DODATOK č. 1 ku Kúpnej Zmluve

zo dňa 31.03.2021

Článok I.
ZMLUVNÉ STRANY

1. *ZMLUVNÉ STRANY*

1.1. ***Predávajúci***

Obchodné meno:	***IP HOME Slovakia s.r.o.***
Sídlo:	*Hlavná 46/20, 92901 Dunajská Streda*
IČO:	*50050648*
DIČ:	*2120165333*
IČ DPH:	*SK2120165333*
Zápis:	*Okr. súd Trnava, odd. Sro, vl. č. 36673/T*
Bankové spojenie:	*Tatra banka, a. s.*
Číslo účtu:	*SK2411000000002940014006*
Zastúpený:	*Ing. Szabolcs Dorák, Ladislav Kósa*

(ďalej iba ako „**Predávajúci**")

1.2. ***Kupujúci***

Obchodné meno:	***Obec Patince***
Sídlo:	*Lipová 233, 946 39 Patince*
IČO:	*00306631*
DIČ:	*2021035742*
Bankové spojenie:	*Všeobecná úverová banka, a. s*
Číslo účtu:	*SK43 0200 0000 0000 23529142*
Zastúpený:	***Mgr. Rozália Tóthová** – starostka obce*

(ďalej len ako „**Kupujúci**")

Zmluvné strany sa dohodli, že Kúpna zmluva (ďalej len „Zmluva") sa mení a dopĺňa nasledovne:

I. Predmet dodatku

1. v bode 6.7. sa slovné spojenie „pre obec Moča" nahrádza slovným spojením: „**pre obec Patince**".
2. V bode 6.9 sa dopĺňajú ďalšie prílohy, ktoré sú neoddeliteľnou súčasťou Zmluvy:
   - Príloha č. 3 Test splnenia technických parametrov (TSTP) v rámci projektu „Wifi pre Teba"
   - Príloha č. 4 Podrobný popis prístupového bodu (AP)
   - Príloha č. 5 Technické listy dodávaných aktívnych prvkov.

II. Záverečné ustanovenia

1. Tento dodatok je neoddeliteľnou súčasťou Kúpnej zmluvy zo dňa 31.03.2021.

2. Ostatné ustanovenia zmluvy zostávajú nezmenené.

3. Tento dodatok je vyhotovený v štyroch vyhotoveniach, z toho dva rovnopisy pre predávajúceho, dva pre kupujúceho.

V Patinciach, dňa 18.6.2021

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IČO: 50 050 848, DIČ: 2120165333

OBEC PATINCE

Za Predávajúceho:

Ing. Szabolcs Dorák, konateľ

Za Kupujúceho:

Mgr. Rozália Tóthová – starostka obce

Test splnenia technických parametrov (TSTP) v rámci "Wifi pre Teba"

TSTP slúži pre žiadateľa ako podklad pre špecifikáciu riešenia spĺňajúcu minimálne technické parametre požadovaných výzvou.

Technické parametre riešenia sú navrhnuté v súlade so schválenou Štúdiou uskutočniteľnosti https://metais.finance.gov.sk/studie/detail/c95df2d-700e-47ce-a1b0-4cbf3334b453?tab=documents a musia spĺňať požiadavky Robustného, Spoľahlivého a Bezpečného produktu, ktorý poskytne občanom bezplatný prístup na internet prostredníctvom Wifi pripojenia.

1. Robustný: definuje minimálne technické parametre Prístupového bodu (Access pointu), resp. ostatného HW vybavenia,
2. Spoľahlivý: definuje minimálne podmienky pre poskytnutie kvalitného internetového pripojenia,
3. Bezpečný: definuje minimálne podmienky pre sieťovú a fyzickú bezpečnosť.

Upozornenie: výsledky tohto testu slúžia výlučne pre potreby žiadateľa a nie sú zárukou výsledku v procese schvaľovania žiadosti o NFP.

