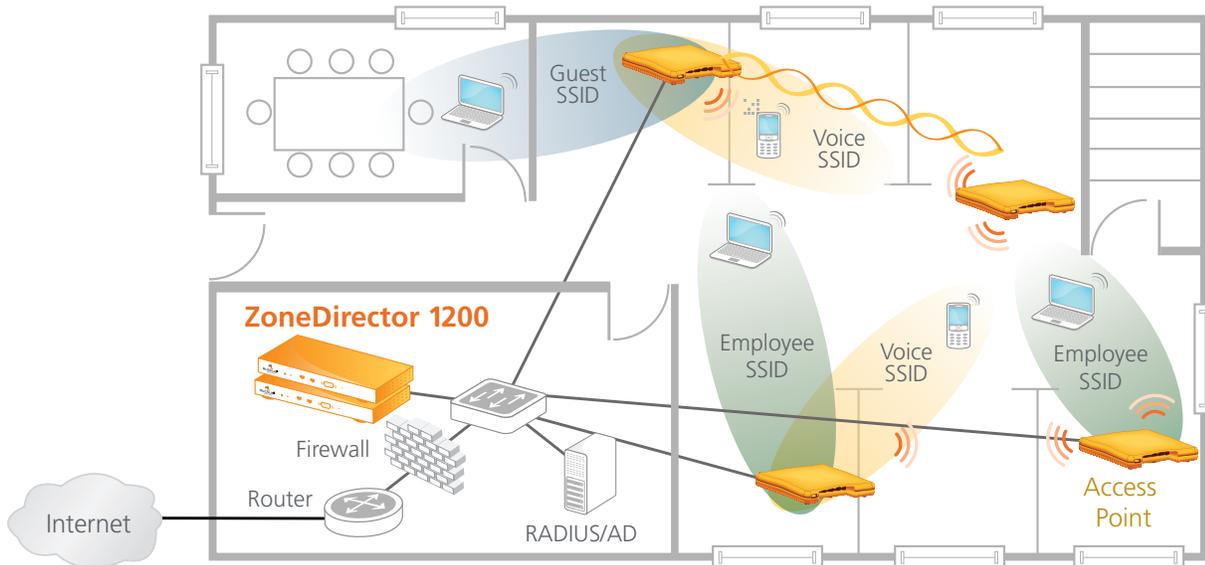
Figure 1. The ZoneDirector 1200 can be deployed anywhere within a Layer 2/3 network. All Ruckus APs automatically discover the ZoneDirector and are automatically provisioned.

Simple to Deploy

The Ruckus ZoneDirector integrates seamlessly with existing switches, firewalls, authentication servers and other network infrastructure. The ZoneDirector can be placed within any Layer 2/3 network. Ruckus APs (whether wired or mesh APs using Smart Mesh Networking) automatically discover the Ruckus ZoneDirector, self configure and become instantly manageable. Ruckus Smart Redundancy ensures high network availability and is easy to use with automatic synchronization of configuration and authorized users between ZoneDirectors.

Simple to Manage

Once up and running, the ZoneDirector automatically manages the network of APs—automatically adjusting transmit power levels and RF channel assignments as needed to avoid interference, 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, as well as your Ruckus Smart Mesh Networking topology.

ZoneDirector Smart WLAN systems integrate a unique performance utility from Ruckus called SpeedFlex™. Ruckus SpeedFlex allows administrators to locally or remotely determine client Wi-Fi performance over the wireless LAN. With SpeedFlex, administrators can now better plan, troubleshoot, monitor and measure WLAN performance, eliminating the need to use Internet-based speed tools that often provide inaccurate results of the local Wi-Fi environment.

Simple to Secure

The ZoneDirector 1200 provides innovative new techniques that simplify and automate Wi-Fi security. In addition to enterprise-class 802.1x support and dynamic VLAN assignment capabilities, the ZoneDirector 1200 supports a patent-pending Dynamic Pre-Shared Key (PSK) capability that streamlines WLAN security.

