



Ruckus Wireless™ ZoneFlex™ 7762 Series

Dual-Band 802.11n Smart Wi-Fi® Outdoor AP and Sector AP



Benefits

- Superior Wi-Fi range and reliability
- Exceptional outdoor Wi-Fi performance
- Unified, centralized Wi-Fi management eases administration
- Simplicity and elegance make deployment a breeze
- Extended coverage means fewer APs
- Proven support for IP-based voice and video over Wi-Fi
- SmartMesh capability streamlines costly and complex deployments
- Hardened enclosure for outdoor deployment
- Enables a myriad of new services and service opportunities

The Ruckus ZoneFlex™ 7762 Series represents a completely new class of outdoor Wi-Fi products that deliver 802.11n with unparalleled simplicity, throughput, range and reliability at a fraction of the cost of conventional alternatives.

The ZoneFlex 7762 is the first dual-band 802.11n outdoor Access Point (AP) to integrate dynamic beamforming technology combined with unique interference avoidance technology. This patented technology enables much longer range signals, better signal penetration inside buildings, and more resilient mesh connections that automatically adapt to interference and changing environmental conditions.

Supporting advanced SmartMesh™ Networking, the ZoneFlex 7762 Series is perfect for providers looking to quickly and economically expand branded broadband services, offload data traffic from congested 3G networks, deploy multimedia hotspots or offer wireless broadband services where fixed line access is limited. Separate radios for access and backhaul traffic deliver high-throughput to clients.

The 7762 Series can be centrally managed by the ZoneDirector™ Smart WLAN controller as part of a unified indoor/outdoor wireless LAN or deployed as a standalone AP and managed individually or through the FlexMaster™ remote Wi-Fi management system.

The ZoneFlex Series implements Ruckus-patented BeamFlex™ smart antenna technology that enables consistent, high-performance, extended coverage and multimedia support. A Web-based wizard allows any computer user to configure ZoneFlex products through the ZoneDirector controller—creating a secure and sophisticated WLAN in a matter of minutes.

The ZoneFlex products simply plug into any Ethernet network and automatically discovers the ZoneDirector. No RF tuning and no client configuration are needed. The Ruckus ZoneFlex 7762 Series is a true plug-and-play outdoor WLAN that is ready to use.



7762 Series AP with Pole/Wall Mounting Bracket



An automatic signal optimizer modifies RF transmissions based on the orientation of the access point.

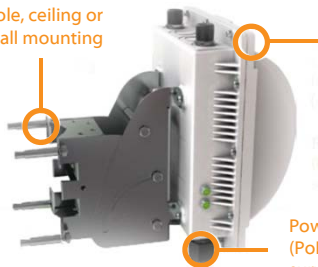


Simple wall-mounting options make deployment fast and easy



Pole-mounting can be performed in minutes with all configuration and management performed centrally

Flexible mounting options include pole, ceiling or wall mounting



ZoneFlex 7762 can be deployed in harsh environmental conditions ranging from -40°C to 65°C (-40°F to 149°F)

Power over Ethernet (PoE) output for surveillance camera

Benefits

Superior Wi-Fi® range and reliability

Automatic dynamic beamforming combined with unique interference avoidance technology delivers up to 10 dBi of signal gain and -15 dB of interference rejection

Exceptional outdoor Wi-Fi performance

Advanced smart Wi-Fi design with concurrent 802.11n radios delivers 150 Mbps of sustained throughput between mesh Access Points (APs) 600 meters apart and 50 Mbps of sustained throughput to clients 300 meters away

Unified, centralized Wi-Fi management eases administration

ZoneDirector™ controllers and/or the FlexMaster™ Management System provide a detailed view into and control over both indoor and outdoor Smart Wi-Fi APs enabling seamless and system-wide administration of the entire wireless environment

Simplicity and elegance make deployment a breeze

A sleek, lightweight design hiding external antennas is combined with ultra-simple, wizard-based configuration to make configuration and installation as simple as it gets, performed in minutes, not hours

Extended coverage means fewer APs

Adaptive/directional, high-gain antennas dynamically combine to deliver two- to four-times the coverage over typical outdoor APs

Proven support for IP-based voice and video over Wi-Fi

An adaptive/directional antenna array and expert QoS software optimize delay-sensitive, IP video and high-density voice over Wi-Fi (VoFi) applications and PoE output allows connecting other devices such as an IP camera