Otázka č.	Znenie otázky	Odkaz na relevantnú časť Technických listov (žiadateľ uvedie predmetnú časť technických listov, resp. iného relevantného zdroja zodpovedajúceho konkrétnemu parametru)	Odpoveď (po kliknutí na bunku vyberte jednu z možností)
1.	Kompaktné dvojpásmové WiFi zariadenia (2,4GHz - 5 GHz), ktoré sú certifikované pre európsky trh?	TL - strana 3 - tabuľka WIFI - riadok Suported Channels TL EU CE certifikáty	Áno
2.	Životný cyklus použitých produktov vyšší ako 5 rokov?	TL - Standard End of Life Policy (na strane 1 v poslednom odstavci kapitoly Hardware je uvedé : „The last hardware repair/replace and support for advanced hardware replacement date for discontinued products is 5 years after the EOS date." To znamená, že AP má životný cyklus minimálne 5,5 roka)	Áno
3.	Stredná doba medzi poruchami (MTBF) minimálne 5 rokov?	TL je možné dodať iba v prípade podpisu NDA (MTBF pri teplote 25°C MTBF 1,5 mil hodín a pri teplote 50°C 740 000 hodín)	Áno
4.	Možnosť centrálneho manažmentu pre riadenie, monitoring a konfiguráciu siete (single point of management)?	TL - strana 4 - tabuľka Networking - riadok Controller Platform Support	Áno
5.	Súlad s „802.11ac Wave I, Institute of Electrical and Electronics Engineers" (IEEE) štandardom?	TL - strana 3 - tabuľka WIFI - riadok Wi-Fi Standards	Áno
6.	Podpora 802.1x IEEE štandardu?	TL - strana 4 - tabuľka Networking - riadok 802.1x	Áno
7.	Podpora 802.11r IEEE štandardu?	TL - strana 3 - tabuľka WIFI - riadok Other Wi-Fi Features	Áno
8.	Podpora 802.11k IEEE štandardu?	TL - strana 3 - tabuľka WIFI - riadok Other Wi-Fi Features	Áno
9.	Podpora 802.11v IEEE štandardu?	TL - strana 3 - tabuľka WIFI - riadok Other Wi-Fi Features	Áno
10.	Schopnosť AP obsluhovať naraz aspoň 50 rôznych užívateľov bez zníženia kvality služby?	TL - strana 3 - tabuľka Performance and Capacity - riadok Client Capacity	Áno
11.	Minimálne 2x2 MIMO (multiple-input-multiple-output)?	TL - strana 3 - tabuľka WIFI - riadok MIMO	Áno
12.	Súlad s Hotspot 2.0 (Passpoint WiFi Alliance certification program)?	TL - strana 3 - tabuľka WIFI - riadok Other Wi-Fi Features	Áno
13.	Súčasťou dodávky bude: projektová dokumentácia ktorá bude obsahovať sieťové zapojenie aktívnych prvkov siete s IP adresným plánom, Simuláciu pokrytia priestoru, Meranie skutočného pokrytia, technické listy aktívnych prvkov, funkčný popis a vyobrazenie obsahu hotspot portálu s umiestneným logom?		Áno

Všetky otázky sú zodpovedané

Minimálne technické podmienky sú zadefinované.

Počet odpovedí "nie"	0
Počet nezodpovedaných otázok	0

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Ruckus Wireless Standard End of Life (EOL) Policy

Revision date: 20 December 2013

The following EOL policy applies to all Ruckus Wireless standard products. Figure 1 illustrates Ruckus Wireless Standard EOL Policy timeframe. Detailed dates outlining the timeframes set forth in this policy will be clearly outlined in each product's EOL notification.

Hardware

Ruckus Wireless will publish an end-of-life (EOL) notification to customers to give them advanced notice of a planned end-of-sale (EOS) event on a specific product. Customers will be provided an opportunity for last-time purchases of products prior to end-of-sale.
Standard policy requires the end-of-sale (EOS) date to occur **6 months** after the EOL notification is published on the Ruckus Wireless support site (support.ruckuswireless.com). At the EOS date, the discontinued product is removed from the price list and is no longer available for purchase. All accessories, kits and bundles uniquely applicable to the discontinued product may also be removed from the price list and may no longer available for purchase.
The last ship date for a discontinued product may extend to **6 months** after the EOS date. The last ship date excludes transportation considerations.
The last hardware repair/replace and support for advanced hardware replacement date for discontinued products is **5 years** after the EOS date. The replacement or advanced hardware replacement of discontinued product after the EOS may be product of a like-kind.

