

Ruckus
Simply Better Wireless.

data sheet

BENEFITS

High speed client performance with integrated adaptive antennas
Patented BeamFlex technology greatly improves connection reliability and increases WLAN capacity

Light, slim design for easy deployment
Compact, lightweight design with integrated antennas provide flexible deployment options with quick and easy installation

Highly Scalable
The ability to cost effectively scale high density networks

Predictive channel selection for increased capacity and reduced interference
ChannelFly automatically selects the best performing channel based on statistical, real-time capacity analysis of all RF channels

Standard 802.3af power
Easy installation using standard 802.3af PoE switches or PoE injectors

Unmatched Wi-Fi capacity and reliability
BeamFlex delivers up to 4 dB of added signal gain and up to 10dB of interference mitigation

Enhanced receive capabilities
Support for signal polarization diversity with maximal ratio combining (PD-MRC) ensures reliable connectivity for mobile devices

ZoneFlex™ T300 Series

802.11AC SMART WIFI OUTDOOR ACCESS POINTS

High Capacity, High Performing Outdoor Access Points

The ZoneFlex T300 Series are the first dual-band 802.11ac outdoor access points (APs) designed explicitly for high density public venues such as airports, conventions centers, plazas & malls, and other dense urban environments.

These environments require support for users that demand high capacity and mobile device ready WLAN services. The T300 is uniquely designed to serve these demanding environments with dual-polarized adaptive antennas that dynamically select the best antenna patterns on a per packet basis to provide reliable client connections and to increase network capacity while implicitly mitigating interference and improving signal-to-interference -plus-noise ratio (SINR).

In addition, the T300 Series uniquely leverages a predictive model for channel selection (ChannelFly) that uses actual activity to learn what channels will yield the most capacity to provide the highest client speeds and reduced interference.

Designed for easy installation within an ultra lightweight and low profile enclosure, the T300 Series is ideal for venue owners and enterprises looking to quickly and economically deploy Wi-Fi in high-capacity environments.

The ZoneFlex T300 Series can be centrally managed by the ZoneDirector Smart WLAN controller or the Smart Cell Gateway (SCG) 200 as part of a unified indoor/outdoor wireless LAN, deployed as a standalone AP and managed individually, or through the FlexMaster remote Wi-Fi management system.

With the T300, venue operators can now deliver an enhanced Wi-Fi experience, which directly translates into increased customer loyalty and ultimately increased revenue.

ZoneFlex™ T300 Series

DUAL-BAND SMART WI-FI OUTDOOR APS

ZoneFlex T300



Dual-band 802.11ac 2:2x2, 1200 Mbps

Internal omni directional antenna for 2.4GHz and 5GHz

- Well suited to high-density deployments
- Best for omni coverage and high capacity

ZoneFlex T300e



Dual-band 802.11ac 2:2x2, 1200 Mbps

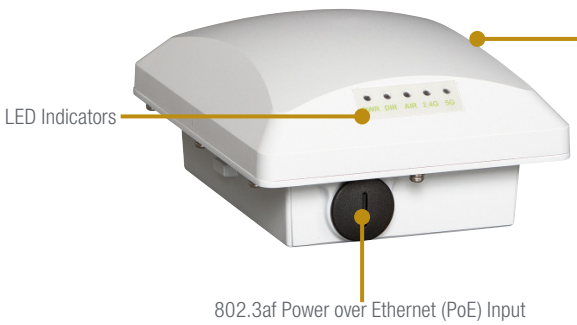
Internal omni directional antenna for 2.4GHz and 5GHz, support for optional external 5GHz antennas

- Well suited to high-density deployments
- Best for "greenfield" applications requiring 2.4GHz access and long range 5GHz SmartMesh**

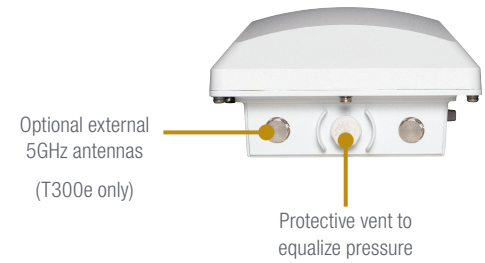
FEATURES

- Concurrent dual-band (5GHz/2.4GHz) support
- 1200 Mbps of total WLAN RF capacity
- BeamFlex+ adaptive antenna technology and advanced RF management
- Up to 10dB interference mitigation
- Optimized for high-density environments
- Polarization diversity for optimal mobile device performance
- IP-67 rated, -20°C to +65°C
- Adjustable bracket included
- Small, lightweight, and sleek form factor
- Standalone or centrally managed by ZoneDirector, SCG 200, or FlexMaster
- Dynamic, per-user rate-limiting for hotspot WLANs
- WPA-PSK (AES), 802.1X support for RADIUS and Active Directory*
- BYOD, Zero-IT, and Dynamic PSK*
- Captive portal and guest accounts *
- Admission control/load balancing*
- Band balancing*
- Application recognition and control*
- Secure HotSpot*
- SPOT location services*
- Intelligent Band steering
- Airtime fairness
- SmartMesh**
- Smart QoS

*When used with Ruckus ZoneDirector controller
**Supported in future software release







Specifications

PHYSICAL CHARACTERISTICS	
POWER	• 802.3af PoE Input (Class 3 PD)
PHYSICAL SIZE	• 7" x 5.9" x 3.4" (18cm x 15cm x 8.6cm)
WEIGHT	• 2.1 lbs (1 kg) with bracket • 2 lbs (0.9 kg) without bracket
ETHERNET PORTS	• 10/100/1000Base-T 802.3,802.3 u,802.3ab • 802.3at/af PoE PD Input • Jumbo frame support (2290 byte max MTU)
RF CONNECTORS	• N female qty 2 (optional 5GHz only)
ENVIRONMENTAL CONDITIONS	• Operating temperature range: -20°C to 65° C • Weather protection: IP67 per IEC 60529