SmartMeshing streamlines costly and complex deployment

Integrated SmartMesh™ Networking technology automates deployment and eliminates running expensive cables to every outdoor AP

Hardened enclosure for outdoor deployment

IP-67 water and dust proof plastic enclosure with flexible mounting options ensures that no distortion of Wi-Fi signals is introduced

Enables a myriad of new services and service opportunities

Smart Wi-Fi applied outdoors now enables new revenue-generating services such as community Wi-Fi, IP-video applications, multimedia hotspots, extended WLAN services outdoors and 3G data offloading

Features

- Concurrent dual-band (5 GHz/2.4 GHz) support
- Dynamic beamforming and advanced RF management
- 7762-S offers up to 10 dBi signal gain / -15 dB interference rejection and 120° coverage
- 7762 provides up to 7 dBi signal gain / -15 dB interference rejection
- Automatic interference avoidance, optimized for high-density environments
- Standard 802.3af/at Power over Ethernet (PoE)
- Ruckus™ custom high power PoE injector included
- Standard 802.3af output for surveillance camera
- Wall, pole or ceiling mountable
- Built-in heater for cold climate (-40° C)
- 2 to 4 times extended range and coverage
- Multicast IP video streaming
- 600 Mbps of user throughput (300 Mbps/radio)
- Four queues per client station
- Advanced QoS packet classification and automatic priority for latency-sensitive traffic
- 16 BSSIDs with unique QoS and security policies (8 BSSIDs/radio)
- WEP, WPA-PSK (AES), 802.1X support
- SmartMesh™ Networking*
- Zero-IT and Dynamic PSK*
- Admission control/load balancing*
- Band steering and airtime fairness support
- Captive portal and guest accounts *
- RADIUS and Active Directory* support

*When used with Ruckus ZoneDirector™ controller

ZoneFlex 7762 Integrated 2.4/5GHz Smart Antenna Array Offers Over 4,000 Unique Patterns for Ultra Reliability



A patented smart antenna array in each Ruckus Smart Wi-Fi outdoor AP integrates horizontally and vertically polarized high-gain, directional antenna elements to provide over 4000 potential signal paths to any given end device while delivering up to 7dBi in signal gain and up to -15dB of interference avoidance for unprecedented range extension, signal reliability and higher data rates.

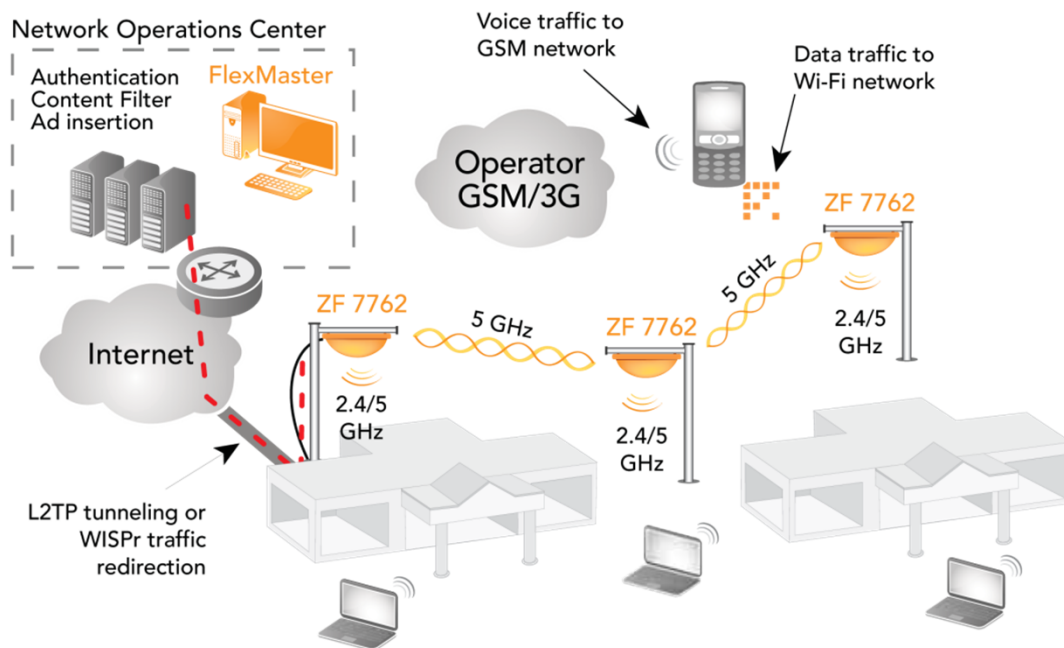
ZoneFlex 7762-S Sector Integrated 2.4GHz Smart Antenna Array with 24 Unique Patterns for Ultra Reliability (5GHz radio operation requires connecting external antennas to the N-type connectors on the 7762-S)