Software

Standard policy requires software maintenance for the discontinued product to continue until the end-of-maintenance (EOM) date, which occurs **1 year** after the product end-of-sale (EOS) date.

This EOL policy does not ensure that software maintenance for a discontinued product will always follow an EOL announcement. Mature products may use software for which no active maintenance has occurred for some time and for which no further active maintenance is planned. While typically the exception, Ruckus reserves the right to establish an end-of-maintenance date for products prior to the EOL announcement.

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

Support & License Upgrades

Ruckus Support and AP license upgrades are available for discontinued products for up to **5 years** after the EOS date. End-of-sale dates for 1-year, 3-year, and 5-year Support packages are timed such that Support shall not extend beyond 5 years after the EOS date of the discontinued product. The end-of-sale date for AP license upgrades for a discontinued controller is 5 years after the EOS date of the controller. Support package and license upgrade EOS dates are clearly defined in the discontinued product's EOL notification.

Support extending beyond the discontinued product's EOM date is limited in nature. Ruckus Support is unable to provide software fixes or upgrades which may be required to resolve support cases after the EOM date. Ruckus will continue to provide all other aspects of support. The customer accepts that a Support Contract for product is limited in terms of software maintenance beyond that product's EOM date. Note that the window of limited support for a discontinued product may be 4 years in duration, starting 1 year after the product's EOS date and ending 5 years after the EOS date.

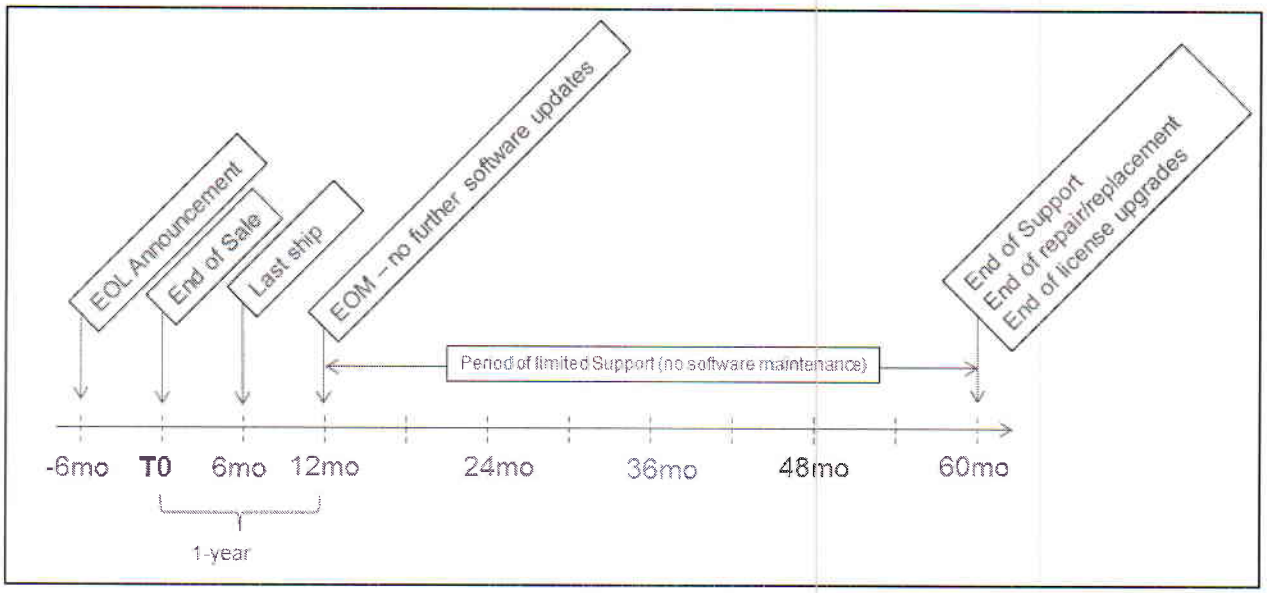

Figure 1. Ruckus Standard End of Life Policy Timeline

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THE END

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Príloha č. 4: Inštruktáž k vyplneniu prílohy Podrobný popis prístupového bodu (AP) s väzbou na finančné limity