First-time users plug their computers into the LAN and specify a URL that directs them to a captive web portal for a one-time authentication. After successful authentication, the ZoneDirector automatically configures the client system with the designated SSID and a dynamically-generated encryption key. The key is bound to the client, and can be removed upon expiration 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/LDAP and also comes with an internal authentication database. Additionally, clients can be dynamically assigned to a VLAN based on their RADIUS attributes.
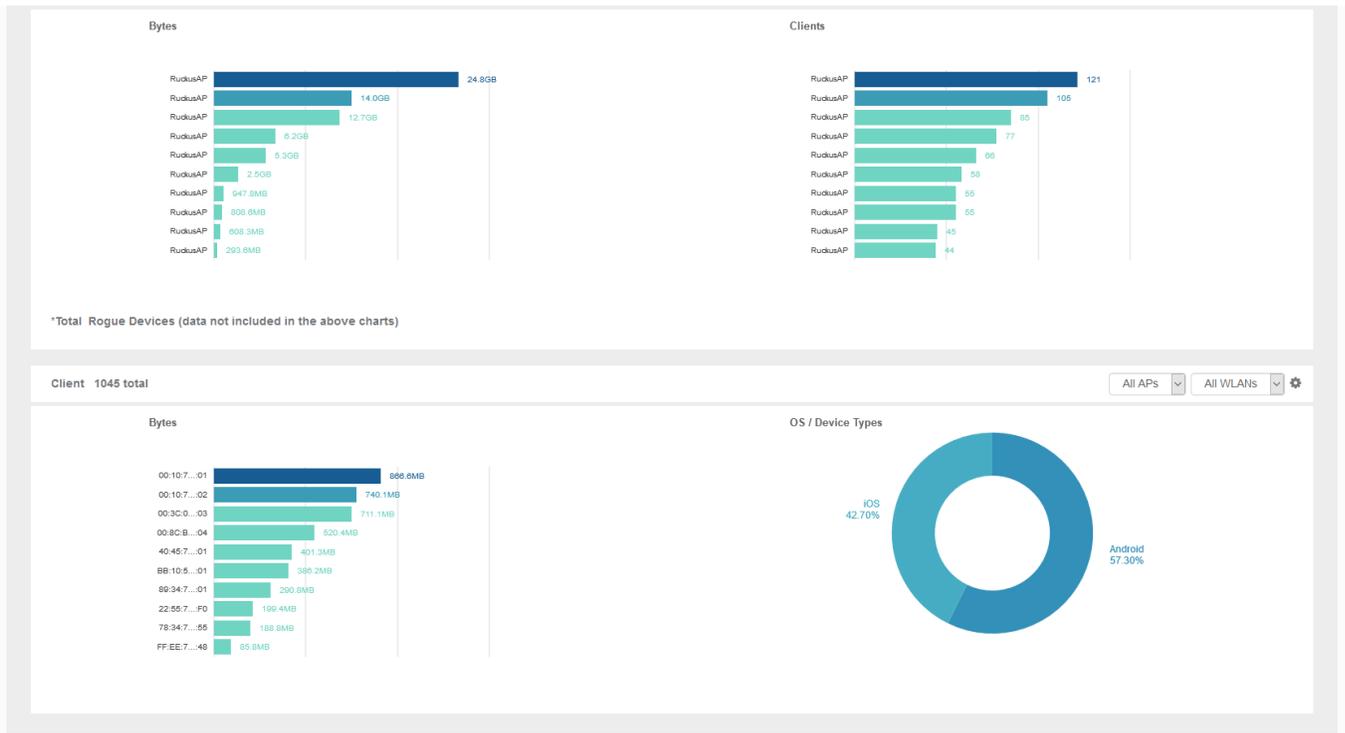
Figure 2. The ZoneDirector 1200 provides a detail map view that lets administrators quickly see the Wi-Fi network topology for all Ruckus Smart Wi-Fi access points.

