



## data sheet

### **BENEFITS**

### Best-in-class mid-range performance at lowest cost

Unprecedented price/performance with extended range at the industry's most affordable price point

### Extended range requires fewer APs

Adaptive antenna technology delivers a 2x to 4x increase in Wi-Fi signal coverage minimizing the number of APs required to service any area

### Wire-like wireless reliability

Patented smart antenna array, adaptive antenna technology and Quality of Service technologies combine to mitigate interference and minimize packet loss

### Sleek, low profile enclosure for ease-of-deployment Aesthetically-pleasing design fits almost anywhere

### **Channel selection optimizes throughput**

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

### Super simple configuration and management

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

### Flexible deployment options

Standalone or controller-based deployment

### Smart wireless meshing

When used with a ZoneDirector Smart WLAN controller, the ZoneFlex 7352 easily extends Wi-Fi services to areas where Ethernet cabling isn't available, possible or cost effective

### 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

# **ZoneFlex**<sup>™</sup> 7352

### **802.11N SMART WI-FI ACCESS POINTS**

High Performance, 802.11n Mid-Range Smart Wi-Fi Access Points with Adaptive Antenna Technology

The Ruckus ZoneFlex 7352 delivers high-performance and reliable 802.11n wireless networking at the industry's most affordable price point.

Unlike any other 802.11n wireless solution in its class, the ZoneFlex 7352 combines patented adaptive antenna technology and automatic interference mitigation to deliver consistent, predictable performance at extended ranges with up to an additional 4dB of BeamFlex gain on top of the physical antenna gain and up to 10dB of interference mitigation.

Additional performance enhancements to signal gain can be attributed to the chip-based transmit beamforming capability adding 3 dB when associated to a compatible client. The 7352 is also ideal for client performance with mobile devices that constantly change orientation with dual-polarized antennas that adapt to hand-held device movement.

Each ZoneFlex 7352 integrates Ruckus-patented BeamFlex, a softwarecontrolled, high gain antenna array that continually forms and directs each 802.11n packet over the best performing signal path. The ZoneFlex 7352 automatically selects channels for highest throughput potential using Ruckus ChannelFly dynamic channel management, adapting to environmental changes. Once deployed, enterprises never have to worry about constant site surveys as the environment changes.

A sleek and low-profile design, the ZoneFlex 7352 was purpose-built for cost-minded enterprises requiring reliable high speed client connectivity. It is ideal for a variety of enterprise and hotspot environments including hotels, schools, retail outlets, branch offices and public venues.

The ZoneFlex 7352 can be deployed as a standalone access point or as part of the centrally-controlled Smart Wireless LAN with the Ruckus ZoneDirector. The ZoneFlex 7352 can also be easily deployed using Smart Mesh Networking to extend Wi-Fi services in locations where Ethernet cabling is not available or cost prohibitive.

### ZoneFlex<sup>™</sup> 7352 802.11N SMART WI-FI ACCESS POINTS

### Patented BeamFlex<sup>™</sup> Technology Extends Signal Range, Improves Stability of Client Connections

All ZoneFlex 7352 Smart Wi-Fi access points integrate a software-controlled smart antenna array that delivers up to an additional 4dB of BeamFlex gain and 10dB of interference mitigation. This allows a 2 to 4x improvement in signal range and a reduction in packet loss from the ability to automatically mitigate interference and avoid obstacles.

### Advanced WLAN Applications with Smart/OS

When used with the Ruckus ZoneDirector Smart WLAN controller, each ZoneFlex 7352 supports a wide range of value-added applications such as guest networking, Smart Wireless Meshing, Dynamic PSK, hotspot authentication, wireless intrusion detection and many more. With



Smart/OS, WLANs can be created and mapped to the same or different APs or VLANs. In a centrally

managed configuration, the ZoneFlex 7352 works with a wide range of authentication servers including Microsoft's Active Directory, LDAP, and RADIUS.

### **Flexible Deployment Options**

ZoneFlex 7352 APs can be deployed as a standalone AP or as part of a centrally managed wireless LAN using ZoneDirector Smart WLAN controllers. ZoneFlex 7352 can be deployed across any L2/L3 network and can bridge traffic onto the local network, tunnel to a central location using L2TP or PPPoE, or route between the WAN and NAT'ed private subnets. It can be wired to the network or connect wirelessly by meshing to another AP when Ethernet cabling is unavailable. When used with the ZoneDirector, each ZoneFlex 7352 is automatically configured through the network making deployment quick and easy.

