



Antennas and Cables

When building a wireless LAN infrastructure, the IT staff should consider several factors influencing transmission efficiency, such as different facility sizes, building materials and interior divisions. To address this concern, a comprehensive WLAN solution for wireless LAN deployments can be critical.

To facilitate the installation process, Zyxel offers a complete range of 2.4 GHz and 5 GHz antennas, cables and other accessories for Access Points (APs) to enable customized wireless deployments for almost any installation types.

The Zyxel antennas are available in various space, directionality, gain and range capabilities in different form factors. With appropriately coupled antennas and APs, businesses will enjoy perfect WLAN environments with superior coverage, better reliability and higher data rates in all kinds of facilities. In addition, the Zyxel lowloss cables can be used to extend the distance between any Zyxel 2.4 GHz and 5 GHz AP and the antenna through N-plug or RP-SMA connectors.

This document is to help our customers with the selection of suitable antennas and related accessories for their deployment.



Compatible with Zyxel WLAN devices to get optimal signal quality







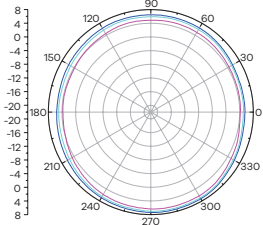
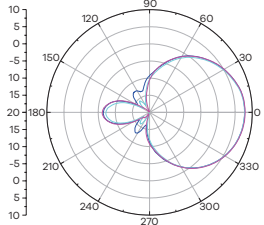
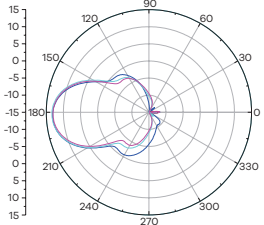
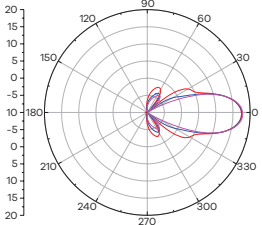
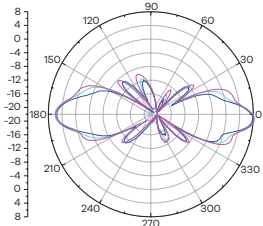
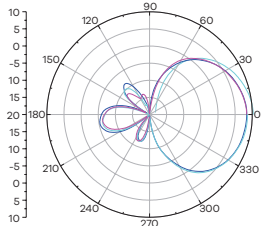
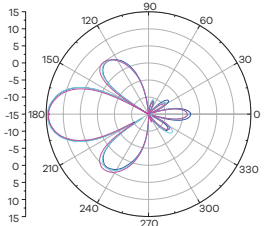
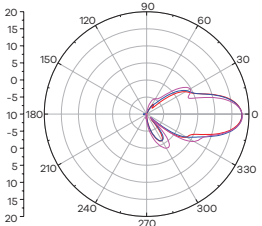
Matching colors and exterior looks



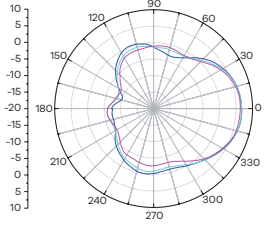
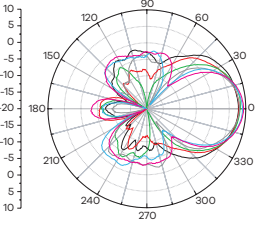
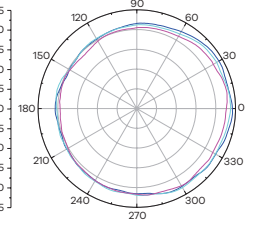
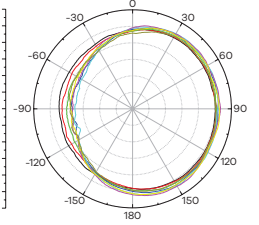
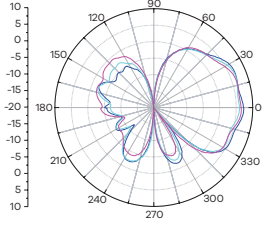
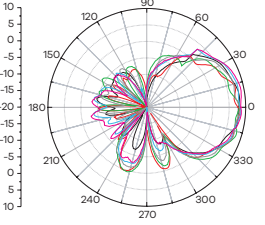
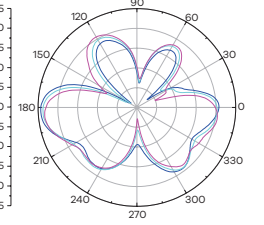
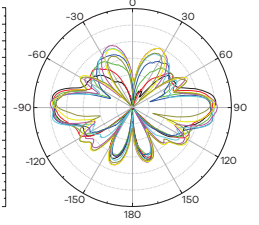