Avoid Interference, Maximize Performance and Extend Reach with BeamFlex

Ruckus BeamFlex™, a patented Wi-Fi beam-steering technology, ensures predictable performance for multimedia traffic applications and extends 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 and smart wireless meshing.

The ZoneDirector automatically controls the channels assignments and transmit power levels of all Smart Wi-Fi APs. And with BeamFlex, the system continuously picks the best path for every packet, to both clients outside the network and mesh APs inside the network, automatically avoiding interference to guarantee the highest quality of service.

Smart Mesh Networking Increases Flexibility, Reduces Costs

Ruckus Smart Mesh Networking enables self-organizing and self-healing WLAN deployment. It eliminates the need to run Ethernet cables to every AP, allowing administrators to simply plug in Ruckus APs to any power source and walk away. All configuration and management is delivered through the ZoneDirector Smart WLAN controller. APs can also be daisy-chained to mesh APs to extend the mesh and take advantage of spatial reuse. Smart meshing uses patented Smart Wi-Fi technology to extend range and control Wi-Fi signals to minimize inter-nodal hops that degrade performance and automatically adapt Wi-Fi connections between nodes to maintain ultra high reliability.

HARDWARE FEATURES

- Thin desktop footprint

- Easy discovery from PC using UPnP

- Two 1000 Mbps ports for full redundancy

- Lifetime warranty coverage

SOFTWARE FEATURES

- Central control and configuration of up to 150 Ruckus APs

- Support for 256 WLANs

- Integrated DHCP server

- Easy-to-use setup wizard

- Ultra-intuitive GUI

- 1+1 redundancy with auto synchronization

- Application recognition and controls

- VLAN pooling

- Smart Mesh Networking control and monitoring

- Real-time client admission control

- Load balancing

- Customizable dashboard

- Dynamic RF channel and power management

- Quality of service with WLAN prioritization, band steering and airtime fairness

- Integrated captive portal

- Native ActiveDirectory/RADIUS/LDAP support

- Local authentication database

- Dynamic VLAN assignment

- Guest networking

- Dynamic generation of unique Pre-Shared Keys

- Rogue AP detection and graphical map view

- Hotspot authentication using WISPr

- WISPr Smart Client Support

- Performance monitoring and statistics
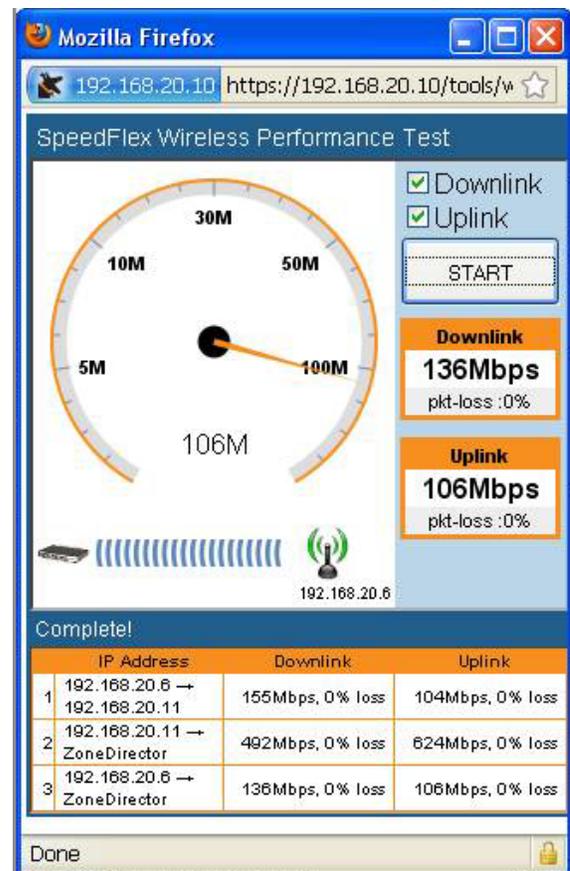
- Limited lifetime warranty

Figure 3. SpeedFlex™ is a unique wireless performance test tool integrated within the Ruckus family of centralized controllers that measures the Wi-Fi throughput of associated wireless LAN clients.