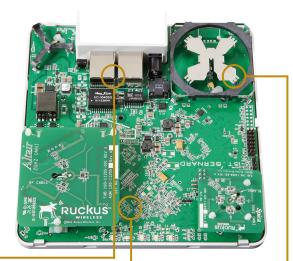
### Complete Local and Remote Management

Each ZoneFlex 7352 can be managed as a standalone AP through a Web-based GUI, using SNMP or through the Ruckus FlexMaster Wi-Fi remote management system. Local management can also be performed using the ZoneDirector Smart WLAN controller. FlexMaster is a LINUX-based software platform that uses industry-standard protocols to perform bulk configuration, fault detection,





monitoring and a wide range of troubleshooting capabilities over a wire area connection. The ZoneDirector enables local management and control of APs, adding value-added services such as transmit power control, guest networking and meshing.



One 10/100 Mbps and one 802.3af PoE 10/100/1000 Mbps Ethernet port support

> Many potential antenna combinations can be chosen for high availability of Wi-Fi

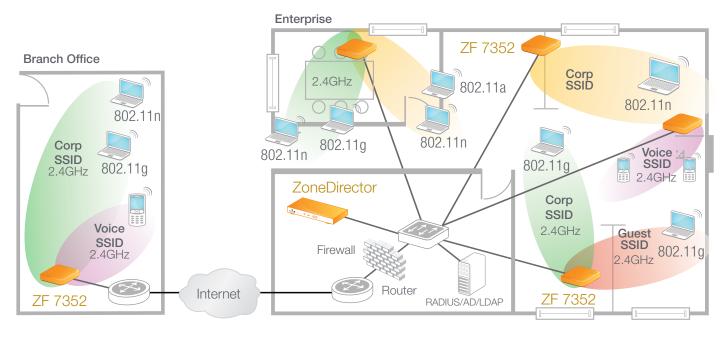
High-gain directional antenna elements not only delivers signal gain but also interference mitigation for range extension, reliability and high data rates



### AFFORDABLE PERFORMANCE FOR ENTERPRISES

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The ZoneFlex 7352 integrates seamlessly with your existing network infrastructure, delivering best-in-class 802.11n performance and reliability at the industry's most affordable price - making it the ideal wireless solution for mid-range enterprise and branch office applications.



### **FEATURES**

- 2.4GHz
- Adaptive antenna technology and advanced RF management
- Up to an additional 4dB BeamFlex gain / 10dB interference mitigation / 6 dBi physical antenna gain
- Automatic interference mitigation, optimized for highdensity environments
- Integrated smart antenna technology
- Standard 802.3af Power over Ethernet (PoE)
- Router mode with NAT and DHCP services
- 2 to 4 times extended range and coverage
- IP multicast video streaming support
- Up to 27 BSSIDs per radio with unique QoS and security policies
- Advanced QoS packet classification and automatic priority for latency-sensitive traffic

- Dynamic, pre-user rate-limiting for hotspot WLANs
- WEP, WPA-PSK (AES), 802.1X support for RADIUS and Active Directory\*\*
- Ethernet 802.1x port-based authentication (authenticator and supplicant)
- Smart Mesh Networking\*\*
- Zero-IT and Dynamic PSK\*\*
- Admission control/load balancing\*\*
- Bandsteering and airtime fairness
- Captive portal and guest accounts \*\*
- · Wall, desktop or ceiling mountable
- Limited lifetime warranty
- \*\* when used with Ruckus ZoneDirector controller.

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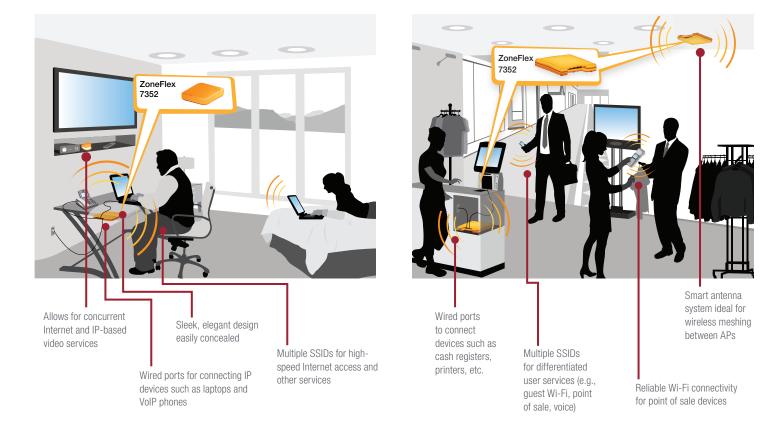


### IN-ROOM DEPLOYMENT FOR HOTELS

The ZoneFlex 7352 is ideal for deployment in hotel guest rooms to provide wireless connection to high quality video and data access, as well as wired connections to IP phone and guest devices.