Položka	Merná jednotka	Počet jednotiek	Jednotková cena (v EUR bez DPH)	Vysúťažená suma celkom (v EUR s DPH)	Limity podľa Príručky pre oprávnenosť výdavkov PO7 OPII pre dopytovo orientované projekty „Wifi pre Teba" (max. suma za 1 AP v EUR s DPH)
Externý prístupový bod (AP) č. 1:			(nevypĺňa sa)		1 500,00
Prístupový bod	ks	1	700,00	840,00	(nevypĺňa sa)
Inštalácia a konfigurácia AP	hod	3	80,00	288,00	(nevypĺňa sa)
Kabeláž - prepojenie FTP optickým káblom	m	10	1,00	12,00	(nevypĺňa sa)
Centrálne komponenty - switch, napajanie	súbor	1	272,00	326,40	(nevypĺňa sa)
Spolu				1 466,40	(nevypĺňa sa)
Externý prístupový bod (AP) č. 2:			(nevypĺňa sa)		1 500,00
Prístupový bod	ks	1	700,00	840,00	(nevypĺňa sa)
Inštalácia a konfigurácia AP	hod	3	80,00	288,00	(nevypĺňa sa)
Kabeláž - prepojenie AP optickým káblom	m	10	1,00	12,00	(nevypĺňa sa)
Centrálne komponenty - switch, napajanie	súbor	1	272,00	326,40	(nevypĺňa sa)
Spolu				1 466,40	(nevypĺňa sa)
Externý prístupový bod (AP) č. 3:			(nevypĺňa sa)		1 500,00
Prístupový bod	ks	1	700,00	840,00	(nevypĺňa sa)
Inštalácia a konfigurácia AP	hod	3	80,00	288,00	(nevypĺňa sa)
Kabeláž - prepojenie AP optickým káblom	m	10	1,00	12,00	(nevypĺňa sa)
Centrálne komponenty - switch, napajanie	súbor	1	272,00	326,40	(nevypĺňa sa)
Spolu				1 466,40	(nevypĺňa sa)
Externý prístupový bod (AP) č. 4:			(nevypĺňa sa)		1 500,00
AP/Router spĺňajúci minimálne technické parametre	ks	1	700,00	840,00	(nevypĺňa sa)
Inštalácia a konfigurácia AP	hod	3	80,00	288,00	(nevypĺňa sa)
Kabeláž - prepojenie AP optickým káblom	m	10	1,00	12,00	(nevypĺňa sa)
Centrálne komponenty - switch, napajanie	súbor	1	272,00	326,40	(nevypĺňa sa)
Spolu				1 466,40	(nevypĺňa sa)
Externý prístupový bod (AP) č. 5:			(nevypĺňa sa)		1 500,00
Prístupový bod	ks	1	700,00	840,00	(nevypĺňa sa)
Inštalácia a konfigurácia AP	hod	3	80,00	288,00	(nevypĺňa sa)
Kabeláž - prepojenie AP optickým káblom	m	10	1,00	12,00	(nevypĺňa sa)
Centrálne komponenty - switch, napajanie	súbor	1	272,00	326,40	(nevypĺňa sa)
Spolu				1 466,40	(nevypĺňa sa)
Externý prístupový bod (AP) č. 6:			(nevypĺňa sa)		1 500,00
Prístupový bod	ks	1	700,00	840,00	(nevypĺňa sa)
Inštalácia a konfigurácia AP	hod	3	80,00	288,00	(nevypĺňa sa)
Kabeláž - prepojenie AP optickým káblom	m	10	1,00	12,00	(nevypĺňa sa)
Centrálne komponenty - switch, napajanie	súbor	1	272,00	326,40	(nevypĺňa sa)
Spolu				1 466,40	(nevypĺňa sa)
Externý prístupový bod (AP) č. 7:			(nevypĺňa sa)		1 500,00
Prístupový bod	ks	1	700,00	840,00	(nevypĺňa sa)
Inštalácia a konfigurácia AP	hod	3	80,00	288,00	(nevypĺňa sa)
Kabeláž - prepojenie AP optickým káblom	m	10	1,00	12,00	(nevypĺňa sa)
Centrálne komponenty - switch, napajanie	súbor	1	272,00	326,40	(nevypĺňa sa)
Spolu				1 466,40	(nevypĺňa sa)
Externý prístupový bod (AP) č. 8:			(nevypĺňa sa)		1 500,00
Prístupový bod	ks	1	700,00	840,00	(nevypĺňa sa)
Inštalácia a konfigurácia AP	hod	3	80,00	288,00	(nevypĺňa sa)
Kabeláž - prepojenie AP optickým káblom	m	10	1,00	12,00	(nevypĺňa sa)
Centrálne komponenty - switch, napajanie	súbor	1	272,00	326,40	(nevypĺňa sa)
Spolu				1 466,40	(nevypĺňa sa)
Externý prístupový bod (AP) č. 9:			(nevypĺňa sa)		1 500,00
Prístupový bod	ks	1	700,00	840,00	(nevypĺňa sa)
Inštalácia a konfigurácia AP	hod	3	80,00	288,00	(nevypĺňa sa)
Kabeláž - prepojenie AP optickým káblom	m	10	1,00	12,00	(nevypĺňa sa)
Centrálne komponenty - switch, napajanie	súbor	1	272,00	326,40	(nevypĺňa sa)
Spolu				1 466,40	(nevypĺňa sa)
Interný prístupový bod (AP) č. 1:			(nevypĺňa sa)		1 000,00
Prístupový bod	ks	1	700,00	840,00	(nevypĺňa sa)
Inštalácia a konfigurácia AP	hod	1	40,00	48,00	(nevypĺňa sa)
Kabeláž - prepojenie AP optickým káblom	m	10	1,00	12,00	(nevypĺňa sa)
Centrálne komponenty - switch, napajanie	súbor	1	62,00	74,40	(nevypĺňa sa)
Spolu				974,40	(nevypĺňa sa)
Celkom				14 172,00	

