Ruckus T300 Unleashed

Entry-Level 802.11ac Outdoor Access Points



DATA SHEET



BENEFITS

UNLEASH THE PERFORMANCE

In the Unleashed version, the T300 series is capable of supporting controller-less deployments with up to 25 access points and 512 concurrent clients.

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

802.11AC AP WITH BEAMFLEX+ FOR COST-EFFECTIVE DEPLOYMENTS IN HIGH DENSITY OUTDOOR VENUES

Ruckus T300 Unleashed™ enables controller-less Wi-Fi architecture for small business environments with superior performance, lower costs and simplified management. Separate controllers and access point licenses are no longer needed, significantly reducing upfront costs. Set-up is also easy, thanks to a simplified web interface that helps businesses configure Wi-Fi in just 60 seconds.

These environments require support for users that demand high capacity and mobile device ready WLAN services. The T300 Unleashed 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 Unleashed 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 Unleashed Series is ideal for venue owners and enterprises looking to quickly and economically deploy Wi-Fi in high-capacity environments.

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

RUCKUS T300



DUAL-BAND 802.11AC 2x2:2, 1167 MBPS

Internal omni directional antenna for 2.4GHz and 5GHz

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

RUCKUS T300E



DUAL-BAND 802.11AC 2x2:2, 1167 MBPS

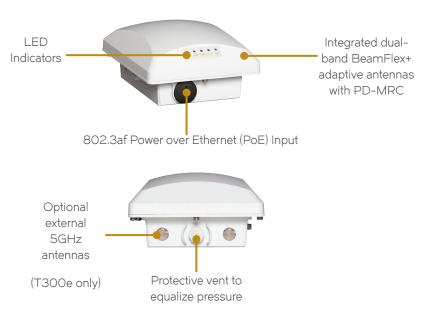
Internal omni directional antenna for 2.4GHz and 5GHz, support for optional external 5GHz antennas

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



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
- Gateway mode with NAT and DHCP services
- 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 account
- Admission control/load balancing
- Application recognition and control
- Secure HotSpot
- SPoT location services
- Intelligent Band balancing
- Airtime fairness
- SmartMesh
- Smart QoS



Ruckus T300 Unleashed Entry-Level 802.11ac Outdoor Access Points

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)	
Mounting Options	Wall Mount Pole Mount Diameter 1" to 2.5"	
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/AI2:2011 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 62311:2008EN 50385:2002FCC OET-65ICNIRP: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	EN50121-1EN50121-4EN61373 (for trackside use)
Wi-Fi Alliance	Wi-Fi CERTIFIED™ a, b, g, n, ac WPA™ — Enterprise, Personal WPA2™ — Enterprise, Personal Optimization — WMM®
WARRANTY: Sold with a limited one year warrant	у.

WI-FI		
Standards	5 GHz IEEE 802.11ac2GHz 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 5.15-5.25GHz ■ U-NII-2 5.25-5.35 (DFS) ■ U-NII-2B 5.37-5.475 ■ U-NII-2C 5.47-5.725 (DFS) ■ U-NII-3 5.725-5.825 ■ ISM 5.725 - 5.875 ■ U-NII-4 5.85-5.9255	
WLAN Radio Configration	Dual band concurrent 2 x 2:2 stream radios	
Wireless Security	WPA-PSK, WPA2 AES, 802.11i Authentication via 802.1x with the local authentication database and support for RADIUS, and ActiveDirectory	
Maximum Tx Power ¹	26 dBm for 2.4GHz25 dBm for 5.0GHz	
Channelization	 2.4GHz 802.11b/g/n 20/40MHz 5GHz 802.11a/n/ac 20/40/80MHz 	
BSSID	Up to 32 (27 configurable) on 2.4GHz Up to 16 (13 configurable) on 5GHz	
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 	

⁵ With future software release

PERFORMANCE AND CAPACITY	
Physical Layer Modulation Data Rate	2.4GHz 802.11b/g/n 300Mbps5GHz 802.11a/n/ac 867Mbps
Concurrent Stations	Up to 512 capable per AP
Simultaneous Voip Clients	• Up to 30

PRODUCT ORDERING INFORMATION

MODEL	DESCRIPTION	
T300 Unleashed Outdoor APs		
9U1-T300-XX01 (XX = US, WW)	T300 Unleashed, omni-antenna, 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.	
9U1-T300-XX81** (XX = US, WW)	T300e Unleashed, 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.	
Optional Accessories		
902-0162-XXYY	Spare, PoE Adapter, 10/100/1000BaseT, with xx power adapter	
902-0182-0003	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	

PLEASE NOTE: When ordering outdoor APs, you must specify the destination region by indicating -US, -WW, or -Z2 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

For access points, -Z2 applies to the following countries: Algeria, Egypt, Israel, Morocco, Tunisia, and Vietnam

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¹ Max power varies by country setting, band, and MCS rate ² BeamFlex+ gains are statistical system-level effects (including TxBF), 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