A patented, sectorized smart antenna array in each ZoneFlex 7762-S outdoor AP integrates horizontally and vertically polarized high-gain, directional antenna elements to provide 24 potential signal paths to any given end device while delivering up to 10dBi in signal gain and up to 15dB of interference avoidance within a 120 degree azimuth for unprecedented range extension, signal reliability and higher data rates.

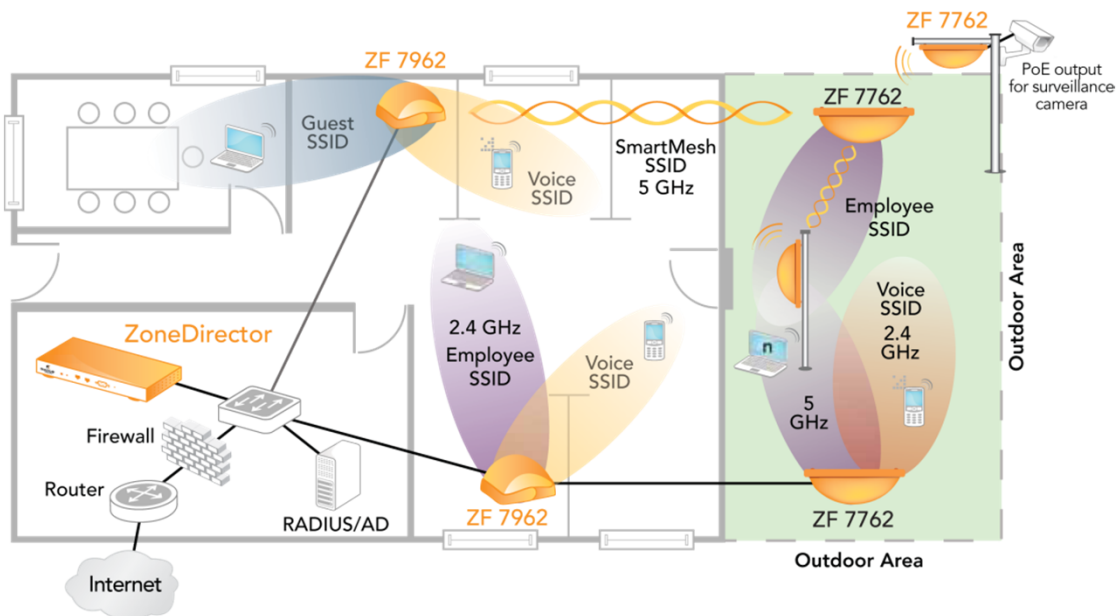
Smarter Multimedia Hotspots (Smartspots)

Perfect for offloading data traffic from 3G networks, the ZoneFlex 7762 allows the cost-effective extension of carrier-branded broadband services and creating more robust multimedia hotspots.