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T310 SERIES
Outdoor 802.11ac Wave 2 2x2:2 Wi-Fi Access Point

RUCKUS
an ARRIS company

DATA SHEET

BENEFITS

SIMPLICITY
Ruckus' Outdoor APs make Wi-Fi deployments extremely simple to deploy with one-touch technologies like SmartMesh™.

STUNNING WI-FI PERFORMANCE
Extends coverage with patented BeamFlex+™ adaptive antenna technology while mitigating interference by utilizing up to 64 directional antenna patterns.

GREAT OUTDOOR WI-FI
Experience high performance outdoor 802.11ac Wave 2 Wi-Fi with IP-67 weather proofing.

MULTIPLE MANAGEMENT OPTIONS
Manage the T310 Series with physical or virtual controller appliances.

SERVE MORE DEVICES
Connect more devices simultaneously with two MU-MIMO spatial streams and concurrent dual-band 2.4/5GHz radios while also enhancing non-Wave 2 device performance.

AUTOMATE OPTIMAL THROUGHPUT
ChannelFly™ dynamic channel technology uses machine learning to automatically find the least congested channels. You always get the highest throughput the band can support.

MORE THAN WI-FI
Support services beyond Wi-Fi with Ruckus IoT Suite, Cloudpath security and onboarding software, SPoT Wi-Fi locationing engine, and SCI network analytics.

Modern Wi-Fi device users expect reliable connectivity—anywhere, anytime. But in crowded outdoor venues with thousands of users and constant RF noise, they are often frustrated by poor coverage, dropped connections, and reduced data rates. These aggravating Wi-Fi experiences car easily translate to negative perceptions of the venue and th service provider, resulting in loss of business. The quality of the network experience becomes the "litmus test" for acceptance or rejection.

As the market leader in outdoor Wi-Fi deployments, Ruckus knows that one AP solution cannot meet every possible challenge of varied and complex outdoor requirements. This is why the Ruckus T310 802.11ac Wave 2 series is designed wit more variety than any other outdoor AP in the market today. Available with eithe internal omni-directional antennas or internal high-gain directional antenna models, the T310 Series uses patented Ruckus antenna optimization and interference mitigation technologies to improve throughput, connection reliabilit and deliver industry-leading 802.11ac Wave 2 performance to every connected client. At the same time, the T310 Series is designed for fast, simple installation with an ultra-lightweight, low profile, IP-67 rated enclosure that can stand up to th most challenging outdoor environments.

