



## data sheet

#### **BENEFITS**

#### Highly scalable with n + 1 clustering

Supporting up to 1,024 APs and 25,000 clients per device, the SmartZone<sup>™</sup> 100 easily serves the largest deployments. SmartZone<sup>™</sup> 100 can cluster up to 4 units (3+1) thereby supporting up to 3,000 APs and 60,000 clients

#### Ultra high performance and resiliency

With clustering for resiliency and up to 10 GE throughput, control/management and data are set-up to be delivered separately through dedicated redundant ports ensuring optimal performance

#### Granular and flexible cloud-based licensing

Cloud based licensing ensures simple set-up with granular, per AP licensing as opposed to tiered licensing schemes forcing users to pay for unnecessary extra costs. Licensing can be transferred to similar platforms

#### Data persistence across reboot for reporting

SmartZone<sup>™</sup> 100 stores up to 30 days of network and client data on an integrated drive that keeps all data even on reboot

## IT lite deployment in 5 minutes, simple to use and manage

Web-based configuration wizard configures an entire WLAN in minutes. ZoneFlex APs auto-discover the SmartZone™ 100

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

Advanced wireless networking features include rogue AP detection, interference detection and mitigation, band steering, airtime fairness, role-based user policies, per-user rate-limiting, hotspot and guest networking services

### Smart Meshing streamlines costly and complex deployment

Integrated Ruckus Smart Mesh Networking technology automates deployment and eliminates the need to run Ethernet cable to every Smart Wi-Fi access point

# SmartZone<sup>™</sup> 100

### SCALABLE MEDIUM TO LARGE SIZE ENTERPRISE CLASS SMART WLAN CONTROLLER

The Most Affordable, Scalable, Resilient, and Highest Performing Wireless LAN controller in its class The Ruckus Wireless SmartZone™ 100 (SZ 100) uniquely combines power, simplicity and scalability into an affordable system.

Supporting up to 25,000 clients and 2,000 WLANs per device, the SZ 100 manages up to 1,024 ZoneFlex Smart Wi-Fi access points from a single location clustering up to 3,000 APs and 60,000 clients.

Unlike conventional wireless LAN systems that are costly, complex and cumbersome to deploy, the SZ 100 is designed for simplicity and ease of use. It's ideal for any medium to large-scale enterprise requiring a high-performance, reliable, and scalable wireless LAN that can be easily deployed and managed.

The SZ 100 integrates an operating system platform that delivers advanced features such as smart wireless meshing, high availability, hot spot authentication, guest networking and dynamic Wi-Fi security. Licensing can be ported to similar platforms, is granularity scalable per AP, and is cloud based requiring no license installation.

The SZ 100 easily integrates with network, security and authentication infrastructure already in place and is easily configured through a pointand-click web wizard. Ruckus ZoneFlex APs automatically discover and are configured by the SmartZone<sup>™</sup> 100.

Redundant and secure, the SZ 100 provides WLAN-wide network, security, RF and location management within a single, easy-to-use and affordable WLAN system.

## SmartZone<sup>™</sup> 100 SCALABLE ENTERPRISE CLASS SMART WLAN CONTROLLER

#### **Simple to Deploy**

The Ruckus SmartZone<sup>™</sup> 100 integrates easily with existing switches, firewalls, authentication servers and other network infrastructure. All Ruckus ZoneFlex APs (wired or meshed) then automatically discover the Ruckus SmartZone<sup>™</sup> 100, self configure and become instantly manageable.

#### Simple to Manage

Once up and running the SmartZone<sup>™</sup> 100 automatically manages the ZoneFlex network of APs. With a single view into the cluster, when used as such, the SZ 100 has a per user customized dashboard, integrated Google maps, and simplified menus with a single zone and domain to reduce workflow complexity. Additionally, the SZ 100 has a 30 day reporting archive with data persistence even across reboot, and reports can be exporting to CSV, PNG, JPEG, PDF or SVG formats.

## Mitigate Interference, Maximize Performance and Extend Reach with BeamFlex+

Ruckus BeamFlex+<sup>™</sup>, a patented adaptive antenna technology, ensures predictable performance for multimedia traffic applications and handheld devices which are constantly in motion.

The SmartZone<sup>™</sup> 100 automatically controls the channel assignments of all ZoneFlex Smart Wi-Fi APs. And with BeamFlex, the ZoneFlex system continuously picks the best path for every packet, to both clients outside the network and mesh APs inside the network, automatically mitigating 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 ZoneFlex APs to any power source and walk away. All configuration and management is delivered through the SmartZone<sup>™</sup> 100 Smart WLAN controller. APs can also be daisy-chained to mesh APs to extend the mesh and take advantage of spatial reuse.



