



# data sheet

## **BENEFITS**

#### Easy to Install and Manage

Simply plug the small form factor Ruckus ZoneFlex 7741 DAS AP with flexible mounting and powering options into an existing DAS infrastructure to enable universal Wi-Fi connectivity

#### **Universal Support**

Provides an extremely cost effective method for quickly deploying Wi-Fi in-building wireless systems

#### Wi-Fi Services Offered

Can provide data services for all Wi-Fi enabled devices in a venue, which would include laptops, tablets, building automation devices, etc.

#### **Lower Deployment Costs**

The greater power levels provided by the ZoneFlex 7441 enable it to drive an RF signal out across a very large DAS footprint to lower deployment costs

#### **Robust**

The ZoneFlex 7441 is an indoor hardened device supporting temperature ranges required in noncontrolled environments and is certified for on-board railway applications





0.9 kg (2 lbs.)



# ZoneFlex<sup>™</sup>7441

# ACCESS POINT FOR IN-BUILDING DISTRIBUTED ANTENNA SYSTEMS (DAS)

### Wi-Fi services on coax distributed antenna systems

Wi-Fi has rapidly become the de facto solution for providing indoor wireless data services. Wi-Fi is inexpensive, popular with data users, and available on all data centric devices, whereas distributed antenna systems have long been the preferred solution for providing indoor mobile coverage. Both technologies can provide a neutral host solution where the subscribers of any mobile operator can be easily connected. Typically these are deployed as parallel networks in many venues, but with the ZoneFlex 7441 access point it is now possible to deploy Wi-Fi over an existing DAS network enabling operators of DAS systems to create and market Wi-Fi services for property management, building operations, guest access and even wholesale Wi-Fi HotSpot services across a building.

The 2.4GHz or 5GHz selectable ZoneFlex 7441 is a fully featured, fully integrated platform, purpose built and designed to meet the demanding requirements for today's in-building wireless services. The ZoneFlex 7441 is an 802.11n 1x1 MIMO AP with an external N style coax connector designed to provide high-power RF and expanded link-budgets needed to push WLAN services over passive coaxial DAS segments. In cases where a DAS system has already been deployed, this is an extremely cost effective way to add Wi-Fi coverage. As Wi-Fi demand increases, it is always possible to come back at a later date and add a high-capacity Wi-Fi overlay network based on Ethernet backhaul.

The ZoneFlex 7441 is an excellent way to get started with Wi-Fi in a simple, quick, and cost effective manner.

Note: 7441 is only available with ZoneFlex 9.7 and greater

#### **Specifications**

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PHYSICAL CHARACTERISTICS		
POWER	802.3at/af PoE Input     DC 10 to 32 VDC 2.1/5.5mm DC Jack	
PHYSICAL SIZE	• 4.25" x 5.5" x 1.125" / 10.8cm x 14cm x2.85cm	
WEIGHT	• 0.9 Kg (2 lbs)	
ETHERNET PORTS	10/100/1000Base-T 802.3, 802.3u, 802.3ab Jumbo frame support (up to 2000 byte frames) 802.3at/af PD, PoE PD Class 3 (passive bridge)	
RF PORT	N-female	
ENVIRONMENTAL CONDITIONS	• Extended temperature range: -20°C to 60° C	
POWER DRAW	<ul> <li>PoE Input</li> <li>Idle: 2W</li> <li>Typical: 7.5W</li> <li>Peak: 9W</li> <li>DC Input</li> <li>Idle: 2W</li> <li>Typical: 8W</li> <li>Peak: 9.5W</li> </ul>	
MOUNTING OPTIONS	Desk Top     Wall Mount with bracket (side to wall)     Wall Mount with bracket (back to wall)     DIN Rail Mount     Bracket requires 4mm or #8 screw	
CERTIFICATION SPECS		