At Ruckus, we know that outdoor AP deployments are especially challenging for installation and maintenance, which is why Ruckus outdoor APs use a variety of technologies, like SmartMesh that help simplify outdoor AP deployment.

The Ruckus T310 Series is perfect for high-density outdoor public venues such a airports, convention centers, plazas, malls, smart cities, and other dense urban environments. By providing a superior Wi-Fi experience to every user in high-density outdoor locations, venue operators can improve guest satisfaction and loyalty, deliver new kinds of wireless application services, and increase revenues

The Ruckus T310 Series incorporates patented technologies found only in the Ruckus Wi-Fi portfolio.

- Extended coverage with patented BeamFlex+™ utilizing multi-directional antenna patterns.
- Improve throughput with ChannelFly, which dynamically finds less congestec Wi-Fi channels to use.

Whether you're deploying ten or ten thousand APs, the T310 Series is easy to manage through Ruckus' appliance and virtual management options.

ACCESS POINT ANTENNA PATTERN

Ruckus' BeamFlex+ adaptive antennas allow the T310 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

Traditional omni-directional antennas, found in generic access points, oversaturate the environment by needlessly radiating RF signals in all directions. In contrast, the Ruckus BeamFlex+ adaptive antenna directs the radio signals per-device on a packet by-packet basis to optimize Wi-Fi coverage and capacity in real-time to support high device density environments. BeamFlex+ operates without the need for device feedback and hence can benefit even devices using legacy standards.

Figure 1. Example of Beamflex+ pattern

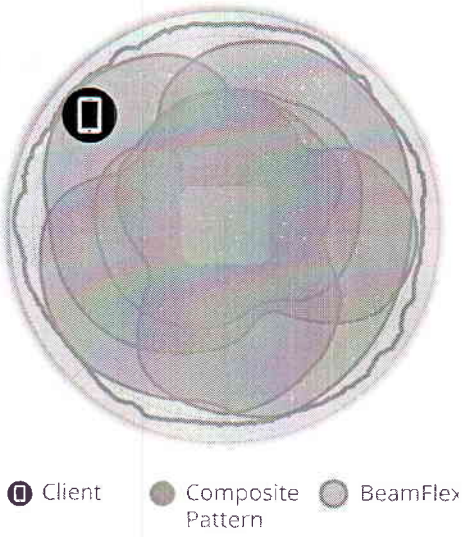


Figure 2. T310d 2.4GHz Azimuth Antenna Patterns

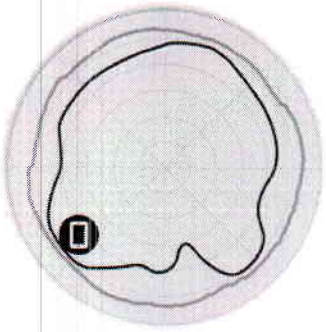


Figure 3. T310d 5GHz Azimuth Antenna Patterns

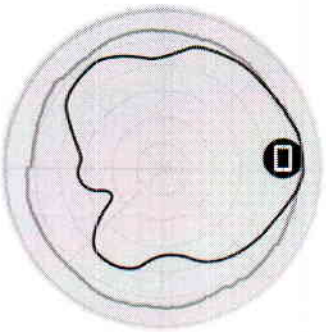


Figure 4. T310d 2.4GHz Elevation Antenna Patterns

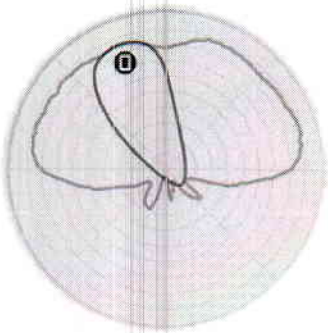
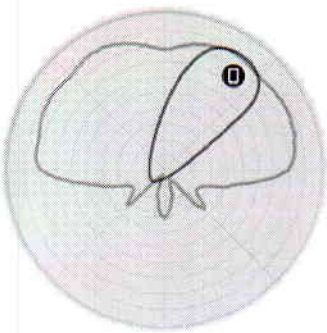


Figure 5. T310d 5GHz Elevation Antenna Patterns



Note: The outer trace represents the composite RF footprint of all possible BeamFlex+ antenna patterns, while the inner trace represents one BeamFlex+ antenna pattern within the composite outer trace.