#### Below: The SmartZone 100 per user customizable dashboard

#### 

## SmartZone<sup>™</sup> 100 SCALABLE ENTERPRISE CLASS SMART WLAN CONTROLLER

#### HARDWARE FEATURES

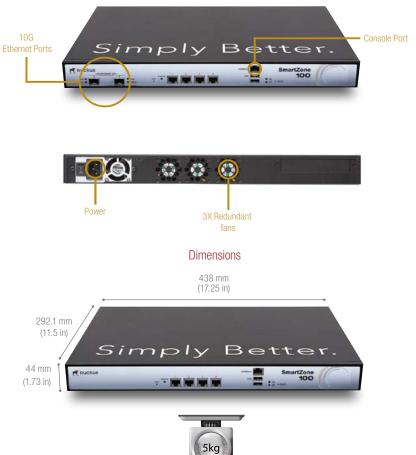
- 1RU rack-mountable chassis footprint
- Redundant fans
- Easy discovery from PC using UPnP
- One year warranty coverage

#### SOFTWARE FEATURES

- Simplified, Intuitive GUI
- Installation Wizard
- Ruckus SPoT LBS Location support
- WIDS/WIPS (Rogue AP Detection/Prevention)
- Bonjour Gateway (at AP)
- Capacity-based client admission control
- Band Balancing
- Internal Captive Portal (Radius, AD, LDAP, Local DB)
- AP Survivability for Guest, Captive Portal
- Zero-IT (using 802.1x)
- WLAN Time Scheduling
- User Roles
- Device Policy Control
- Per WLAN ACL Support (L2 white/black list, L3, L4)
- Multi-hop SpeedFlex for mesh testing
- Force DHCP
- ZoneFlex AP discovery
- Restful/JSON API



10G SmartZone Model



#### **Specifications**

APPLICATIONS

PHYSICAL CHARACTERISTICS	
POWER	AC input requirements: 250 Watts
PHYSICAL SIZE	• 1RU: 438 MM (W) x 292.1 MM (D) x 44 MM (H); 17.25"(W) x 11.5"(D) x 1.73"(H)
WEIGHT	• 11.02 lbs (5 kilograms)
ETHERNET PORTS	<ul> <li>1GE Model: 4 Gigabit Ethernet ports</li> <li>10GE Model: 2 x 10Gigabit Ethernet ports and 4 Gigabit Ethernet Ports</li> </ul>
ENVIRONMENTAL CONDITIONS	<ul> <li>Operating Temperature: 32°F (0°C) – 104°F (40°C)</li> </ul>

SECURITY	
STANDARDS	• WPA, WPA2, 802.11i
ENCRYPTION	• TKIP, AES
AUTHENTICATION	• 802.1x, MAC address
USER DATABASE	<ul> <li>Internal database up to 25,000 users</li> <li>External: RADIUS, LDAP, Active Directory</li> </ul>
ACCESS CONTROL	<ul> <li>L2 (MAC address-based)</li> <li>L3/4 (IP and Protocol based)</li> <li>L2 client isolation</li> <li>Management interface access control</li> <li>Time-based WLANs</li> <li>Device type access policies</li> </ul>
WIRELESS INTRUSION DETECTION (WIDS/WIPS)	<ul> <li>Rogue AP detection / prevention</li> <li>Evil-twin/AP spoofing detection</li> <li>Ad hoc detection</li> </ul>

CAPACITY	
MANAGED APs	<ul><li>Up to 1,024</li><li>With cluster: 3,000</li></ul>
WLANS (BSSIDS)	<ul><li> 2,000</li><li>With cluster: 6,000</li></ul>
CONCURRENT STATIONS	<ul><li>Up to 25,000</li><li>With cluster: 60,000</li></ul>

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., Canada, EU, China, Japan,
	Taiwan, Korea

\*Please see price list for latest country certifications

HOTSPOT	<ul> <li>WISPr, Wi-Fi CERTIFIED, Passpoint<sup>™</sup></li> </ul>
GUEST ACCESS	Supported
CAPTIVE PORTAL	Supported
MESH	Supported
VOICE	• 802.11e/WMM
	• U-APSD
	<ul> <li>Tunneling to AP</li> </ul>

NETWORK ARCHITECTURE	
IP	<ul> <li>IPv4, dual-stack</li> </ul>
VLANs	• 4,000
REDUNDANCY	• 3+1 cluster redundancy
DCHP SERVER	Supported

MANAGEMENT	
CONFIGURATION	<ul> <li>Web user interface, CLI, SNMP v1, v2, v3</li> </ul>
AAA	<ul> <li>RADIUS (primary and backup)</li> </ul>
AP PROVISIONING	<ul> <li>L3 or L2 auto-discovery</li> <li>Auto-software upgrade</li> <li>Automatic channel optimization</li> </ul>
CLIENT PROVISIONING	<ul><li> Zero-IT</li><li> Auto proxy configuration</li></ul>
ANALYTICS	<ul> <li>SmartCell Insight allows for custom report generation with up to seven years of network data</li> <li>30 days local storage for built in reporting</li> </ul>

Copyright ©2015, 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 Iogo, BeamFlex, ZoneFlex, MetaFlex, MetroFlex, FlexMaster, SmartZone™ 100, SpeedFlex, SmartCast, 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. December 2015

#### **Product Ordering Information**

MODEL	DESCRIPTION
SmartZone <sup>™</sup> 100 Smart WLAN Controllers	
P01-S104-XX00	SZ 100 – 4xGE Ports
P01-S124-XX00	SZ 100 – 2x10GE & 4xGE Ports
L09-0001-SG00	1 AP license for SZ 100 to manage APs
L09-0001-RXGW	Soft GRE tunnel license from AP to 3rd party concen- trator
902-0190-0000	10GBASE-SR SFP+ Optical transceiver module

PLEASE NOTE: When ordering SmartZone<sup>™</sup> 100, you must specify the destination region by indicating -US, -EU, -CN, -IN, -JP, -KR, -SA, -UK or -UN instead of -XX.



Ruckus Wireless, Inc. 350 West Java Drive Sunnyvale, CA 94089 USA (650) 265-4200 Ph \ (408) 738-2065 Fx

#### www.ruckuswireless.com