

# RUCKUS T 300

## ENTRY-LEVEL 802.11AC AP WITH INTEGRATED OMNI OR EXTERNAL ANTENNAS (5GHZ)

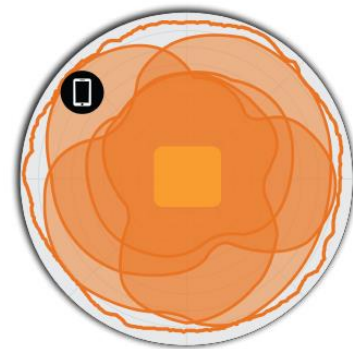
The Ruckus T300 Series is perfect for high-density public venues such as airports, conventions centers, plazas and malls, and other dense urban environments



### ACCESS POINT ANTENNA PATTERN

Ruckus' BeamFlex+ adaptive antennas allow the T300 AP to dynamically choose among a host of antenna patterns (up to 64 possible combinations) in real-time to establish the best possible connection with every device. This leads to:

- Better Wi-Fi coverage
- Reduced RF interference



Client Composite Pattern BeamFlex+

### FEATURES

- **Good Outdoor Wi-Fi**  
Industrial-grade IP-67 hardened enclosures (-20°C to +65°C)
- **Great Wi-Fi Performance**  
Provide a great user experience no matter how challenging the environment with BeamFlex+ adaptive antenna technology using up to 64-directional antenna patterns.
- **Get Optimal Throughput**  
Improve performance automatically with ChannelFly and machine learning, which finds less congested Wi-Fi channels with dynamic RF channel selection.
- **More Than Wi-Fi**  
Enhance your network with Cloudpath security and management software, SPoT real-time Wi-Fi location engine and analytics software, and SCI network analytics

### SPECIFICATIONS

WI-FI	
Wi-Fi Standards	• IEEE 802.11a/b/g/n/ac
Supported Rates	• 802.11ac: 6.5 to 867Mbps (MCS0 to MCS9, NSS=1 to 2 for VHT20/40/80) • 802.11n: 6.5 Mbps to 300Mbps (MCS0 to MCS15) • 802.11a/g: 54, 48, 36, 24, 18, 12, 9, 6Mbps • 802.11b: 11, 5.5, 2 and 1 Mbps
Supported Channels	• 2.4GHz: 1-13 • 5GHz: 36-64, 100-144, 149-165
MIMO	• 2x2 SU-MIMO
Spatial Streams	• 2 SU-MIMO
Channelization	• 20, 40, 80MHz
Security	• WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i, Dynamic PSK • WIPS/WIDS
Other Wi-Fi Features	• WMM, Power Save, Tx Beamforming, LDPC, STBC, 802.11r/k/v • Hotspot • Hotspot 2.0 • Captive Portal • WISPr

<b>RF</b>	
Antenna Type	<ul style="list-style-type: none"> <li>• BeamFlex+ adaptive antennas with polarization diversity</li> <li>• Adaptive antenna that provides 64 unique antenna patterns per chain</li> </ul>
Antenna Gain (max)	<ul style="list-style-type: none"> <li>• Up to 3dBi</li> </ul>
Peak Transmit Power (aggregate across MIMO chains)	<ul style="list-style-type: none"> <li>• 2.4GHz: 26dBm</li> <li>• 5GHz: 25dBm</li> </ul>
BeamFlex+ SINR Transmit Power Gain <sup>1</sup>	<ul style="list-style-type: none"> <li>• Up to 6 dB</li> </ul>
BeamFlex+ SINR Receive Power Gain <sup>1</sup>	<ul style="list-style-type: none"> <li>• Up to 4 dB</li> </ul>
Minimum Receive Sensitivity <sup>2</sup>	<ul style="list-style-type: none"> <li>• -100dBm for 2.4GHz</li> <li>• -94dBm for 5GHz</li> </ul>
Frequency Bands	<ul style="list-style-type: none"> <li>• ISM (2.4-2.484GHz)</li> <li>• U-NII-1 (5.15-5.25GHz)</li> <li>• U-NII-2A (5.25-5.35GHz)</li> <li>• U-NII-2C (5.47-5.725GHz)</li> <li>• U-NII-3 (5.725-5.85GHz)</li> </ul>
<b>2.4GHZ RECEIVE SENSITIVITY</b>	
HT20	
MCS0	MCS7
-92	-76
HT40	
MCS0	MCS7
-89	-73
<b>5GHZ RECEIVE SENSITIVITY</b>	
VHT20	
MCS0	MCS7
-95	-76
VHT40	
MCS0	MCS7
-92	-74
VHT80	
MCS0	MCS7
-90	-69
<b>2.4GHZ TX POWER TARGET</b>	
Rate	Pout (dBm)
MCS0 HT20	23
MCS7 HT20	17
MCS0 HT40	23
MCS7 HT40	15
<b>5GHZ TX POWER TARGET</b>	
Rate	Pout (dBm)
MCS0 VHT20	22
MCS7 VHT20	16
MCS0 VHT40, VHT80	22
MCS7 VHT40, VHT80	18
<b>PERFORMANCE AND CAPACITY</b>	
Peak PHY Rates	<ul style="list-style-type: none"> <li>• 2.4GHz: 300Mbps</li> <li>• 5GHz: 867Mbps</li> </ul>
Client Capacity	<ul style="list-style-type: none"> <li>• Up to 512 clients per AP</li> </ul>
SSID	<ul style="list-style-type: none"> <li>• Up to 43 per AP</li> </ul>
<b>RUCKUS RADIO MANAGEMENT</b>	
Antenna Optimization	<ul style="list-style-type: none"> <li>• BeamFlex+</li> <li>• Polarization Diversity with Maximal Ratio Combining (PD-MRC)</li> </ul>
Wi-Fi Channel Management	<ul style="list-style-type: none"> <li>• ChannelFly</li> <li>• Background Scan Based</li> </ul>
Client Density Management	<ul style="list-style-type: none"> <li>• Adaptive Band Balancing</li> <li>• Client Load Balancing</li> <li>• Airtime Fairness</li> <li>• Airtime-based WLAN Prioritization</li> </ul>
SmartCast Quality of Service	<ul style="list-style-type: none"> <li>• QoS-based scheduling</li> <li>• Directed Multicast</li> <li>• L2/L3/L4 ACLs</li> </ul>
Mobility	<ul style="list-style-type: none"> <li>• SmartRoam</li> </ul>
Diagnostic Tools	<ul style="list-style-type: none"> <li>• Spectrum Analysis</li> <li>• SpeedFlex</li> </ul>
<b>NETWORKING</b>	
Controller Platform Support	<ul style="list-style-type: none"> <li>• SmartZone</li> <li>• ZoneDirector</li> <li>• Unleashed3</li> <li>• Cloud Wi-Fi</li> <li>• Standalone</li> </ul>
Mesh	<ul style="list-style-type: none"> <li>• SmartMesh™ wireless meshing technology. Selfhealing Mesh</li> </ul>
IP	<ul style="list-style-type: none"> <li>• IPv4, IPv6</li> </ul>
VLAN	<ul style="list-style-type: none"> <li>• 802.1Q (1 per BSSID or dynamic per use based on RADIUS)</li> <li>• VLAN Pooling</li> <li>• Port-based</li> </ul>
802.1x	<ul style="list-style-type: none"> <li>• Authenticator &amp; Supplicant</li> </ul>