### DEPLOYMENT FOR RETAIL / BRANCH OFFICES

The ZoneFlex 7352 is ideal for deployment in retail stores to provide inconspicuous wireless connection to high quality video, wireless IP phones and data access for handheld PoS bar code scanners.



### **Specifications**

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PHYSICAL CHARACTERIS	STICS
POWER	<ul><li>DC Input: 12 VDC 1.0A</li><li>Power over Ethernet 802.3 af</li></ul>
PHYSICAL SIZE	• 15.8 cm x 15.8 cm x 4 cm (6.2 in x 6.2 in x 1.57 in)
WEIGHT	• 350 g (0.77 lb.)
ETHERNET PORTS	<ul> <li>1 auto MDX, auto-sensing 10/100/1000 Mbps, RJ-45, POE port</li> <li>1 auto MDX, auto-sensing 10/100 Mbps, RJ-45 ports</li> </ul>
LOCK OPTIONS	<ul> <li>Hidden latching mechanism</li> <li>Kensington Lock Hole</li> <li>T-bar Torx</li> <li>Bracket (902-0108-0000) Torx screw &amp; padlock</li> </ul>
ENVIRONMENTAL CONDITIONS	<ul> <li>Operating Temperature: 0°C - 50°C</li> <li>Operating Humidity: 10% - 95% non-condensing</li> </ul>
POWER DRAW	<ul> <li>DC Input</li> <li>Idle: 1.5W</li> <li>Typical: 2.3W</li> <li>Peak: 4.3W</li> <li>Power over Ethernet Input</li> <li>Idle: 1.5W</li> <li>Typical: 2.3W</li> <li>Peak: 4.3W</li> </ul>

WI-FI		
STANDARDS	<ul> <li>IEEE 802.11b/g/n</li> <li>2.4GHz</li> </ul>	
SUPPORTED DATA RATES	<ul> <li>802.11n: 6.5Mbps – 130Mbps (20MHz)</li> <li>6.5Mbps – 300Mbps (40MHz)</li> <li>802.11b: 11, 5.5, 2 and 1 Mbps</li> <li>802.11g: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps</li> </ul>	
RADIO CHAINS	• 2 x 2	
SPATIAL STREAMS	• 2	
RF POWER OUTPUT PER CHAIN	• 23 dBm for 2.4GHz †	
CHANNELIZATION	• 20MHz and/or 40MHz	
FREQUENCY BAND	• IEEE 802.11 b/g/n: 2.4 – 2.484 GHz	
OPERATING Channels	• US/Canada: 1-11, Europe ( ETSI X30): 1-13, Japan X41: 1-13	
BSSID	• Up to 27	
POWER SAVE	Supported	
WIRELESS SECURITY	<ul> <li>WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i</li> <li>Authentication via 802.1X with the ZoneDirector, local authentication database, support for RADIUS, LDAP, and ActiveDirectory</li> </ul>	
CERTIFICATIONS	<ul> <li>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</li> <li>WEEE/RoHS compliance</li> <li>EN-60601-1-2</li> <li>Wi-Fi Alliance</li> </ul>	

† Maximum power varies by country

### **Product Ordering Information**

MODEL	DESCRIPTION	
ZoneFlex 7352 Smart Wi-Fi 802.11n Access Point		
901-7352-XX00	802.11n AP, 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)	
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PLEASE NOTE: When ordering ZoneFlex Indoor APs, you must specify the destination region by indicating -US, -IL, or -WW 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.

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MANAGEMENT	
DEPLOYMENT OPTIONS	<ul> <li>Standalone (individually managed)</li> <li>Managed by ZoneDirector</li> <li>Managed by FlexMaster</li> <li>Managed by SmartCell<sup>™</sup> Gateway 200</li> </ul>
CONFIGURATION	<ul> <li>Web User Interface (HTTP/S)</li> <li>CLI (Telnet/SSH), SNMP v1, 2, 3</li> <li>TR-069 vis FlexMaster</li> </ul>
AUTO AP SOFTWARE UPDATES	• FTP or TETP, remote auto available

225 Mbps (HT40) / 120 Mbps (HT20)

• Up to 250 per AP

• Up to 12

PERFORMANCE AND CAPACITY

UDP THROUGHPUT

CONCURRENT STATIONS

SIMULTANEOUS VoIP CLIENTS