Specifications

PHYSICAL CHARACTERISTICS

Power	· External power adapter · Input: 110 – 240V AC · Output: 12V DC, 2A
Physical Size	· Desktop: 25cm (L), 15.93cm (W), 3.164cm (H)
Weight	· 2.2 lbs (1 kilogram)
Ports	· 2 Ethernet ports, auto MDX, auto-sensing 10/100/1000 Mbps · 1 Console RJ-45 port
Environmental Conditions	· Operating Temperature: 32°F (0°C) – 104°F (40°C) · Operating humidity: 20% – 90% non-condensing

CAPACITY

Managed APs	· Up to 150
WLANs (BSSIDs)	· 256
Concurrent Stations	· Up to 4,000

APPLICATIONS

Hotspot	· WISPr
Guest Access	· Supported
Captive Portal	· Supported
Mesh	· Supported
Voice	· 802.11e/WMM · U-APSD · Tunneling to AP

NETWORK ARCHITECTURE

IP	· IPv4, IPv6, dual-stack
VLANS	· 802.1Q (1 per BSSID), dynamic VLAN
Redundancy	· 1+1 with auto-synchronization
DCHP Server	· Supported

MANAGEMENT

Configuration	· Web user interface, CLI, FlexMaster, SNMP v1, v2, v3
AAA	· RADIUS (primary and backup)
AP Provisioning	· L2 or L3 auto-discovery · Auto-software upgrade · Automatic channel and power optimization
Client Provisioning	· Zero-IT · Auto proxy configuration
Wireless Packet Capture	· Supported

SECURITY

Standards	· WPA, WPA2, 802.11i*
Encryption	· TKIP, AES · Ruckus Dynamic Pre-Shared Key
Authentication	· 802.1x, MAC address
User Database	· Internal database up to 4,000 users · External: RADIUS, LDAP, Active Directory
Access Control	· L2 (MAC address-based) · L3/4 (IP and Protocol based) · L2 client isolation · Management interface access control · Time-based WLANs
Wireless Intrusion Detection (WIDS)	· Rogue AP detection · DoS attack prevention · Evil-twin/AP spoofing detection · Ad hoc detection · Password guessing protection

* ZoneDirector controllers do not contain embedded radios or antennas.

MULTIMEDIA AND QUALITY OF SERVICE

802.11e/WMM	· Supported
Software Queues	· Per traffic type (4), per client
Traffic Classification	· Automatic, heuristics and TOS based or VLAN-defined
Rate Limiting	· Supported
WLAN Prioritization	· Supported
Client Load Balancing	· Automatic

CERTIFICATIONS

Certifications**	· U.S., Europe, Australia, Brazil, Canada, Chile, Colombia, Hong Kong, India, Indonesia, Korea, Mexico, New Zealand, Philippines, Saudi Arabia, Singapore, Thailand, UAE

** Check price list for latest certifications

SUPPORTED WIRELESS STANDARDS

IEEE	· 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac, 802.11r, 802.11k, 802.11v, 802.11d, WMM/802.11e, 802.11u

Product Ordering Information

MODEL	DESCRIPTION
ZoneDirector 1200 Smart WLAN Controllers	
901-1205-XX00	ZoneDirector 1205 supporting up to 5 Ruckus APs
909-0001-ZD12	ZoneDirector 1200 Single AP License Upgrade SKU. Max orderable upgrade license quantity is 145

PLEASE NOTE: When ordering ZoneDirector, you must specify the destination region by indicating -US, -EU, -CN, -IN, -JP, -KR, -SA, -UK or -UN instead of -XX.

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