POWER DRAW	• PoE Input
	  • Idle: 6.5W
	  • Typical: 7.5W
	  • Peak: 11W

MOUNTING OPTIONS	• Wall Mount • Pole Mount Diameter 1" to 2.5"
CERTIFICATION SPECS	

TRANSPORTATION	• ISTA 2A:
	  • Random Vibration & Drop Test
	  • Compression & Loose Cargo Test
	• ETSI EN 300 019-2-2 Specification T 2.2 Careful transportation

SAFETY	• Safety Listing - EU • EN 60950-1:2006/A12:2011 • EN 60950-22:2006/AC:2008 • International • CB Scheme Certificate • CB Bulletin • IEC 60950-1: 2005 Second Edition • IEC 60950-22: 2005 First edition • CISPR 22 • CISPR 24 • CAN/CSA C22.2 60950-1 Edition 2 • CAN/CSA C22.2 60950-22 Edition 1
HEALTH AND HUMAN SAFETY TO RF EXPOSURE	• EN 62311:2008 • EN 50385:2002 • FCC OET-65 • ICNIRP:2010
HAZARDOUS MATERIALS	• RoHS Directive 2002/95/EC • RoHS Directive 2011/65/EU • WEEE
IMMUNITY	• EN61000-4-2 Level 4 Contact / Level 3 Air ESD Immunity • EN61000-4-5 Level 1 & 2 Immunity • EN61000-4-3 Level 4 EMC Immunity • GR1089 - 1kV 25A Surge (data ports)
RAILWAY AND ROLLING STOCK	• EN50121-1 • EN50121-4 • EN61373 (for trackside use)
Wi-Fi ALLIANCE	• Wi-Fi CERTIFIED™ a, b, g, n, ac • WPA™ — Enterprise, Personal • WPA2™ — Enterprise, Personal • Optimization — WMM®

WI-FI	
STANDARDS	• 5 GHz IEEE 802.11ac • 2GHz IEEE 802.11g/n
FREQUENCY BANDS	• IEEE 802.11g/n 2.4-2.472GHz (ch1-13 CE, ch1-11 US) • IEEE 802.11ac 5GHz • U-NII-1 5.15-5.25 GHz • U-NII-2 5.25-5.35 (DFS) • U-NII-2B 5.37-5.47[5] • U-NII-2C 5.47-5.725 (DFS) • U-NII-3 5.725-5.825 • ISM 5.725 – 5.875 • U-NII-4 5.85-5.925[5]
WLAN RADIO CONFIGURATION	• Dual band concurrent 2 x 2:2 stream radios
MAXIMUM TX POWER[1]	• 26 dBm for 2.4GHz • 25 dBm for 5.0GHz
CHANNELIZATION	• 2.4GHz 802.11b/g/n 20/40 MHz • 5GHz 802.11a/n/ac 20/40/80 MHz
BSSID	• Up to 32 (27 configurable) on 2.4 GHz • Up to 16 (13 configurable) on 5 GHz
CERTIFICATIONS[4]	• 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

1 Max power varies by country setting, band, and MCS rate
2 BeamFlex+ gains are statistical system-level effects translated to enhanced SINR based on observations over time in real-world conditions with multiple APs and many clients
3 Rx sensitivity varies by band, channel width, and MCS rate
4 Refer to price list for current country certifications
5 With future software release

PERFORMANCE AND CAPACITY	
PHYSICAL LAYER MODULATION DATA RATE	• 2.4GHz 802.11b/g/n 300Mbps • 5GHz 802.11a/n/ac 867Mbps
CONCURRENT STATIONS	• Up to 500 capable per AP
SIMULTANEOUS VoIP CLIENTS	• Up to 30

Product Ordering Information

MODEL	DESCRIPTION
ZoneFlex T300 Outdoor APs	
901-T300-XX01* (XX = US, WW)	ZoneFlex T300, omni, outdoor access point, 802.11ac 2x2:2 internal BeamFlex+, dual band concurrent, one ethernet port, PoE input, includes mounting bracket and one year warranty. Does not include PoE injector.
901-T300-XX81 (XX = US, WW)**	ZoneFlex T300e, outdoor access point, 802.11ac 2x2:2 internal BeamFlex+ 2GHz & 5GHz, external 5GHz N-female, dual band concurrent, one ethernet port, PoE input, includes mounting bracket and one year warranty. Does not include PoE injector or external 5GHz antenna.
Power Accessories	
902-0162-XXYY	Spare, PoE Adapter, 10/100/1000BaseT, with xx power adapter
902-0180-0003	Spare, Outdoor Mounting Bracket, AnyAngle
911-2101-DP01	5 GHz dual polarized high gain 21 dBi directional antenna
911-2401-DP01	5 GHz dual polarized high gain 24 dBi directional antenna

*Requires ZoneFlex 9.8.1, SCG 2.5.1, or vSCG 3.0
**Requires ZoneFlex 9.9, SCG 2.6 or vSCG 3.0

Ruckus®
Simply Better Wireless.

Copyright © 2014, 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 logo, BeamFlex, ZoneFlex, MediaFlex, MetroFlex, FlexMaster, ZoneDirector, 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. Rev. 9 Subject to change without notice.

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

www.ruckuswireless.com