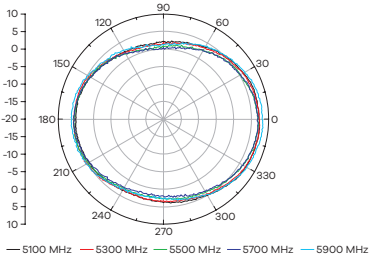
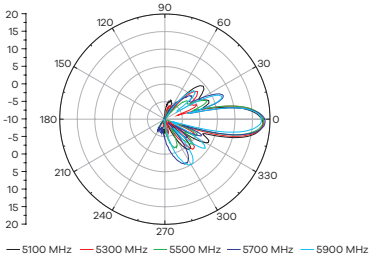
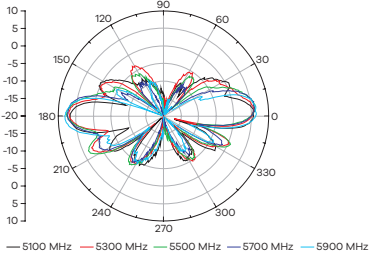
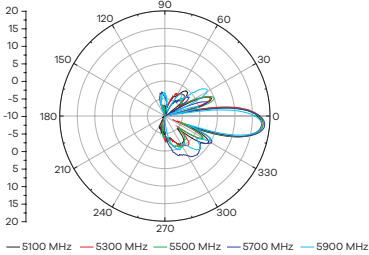
Multiple options to meet your current network environments

Specifications

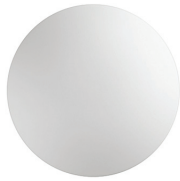


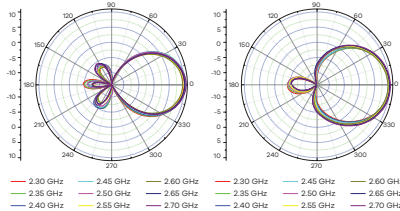
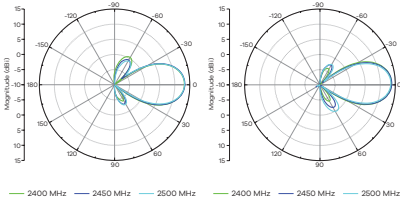
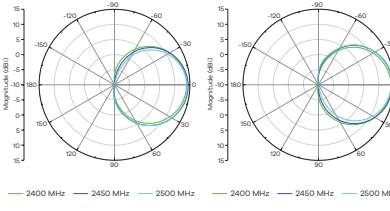
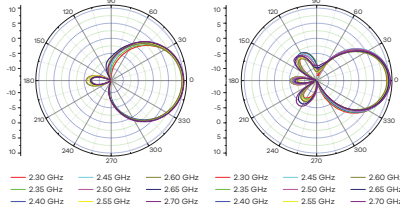
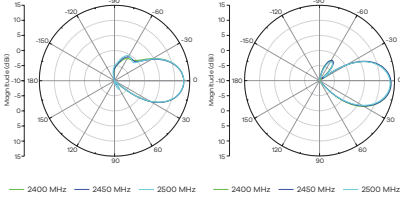
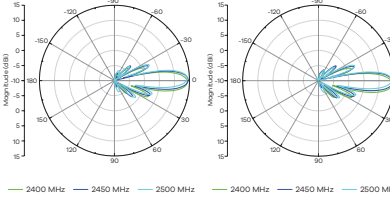
Antenna



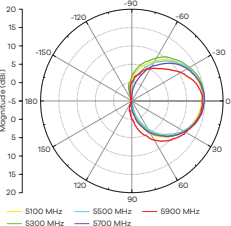
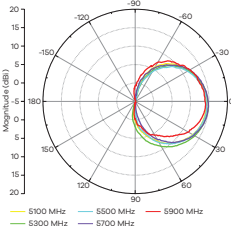
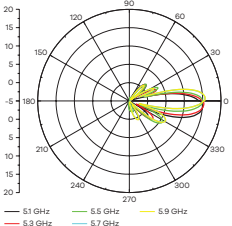
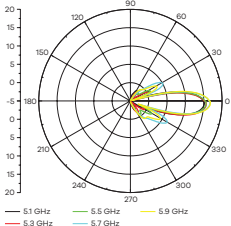
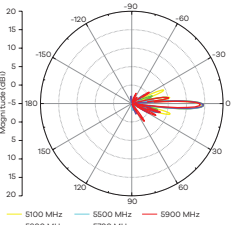
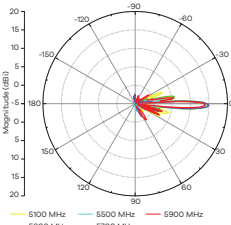
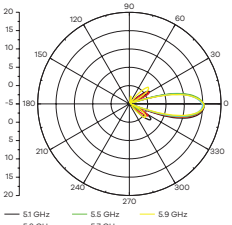
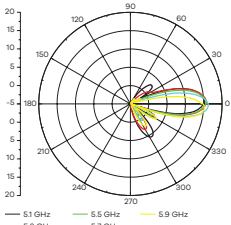
Model	EXT-108	EXT-109	EXT-114	EXT-118
Product name	2.4 GHz 8 dBi Omni-Directional Outdoor Antenna	2.4 GHz 9 dBi Directional Outdoor Patch Antenna	2.4 GHz 14 dBi Directional Outdoor Panel Antenna	2.4 GHz 18 dBi Directional Outdoor Panel Antenna
				