T310 SERIES
Outdoor 802.11ac Wave 2 2x2:2 Wi-Fi Access Point

DATA SHEE

Wi-Fi	
Wi-Fi Standards	• IEEE 802.11a/b/g/n/ac Wave 2
Supported Rates	• 802.11ac: 6.5 to 867 Mbps (MCS0 to MCS9, NSS=1to2 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 • 2x2 MU-MIMO
Spatial Streams	• 2 SU-MIMO • 2 MU-MIMO
Radio Chains and Streams	• 2x2:2
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

RF				
	T310c	T310d	T310s	T310n
Antenna Type	• BeamFlex+ adaptive antennas with polarization diversity			
Antenna Gain (max)	• Up to 3dBi		• Up to 9dBi	• Up to 13 dBi
Peak Transmit Power (aggregate across MIMO chains)	• 2.4GHz: 23dBm • 5GHz: 24dBm		• 2.4GHz: 24dBm • 5GHz: 21dBm	• 2.4GHz: 21dBm • 5GHz: 17dBm
BeamFlex+ SINR Transmit Power Gain*	• Up to 6 dB			
BeamFlex+ SINR Receive Power Gain*	• Up to 4 dB			
Minimum Receive Sensitivity†	• -101dBm			
Frequency Bands	• ISM (2.4-2.484GHz) • U-NII-1 (5.15-5.25GHz) • U-NII-2A (5.25-5.35GHz) • U-NII-2C (5.47-5.725GHz) • U-NII-3 (5.725-5.85GHz)			

2.4GHZ RECEIVE SENSITIVITY			
HT20		HT40	
MCS0	MCS7	MCS0	MCS7
-95	-78	-92	-75

5GHZ RECEIVE SENSITIVITY							
VHT20		VHT40			VHT80		
MCS0	MCS7	MCS0	MCS7	MCS9	MCS0	MCS7	MCS9
-96	-77	-93	-74	-69	-90	-71	-66

2.4GHZ TX POWER TARGET	
Rate	Pout (dBm)
MCS0 HT20	23
MCS7 HT20	18
MCS0 HT40	22
MCS7 HT40	18

5GHZ TX POWER TARGET	
Rate	Pout (dBm)
MCS0 VHT20	24
MCS7 VHT20	20
MCS9 VHT20	18
MCS0 VHT40, VHT80	23
MCS7 VHT40, VHT80	20
MCS9 VHT40, VHT80	18

PERFORMANCE AND CAPACITY	
Peak PHY Rates	• 2.4GHz: 300Mbps 5GHz: 867Mbps
Client Capacity	• Up to 512 clients per AP
SSID	• Up to 31 per AP

RUCKUS RADIO MANAGEMENT	
Antenna Optimization	• BeamFlex+ • Polarization Diversity with Maximal Ratio Combining (PD-MRC)
Wi-Fi Channel Management	• ChannelFly • Background Scan Based
Client Density Management	• Adaptive Band Balancing • Client Load Balancing • Airtime Fairness • Airtime-based WLAN Prioritization
SmartCast Quality of Service	• QoS-based scheduling • Directed Multicast • L2/L3/L4 ACLs
Mobility	• SmartRoam
Diagnostic Tools	• Spectrum Analysis • SpeedFlex

* 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.
† Rx sensitivity varies by band, channel width and MCS rate.

T310 SERIES
Outdoor 802.11ac Wave 2 2x2:2 Wi-Fi Access Point

DATA SHEE

NETWORKING	
Controller Platform Support	• SmartZone • ZoneDirector • Standalone
Mesh	• SmartMesh™ wireless meshing technology. Self-healing Mesh
IP	• IPv4, IPv6
VLAN	• 802.1Q (1 per BSSID or dynamic per use based on RADIUS) • VLAN Pooling • Port-based
802.1x	• Authenticator & Supplicant
Tunnel	• L2TP, GRE, soft-GRE
Policy Management Tools	• Application Recognition and Control • Access Control Lists • Device Fingerprinting • Rate Limiting
IoT Capbale	• Yes

PHYSICAL INTERFACES				
	T310c	T310d	T310s	T310n
Ethernet	• 1 x 1GbE port, RJ-45			
USB	—	• 1 USB 2.0 port, Type A		
DC Power	—	• 12V DC Terminal Block (8V - 20V)		