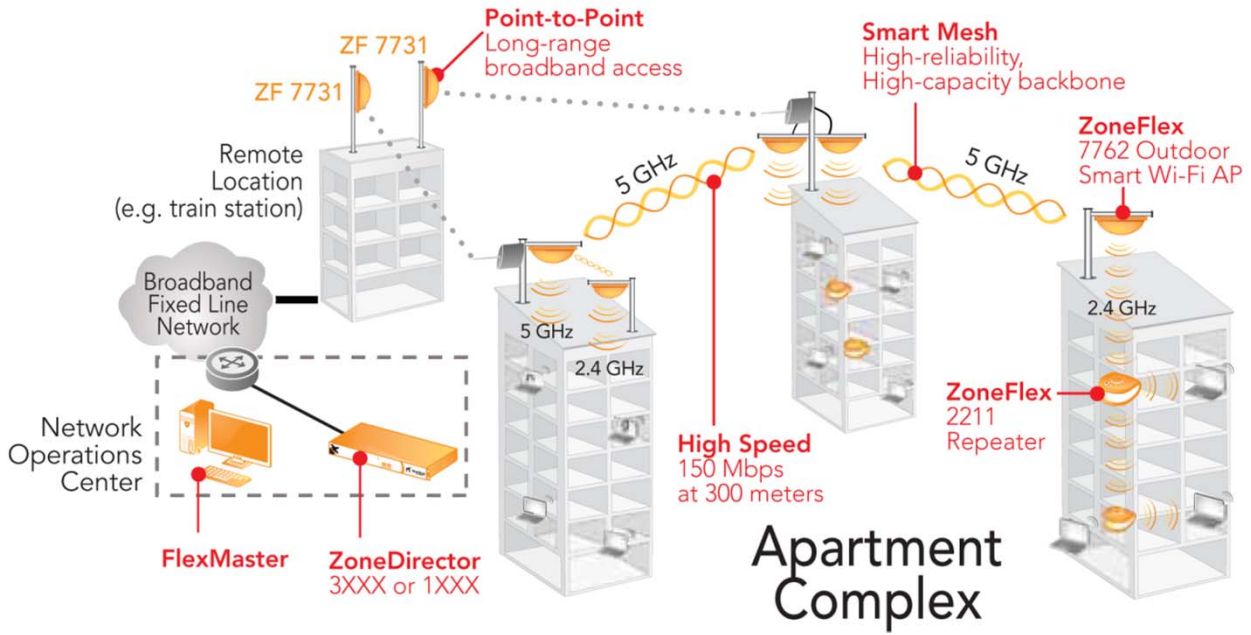
Enterprise WLAN Extension

ZoneFlex 7762 Smart Wi-Fi® access points can be deployed as a seamless extension (meshed or wired) to a managed wireless LAN working in concert with indoor ZoneFlex 7962 APs and controlled by the Ruckus ZoneDirector™ Smart WLAN controller.



Wireless Broadband Access

A long-range, adaptive smart antenna system within each ZoneFlex™ 7762 allows providers to reliably deliver new wireless broadband access services in areas where fixed line access is non-existent or cost prohibitive.



Specifications

Differences between products are color coded.

	7762	7762-S
Physical Characteristics		
Power	Power over Ethernet & 12V DC	Power over Ethernet & 12V DC
Physical Size	23.9 cm (L), 19.5 cm (W), 14.1 cm (H) 9.4" L x 7.7" W x 5.5" H	23.9 cm (L), 19.5 cm (W), 14.1 cm (H) 9.4" L x 7.7" W x 5.5" H
Weight	1900 grams (4.19 lbs.)	1900 grams (4.19 lbs.)
Antenna	Internal software-configurable 2.4/5 GHz antenna array with high-gain elements that provide over 4,000 unique antenna patterns	Internal software-configurable 2.4 GHz antenna array with high-gain elements that provide 24 unique antenna patterns for 120° coverage 5 GHz external antenna connectors
Ethernet Ports	<ul style="list-style-type: none"> 2 ports, auto MDX, auto-sensing RJ-45 10/100/1000 Mbps Power over Ethernet (802.3at) input 10/100 Mbps Power over Ethernet (802.3af) output 	<ul style="list-style-type: none"> 2 ports, auto MDX, auto-sensing RJ-45 10/100/1000 Mbps Power over Ethernet (802.3at) input 10/100 Mbps Power over Ethernet (802.3af) output
Environmental Conditions	IP-67 rated Operating air temperature: -40°C to 65°C (-40°F to 149°F) -20°C (-4°F) when heater is disabled	IP-67 rated Operating air temperature: -40°C to 65°C (-40°F to 149°F) -20°C (-4°F) when heater is disabled
Power Draw	12.95W (PoE) 15W (12V DC)	12.95W (PoE) 15W (12V DC)
Performance and Supported Configurations		
Concurrent Clients	Up to 100/radio	Up to 100/radio
Vo-Fi Clients	Up to 20 simultaneously	Up to 20 simultaneously
Target UDP Throughput	<ul style="list-style-type: none"> Up to 150 Mbps sustained throughput over 300 meters between mesh APs Up to 50 Mbps sustained throughput over 150 meters to client devices 	<ul style="list-style-type: none"> Up to 150 Mbps sustained throughput over 600 meters between mesh APs Up to 50 Mbps sustained throughput over 300 meters to client devices
Traffic Management and Quality of Service		
Classes of Service	Voice, video, best effort & background	Voice, video, best effort & background
Software Queues	Four per client	Four per client
802.11e	Supported	Supported
Automatic Traffic Classification	Automatic type of service tagging for multicast video packets video traffic	Automatic type of service tagging for multicast video packets video traffic
Rate Limiting	Supported	Supported
VLAN Support	802.1Q	802.1Q
Heuristic Classification	Supported	Supported
Deployment		
Options	<ul style="list-style-type: none"> Managed by ZoneDirector Individually managed Managed by FlexMaster Management 	<ul style="list-style-type: none"> Managed by ZoneDirector Individually managed Managed by FlexMaster Management
PoE Injector	Ruckus custom high power PoE injector included	Ruckus custom high power PoE injector included
Management		
Configuration	Web user interface, CLI (Telnet), SSH HTTP/S, SNMP statistics interface, TR-069 through FlexMaster Management	Web user interface, CLI (Telnet), SSH HTTP/S, SNMP statistics interface, TR-069 through FlexMaster Management
Statistics	LAN, wireless and associated stations (accessible via Web UI)	LAN, wireless and associated stations (accessible via Web UI)
Auto AP Software Updates	FTP or TFTP, remote auto available	FTP or TFTP, remote auto available
Wi-Fi*		
Standards	IEEE 802.11a/b/g/n 2.4 GHz and 5 GHz	IEEE 802.11a/b/g/n 2.4 GHz and 5 GHz
Supported Data Rates	802.11n: 6.5 to 130 Mbps (20 MHz) 6.5 to 300 Mbps (40 MHz) 802.11a: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps 802.11b: 11, 5.5, 2 and 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps	802.11n: 6.5 to 130 Mbps (20 MHz) 6.5 to 300 Mbps (40 MHz) 802.11a: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps 802.11b: 11, 5.5, 2 and 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9 and 6 Mbps