Tunnel	<ul style="list-style-type: none"> <li>• L2TP, GRE, Soft-GRE</li> </ul>
Policy Management Tools	<ul style="list-style-type: none"> <li>• Application Recognition and Control</li> <li>• Access Control Lists</li> <li>• Device Fingerprinting</li> <li>• Rate Limiting</li> </ul>
<b>PHYSICAL INTERFACES</b>	
Ethernet	<ul style="list-style-type: none"> <li>• 1 x 1GbE port, RJ-45</li> </ul>
<b>PHYSICAL CHARACTERISTICS</b>	
Physical Size	<ul style="list-style-type: none"> <li>• 23.9(L) x 19.5(W) x 11.0(H) cm</li> <li>• 9.4(L) x 7.5(W) x 4.3(H) in</li> </ul>
Weight	<ul style="list-style-type: none"> <li>• 2.1 lbs (1 kg) with bracket</li> <li>• 2 lbs (0.9 kg) without bracket</li> </ul>
Mounting	<ul style="list-style-type: none"> <li>• Wall</li> <li>• Pole Mount 1" to 2.5" diameter</li> </ul>
Physical Security	<ul style="list-style-type: none"> <li>• Hidden latching mechanism</li> <li>• Kensington lock</li> <li>• T-bar Torx</li> </ul>
Operating Temperature	<ul style="list-style-type: none"> <li>• -20°C (-4°F) to 65°C (149°F)</li> </ul>
Operating Humidity	<ul style="list-style-type: none"> <li>• Up to 95%, non-condensing</li> </ul>
Wind Survivability	<ul style="list-style-type: none"> <li>• Up to 266 km/h (165 mph)</li> </ul>
<b>POWER<sup>4</sup></b>	
<b>Power Supply</b>	<b>Max Power Consumption</b>
802.3af PoE Input (Class 3PD)	<ul style="list-style-type: none"> <li>• 11W</li> </ul>
<b>CERTIFICATIONS AND COMPLIANCE</b>	
Wi-Fi Alliance <sup>5</sup>	<ul style="list-style-type: none"> <li>• Wi-Fi CERTIFIED™ a, b, g, n, ac</li> <li>• Passpoint®, Vantage</li> </ul>
Standards Compliance <sup>6</sup>	<ul style="list-style-type: none"> <li>• EN 60950-1 Safety</li> <li>• EN 60601-1-2 Medical</li> <li>• EN 61000-4-2/3/5 Immunity</li> <li>• EN 50121-1 Railway EMC</li> <li>• EN 50121-4 Railway Immunity</li> <li>• IEC 61373 Railway Shock &amp; Vibration</li> <li>• UL 2043 Plenum</li> <li>• EN 62311 Human Safety/RF Exposure</li> <li>• WEEE &amp; RoHS</li> <li>• ISTA 2A Transportation</li> </ul>
<b>SOFTWARE AND SERVICES</b>	
Location Based Services	<ul style="list-style-type: none"> <li>• SPoT</li> </ul>
Network Analytics	<ul style="list-style-type: none"> <li>• SmartCell Insight (SCI)</li> </ul>
Security and Policy	<ul style="list-style-type: none"> <li>• Cloudpath</li> </ul>

<sup>1</sup> 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.

<sup>2</sup> Rx sensitivity varies by band, channel width and MCS rate.

<sup>3</sup> Refer to Unleashed datasheets for SKU ordering information

<sup>4</sup> Max power varies by country setting, band, and MCS rate

<sup>5</sup> For complete list of WFA certifications, please see the Wi-Fi Alliance website

<sup>6</sup> For current certification status, please see the price list.