ZoneFlex™ 7731
802.11n 5GHz Outdoor Point to Point Bridge

The First Centrally Managed 802.11n 5GHz Outdoor Point to Point Bridge

The Ruckus Wireless ZoneFlex 7731 is the first centrally-managed, outdoor point to point bridge that unleashes the promise of 5 GHz 802.11n, delivering unparalleled throughput. Backhaul throughput of over 100 Mbps open opportunities to new business models, bridging remote locations and providing broadband services to locations not reachable before, in an affordable way.

Designed for harsh outdoor conditions, the Ruckus ZoneFlex 7731 is perfect for service providers looking to easily extend branded broadband services, backhaul 3G networks, offload data traffic from congested 3G networks, deploy multimedia hotspots, or offer wireless broadband services where fixed line access is limited.

The ZoneFlex 7731 is also ideal for hotels, schools, warehouses and other enterprises looking to extend managed Wireless LANs (WLANs) across remote buildings and where Ethernet cabling is not possible.

Auto-pairing of wireless bridges, in addition to flexible mounting options, forgiving antenna pattern, and an easy-to-use aiming software, allows installers to deploy and optimize a wireless link in a short time, significantly increasing productivity and reducing deployment costs.

Unlike other outdoor point-to-point bridges, the ZoneFlex 7731 is centrally managed by Ruckus FlexMaster, providing a complete view of the entire wireless network including ZoneDirector and other indoor and outdoor ZoneFlex APs.

BENEFITS

Wire-like throughput over the air
Based on 802.11n standard, the ZoneFlex 7731 supports data rates up to 300 Mbps. With Ruckus purpose-built directional antenna, the ZoneFlex 7731 supports over 120 Mbps at a kilometer, and offers a maximum link range of 10 km.

Easy installation and pairing
Designed with simple and flexible mounting options and, the ZoneFlex 7731 finds its peer automatically and enables installers to deploy the APs effortlessly.

Simple positioning and aiming
With a 30-degree 3dBm beamwidth antenna and a sophisticated LED-based aiming software, aiming and optimizing performance has never been easier.
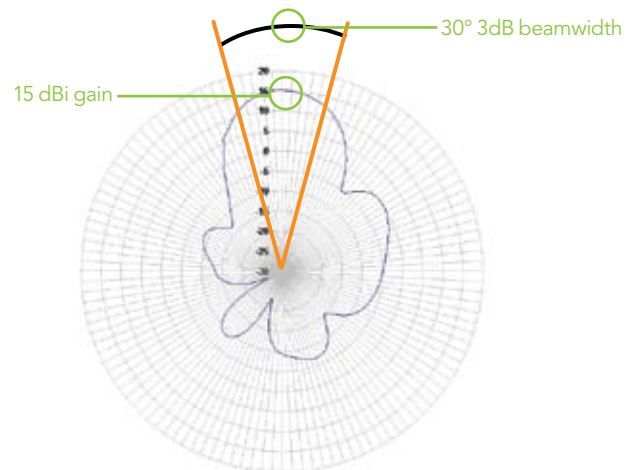
Secure and scalable
AES-based, the wireless bridge link is secure and can scale to support multiple networks segmented by VLANs.

Centrally managed network
The Ruckus ZoneFlex 7731 bridge is fully managed by FlexMaster and supports standard-based SNMP and TR-069 allowing operators to easily configure and manage the bridges as part of the larger network.

Unmatched ROI
The wireless link offers a much higher data throughput than T1/E1 or xDSL lines with only a fraction of the fixed line cost for both installation and without the recurring leased line cost. The ZoneFlex 7731 is also an ideal option for backhauling 3G networks.

30° 3dB beamwidth

15 dBi gain

BUILDING TO BUILDING BRIDGING

ZoneFlex 7731 provides an ideal solution for either the primary link or the redundant link of the two LANs in the buildings.