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CERTIFICATION SPECS		
TRANSPORTATION	<ul> <li>ISTA 2A:</li> <li>Random Vibration &amp; Drop Test</li> <li>Compression &amp; Loose Cargo Test</li> <li>ETSI EN 300 019-2-2 Specification T 2.3 Public transportation</li> </ul>	
SAFETY	<ul> <li>Safety Listing - EU</li> <li>CB Scheme Certificate covers IEC</li> <li>60950-1 for all CB Countries including:</li> <li>IEC 60950-1: 2005 Second Edition</li> <li>EN 60950-1: 2006/A11:2009+A1; 2010</li> <li>CAN/CSA C22.2 60950-1 Edition 2</li> <li>UL 60950-1 Edition 2</li> </ul>	
MEDICAL ELECTRICAL EQUIPMENT	• IEC 60601-1-2	
HEALTH AND HUMAN SAFETY TO RF EXPOSURE	<ul><li>EN 62311:2008</li><li>FCC 0ET-65</li><li>ICNIRP:2010</li></ul>	
HAZARDOUS MATERIALS	<ul><li>RoHS Directive 2002/95/EC</li><li>RoHS Directive 2011/65/EU</li><li>WEEE</li></ul>	
IMMUNITY	<ul> <li>ETSI EN 301 489 -1</li> <li>ETSI EN 301 489 -17</li> <li>EN 50121-4:2006,</li> <li>EN 61000-6-4:2007</li> <li>EN 60601-1-2:2007</li> </ul>	
RAILWAY AND ROLLING STOCK	EN50155 – railway*** on-carriage applications:     EN50121-1 EMC     EN50121-4 Immunity	

WI-FI		
STANDARDS	• IEEE 802.11a/b/g/n	
FREQUENCY BANDS (BAND SELECTABLE)	<ul> <li>ISM 2.4-2.484GHz</li> <li>U-NII-1 5.15-5.25</li> <li>U-NII-2 5.25-5.35 (DFS*)</li> <li>U-NII-2B 5.37-5.47*</li> <li>U-NII-2C 5.47-5.725 (DFS*)</li> <li>U-NII-3 5.725-5.825**</li> <li>U-NII-4 5.85-5.925*</li> </ul>	
OUT OF BAND TX NOISE EMISSIONS 800 TO 2100 MHZ	<ul><li>&lt; 112 dBm/Hz max</li><li>&lt; 118 dBm/Hz typical</li></ul>	
WLAN RADIO CONFIGURATION	Dual band selectable 1 x 1:1 stream radio	
RF POWER OUTPUT PER CHAIN	<ul><li>28 dBm for 2.4GHz †</li><li>27 dBm for 5.0GHz †</li></ul>	
MINIMUM RX SENSITIVITY****	<ul><li>Up to -95 dBm (2.4GHz)</li><li>Up to -94 dBm (5GHz)</li></ul>	
CHANNELIZATION	• 20MHz or 40MHz	
BSSID	• Up to 32; 27 configurable	
CERTIFICATIONS † †	U.S., Europe, Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Costa Rica, Hong Kong, India, Indonesia, Israel, Japan, Korea, Malaysia, Mexico, Peru, Philippines, Russia, Saudi Arabia, Singapore, South Africa, Taiwan	

- \* Available support on future s/w release
- \*\* Allowed channels vary by regulatory domain
- \*\*\*4Q13 certification
- \*\*\*\* Rx Sensitivity varies by band, channel width, and MCS rate
- † Maximum power varies by country setting, band, and MCS rate
- † † Check price list for availability status

PERFORMANCE AND CAPACITY		
PHYSICAL LAYER MODULATION DATA RATE	Up to 150 Mbps	
CONCURRENT STATIONS	<ul><li>Up to 250 (single antenna)</li><li>Unspecified for distributed antennas</li></ul>	
SIMULTANEOUS VOIP CLIENTS	<ul><li>Up to 20 (single antenna)</li><li>Unspecified for distributed antennas</li></ul>	

## **Product Ordering Information**

MODEL	DESCRIPTION
Full Accessory Kits	
901-7441-XX01	ZoneFlex 7441, 802.1n 1x1:1, Single Band Access Point for DAS, 2.4 GHz or 5 GHz selectable, one 10/100/1000 Ethernet port, 802.3af PoE input or DC in, does not include power adapter
Where XX is US, WW Power Accessories	
902-0173-XX10	Power adapter, AC/DC wall plug, 100-250 VAC 50/60 Hz, quantity 10 (XX can be US, EU, AR, AU, BR, CN, IN, KR, SA, UK, UN)
902-0162-XX10	Spare, PoE power adapter, 10/100/1000Base T, Quantity 10 (XX can be US, EU, UK, AU, CH, or IN)
	RUCKUS Simply Better Wireless.

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• EN61373 Shock & Vibration