PHYSICAL CHARACTERISTICS				
	T310c	T310d	T310s	T310n
Physical Size	18.1(L) x 15.1(W) x 7.9 (H) cm 7.1(L) x 5.9(W) x 3.1(H) in.		26(L) x 20.9(W) x 10.3(H) cm 10.2(L) x 8.2(W) x 4.1(H) in.	
Weight	1kg (2.1lbs)		1.65kg (3.6lbs)	
Ingress Protection	IP-67			
Mounting	Wall, Drop ceiling, Desk Pole Mount Diameter 1" to 2.5"			
Operating Temperature	-20°C -(4°F) to 65°C (149°F)	-40°C -(-40°F) to 65°C (149°F)		
Operating Humidity	Up to 95%, non-condensing			
Wind Survivability	Up to 266km/h (165 mph)			

POWER[2]				
	T310c	T310d	T310s	T310n
Power Supply	Max Power Consumption (includes USB power)			
802.3af/at (PoE)	7.92W	11.86W	11.86W	11.86W
DC	—	11.7W	12.11W	11.7W

CERTIFICATIONS AND COMPLIANCE	
Wi-Fi Alliance[3]	• Wi-Fi CERTIFIED™ a, b, g, n, ac • Passpoint®, Vantage
Standards Compliance[4]	• EN 60950-1 Safety • EN 60601-1-2 Medical • EN 61000-4-2/3/5 Immunity • EN 50121-1 Railway EMC • EN 50121-4 Railway Immunity • IEC 61373 Railway Shock & Vibration • UL 2043 Plenum • EN 62311 Human Safety/RF Exposure • WEEE & RoHS • ISTA 2A Transportation

SOFTWARE AND SERVICES	
Location Based Services	• SPoT
Network Analytics	• SmartCell Insight (SCI)
Security and Policy	• Cloudpath

MODEL FEATURE DIFFERENCES				
Model	Antenna	Low Temp	USB	DC Power
T310c	Omni	-20°C	N	N
T310d	Omni	-40°C	Y	Y
T310n	Narrow Sector (30°)	-40°C	Y	Y
T310s	Sector (120°)	-40°C	Y	Y

ORDERING INFORMATION	
T310 OUTDOOR APS	
901-T310-XX20	T310c, omni, outdoor access point, 802.11ac Wave 2 2x2:2 internal BeamFlex+, dual band concurrent. One Ethernet port, PoE input, -20°C to 65°C Operating Temperature. Includes mounting bracket and one year warranty. Does not include PoE injector.
901-T310-XX40	T310d, omni, outdoor access point, 802.11ac Wave 2 2x2:2 internal BeamFlex+, dual band concurrent. One Ethernet port, PoE input, DC input and USB port. -40°C to 65°C Operating Temperature. Includes mounting bracket and one year warranty. Does not include PoE injector.
901-T310-XX51	T310s, 120x30 deg, Outdoor 802.11ac Wave 2 2x2:2, 120 degree sector, dual band concurrent access point. One Ethernet port, PoE input, DC input and USB port. -40°C to 65°C Operating Temperature. Includes adjustable mounting bracket and one year warranty Does not include PoE injector
901-T310-XX61	T310n, 30x30 deg, Outdoor 802.11ac 2x2:2 Wave 2, narrow beam, dual band concurrent access point. One Ethernet port, PoE input, DC input and USB port -40°C to 65°C Operating Temperature. Includes adjustable mounting bracket and one year warranty Does not include PoE injector.

See Ruckus price list for country-specific ordering information.
Warranty: Sold with a limited one year warranty.
For details see: http://support.ruckuswireless.com/warranty

[2] Max power varies by country setting, band, and MCS rate.
[3] For complete list of WFA certifications, please see Wi-Fi Alliance website.
[4] For current certification status, please see price list.

OPTIONAL ACCESSORIES	
902-0162-XXYY	• PoE injector (24W) (Sold in quantities of 1, 10 or 100)
902-0125-0000	• Secure articulating mounting bracket
902-0127-0000	• Extended cap to accommodate up to 6 cm long USB dongle
902-1121-0000	• Spare weatherizing cable gland with option of one hole or 2 hole connection

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

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