Ruckus Wireless™ ZoneFlex™ 7762 Series

Specifications Continued

	7762	7762-S
Radio Chains	3 x 3	3 x 3
Spatial Streams	2	2
Max RF Power Output	28 dBm/600 mW	28 dBm/600 mW
Channelization	20 MHz and/or 40 MHz	20 MHz and/or 40 MHz
Frequency Band	IEEE 802.11n: 2.4 – 2.484 GHz and 5.15 – 5.85 GHz IEEE 802.11a: 5.15 – 5.875 GHz IEEE 802.11b: 2.4 – 2.484 GHz	IEEE 802.11n: 2.4 – 2.484 GHz and 5.15 – 5.85 GHz IEEE 802.11a: 5.15 – 5.875 GHz IEEE 802.11b: 2.4 – 2.484 GHz
Operating Channels	2.4 GHz channels: US/Canada: 1-11, Europe (ETSI X30): 1-13 5 GHz channels: Country dependent for the following channel ranges: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165	2.4 GHz channels: US/Canada: 1-11, Europe (ETSI X30): 1-13 5 GHz channels: Country dependent for the following channel ranges: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165
BSSID	Up to eight per radio (16 total)	Up to eight per radio (16 total)
Power Save	Supported	Supported
Wireless Security	<ul style="list-style-type: none"> ▪ WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i ▪ Authentication via 802.1X with the ZoneDirector, local authentication database, support for RADIUS and ActiveDirectory 	<ul style="list-style-type: none"> ▪ WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i ▪ Authentication via 802.1X with the ZoneDirector, local authentication database, support for RADIUS and ActiveDirectory
Certifications	<ul style="list-style-type: none"> ▪ U.S., Europe, Canada, Australia, India, China, Hong Kong, Malaysia, Philippines, and New Zealand ▪ WEEE/RoHS compliance ▪ Wi-Fi Alliance Certification (Wi-Fi Certified™) (in process) 	<ul style="list-style-type: none"> ▪ U.S., Europe, Canada, Australia, India, China, Hong Kong, Malaysia, Philippines, and New Zealand ▪ WEEE/RoHS compliance ▪ Wi-Fi Alliance Certification (Wi-Fi Certified™)

Ordering Information

ARRIS #	Mfg #	Description
TBD	TBD	ZoneFlex 7762 centrally managed concurrent dual band 802.11n outdoor access point
TBD	TBD	ZoneFlex 7762-S centrally managed concurrent dual band 802.11n outdoor Sector access point, includes universal pole/wall mounting bracket
794015	SVC-CTRCT	1 Year Service Contract Required

PLEASE NOTE: When ordering you must specify the destination region by indicating -US, -EU, -UK, -CH, -UN, -AU, -UU or -IN.

Contact ARRIS: (888) 353-9473 www.arrisi.com

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