Network Operations Center

Authentication
Content Filter
Ad insertion

FlexMaster

Voice traffic to GSM network

Data traffic to Wi-Fi network

Operator GSM/3G

ZF 2741

ZF 7762

ZF 7731

ZF 7731

ZF 2741

ZF 2741

Internet

L2TP tunneling or WISPr traffic redirection

WIRELESS BROADBAND ACCESS

ZoneFlex 7731 allows providers to reliably deliver new wireless broadband services in areas where fixed line access is non-existent or cost-prohibitive.

Point-to-Point
Long-range bridge

Smart Mesh
High-reliability,
High-capacity backbone

ZF 7731

ZF 7731

ZF 7731

ZF 2741

ZF 2741

ZF 2741

Remote Location
(e.g. train station)

Broadband Fixed Line Network

ZF 7762

ZF 7731

ZF 7762

Network Operations Center

FlexMaster

ZoneDirector
3XXX or 1XXX

MediaFlex
2211
Repeater

Apartment Complex

Specifications

PHYSICAL CHARACTERISTICS

POWER	• Power over Ethernet and 12VDC
PHYSICAL SIZE	• 271mm (L), 172mm (W), 131.5mm (H)
WEIGHT	• 877 grams (no external mounting hardware)
ANTENNA	• 15 dBi internal directional antenna
	• 30 degree 3dB beamwidth
	• Two external N-Type antenna connectors
ETHERNET PORTS	• 1 port, auto MDX, auto-sensing 10/100/1000 Mbps, RJ-45
	• Power over Ethernet (802.3af)
ENVIRONMENTAL CONDITIONS	• IP-65 rated
	• Operating air temperature: -40°C – 65° C (-40°F – 149°F)

PERFORMANCE AND SUPPORTED CONFIGURATIONS

TARGET UDP THROUGHPUT	• Up to 150 Mbps at 1.5 km/1 mi
	• Up to 120 Mbps at 3 km/2 mi
	• Up to 100 Mbps at 5 km/3 mi
	• Up to 50 Mbps at 15 km/9 mi
MAXIMUM LINK DISTANCE	• 20 Kilometers

TRAFFIC MANAGEMENT AND QUALITY OF SERVICE

AUTOMATIC TRAFFIC CLASSIFICATION	• Automatic type of service tagging for multicast video packets
VLAN SUPPORT	• 802.1Q passthrough
	• Management VLAN

DEPLOYMENT

OPTIONS	• Individually managed
	• Managed by FlexMaster
AIMING ASSISTANCE	• LED-based aiming software

MANAGEMENT

CONFIGURATION	• Web user interface, CLI (Telnet), SSH HTTP/S, SNMP statistics interface, TR-069 through FlexMaster
STATISTICS	• Link event counters
AUTO AP SOFTWARE UPDATES	• FTP or TFTP, remote auto available
AUTO PROVISIONING	• Automatic or manual

WI-FI

STANDARDS	• IEEE 802.11a
	• IEEE 802.11n Draft 2.0
	• 5Ghz operation
SUPPORTED DATA RATES	• **802.11n:** 6.5Mbps – 130Mbps (20MHz) 6.5Mbps – 270Mbps (40MHz)
	• **802.11a:** 54, 48, 36, 24, 18, 12, 9 and 6Mbps
RADIO CHAINS	• 2 x 2
SPATIAL STREAMS	• 2
RF POWER OUTPUT	• 24 dBm
CHANNELIZATION	• 20MHz and/or 40MHz
FREQUENCY BAND	• IEEE 802.11n: 5.15 – 5.85 GHz
	• IEEE 802.11a: 5.15 – 5.85 GHz
OPERATING CHANNELS	• 5GHz 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
WIRELESS SECURITY	• WPA2 AES, 802.11i
CERTIFICATIONS	• U.S., Europe, Canada, Australia, India, China, Malaysia, Philippines, New Zealand
	• WEEE/RoHS compliance

Product Ordering Information

Model	Description
ZoneFlex 7731 802.11n 5 GHz Outdoor Point to Point Bridge	
901-7731-XX01	Centrally managed 802.11n 5 GHz Outdoor Point to Point Bridge

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

ruckus WIRELESS™

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