Space	Outdoor	Outdoor	Outdoor	Outdoor
Frequency band (MHz)	2400 - 2500	2400 - 2500	2400 - 2500	2400 - 2500
Gain	8 dBi	8.5 dBi (peak)	14 dBi	18 dBi
VSWR	2.0:1 Max.	1.5:1 Max.	1.5:1 Max.	1.5:1 Max.
Polarization	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical
Radiation pattern: H-plane				
	— 2400 MHz — 2450 MHz — 2500 MHz	— 2400 MHz — 2450 MHz — 2500 MHz	— 2400 MHz — 2450 MHz — 2500 MHz	— 2300 MHz — 2400 MHz — 2500 MHz
Radiation pattern: V-plane				
	— 2400 MHz — 2450 MHz — 2500 MHz	— 2400 MHz — 2450 MHz — 2500 MHz	— 2400 MHz — 2450 MHz — 2500 MHz	— 2300 MHz — 2400 MHz — 2500 MHz
HPBW/Horizontal	● 360°	▼ 65°	▼ 30°	▼ 15°
HPBW/Vertical	— 15°	▶ 60°	▶ 30°	— 5°
Front to back ratio	-	15 dB	15 dB	26 dB
Impedance	50Ω	50Ω	50Ω	50Ω
Connector	N type jack	N type jack	N type jack	N type jack
Survival wind speed	216 km/hr	216 km/hr	216 km/hr	216 km/hr
Temperature	-40°C to 80°C/ -40°F to 176°F	-40°C to 80°C/ -40°F to 176°F	-40°C to 80°C/ -40°F to 176°F	-40°C to 80°C/ -40°F to 176°F
Humidity	95% at 25°C (77°F)	95% at 55°C (131°F)	95% at 55°C (131°F)	95% at 55°C (131°F)
Radome color	Gray-white	Light gray	Gray/White	White
Radome material	Fiber glass	ABS, UV resistant	ABS	ABS, UV resistant
Dimensions (WxDxH)(mm/in.)	80 x 78 x 520/ 3.15 x 3.07 x 20.47	114 x 114 x 40/ 4.49 x 4.49 x 1.57	200 x 200 x 50/ 7.87 x 7.87 x 1.97	360 x 360 x 16/ 14.17 x 14.17 x 0.63
Weight (g/lb.)	340/0.75	107/0.24	407/0.90	1600/3.53
Accessory kit	<ul style="list-style-type: none"> Screw kit N-plug adapter Mounting kit Quick installation guide 	<ul style="list-style-type: none"> Cable: N-plug, RP-SMA plug; 3m Mounting plate Quick installation guide 	<ul style="list-style-type: none"> Cable: N-plug, RP-SMA plug; 3m Mounting kit Quick installation guide 	<ul style="list-style-type: none"> Cable: N-plug, RP-SMA plug; 3m Mounting set Quick installation guide



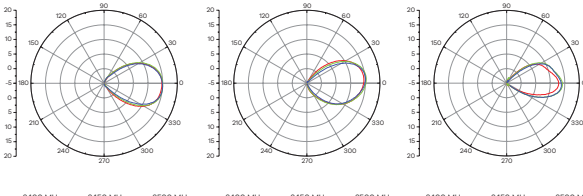
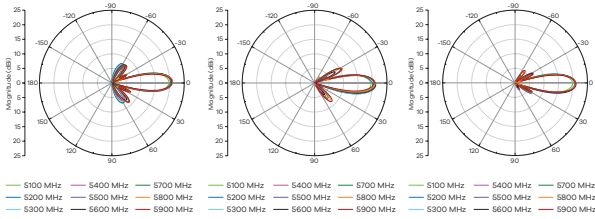
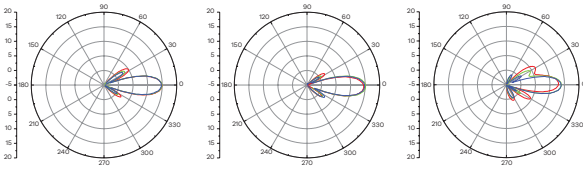
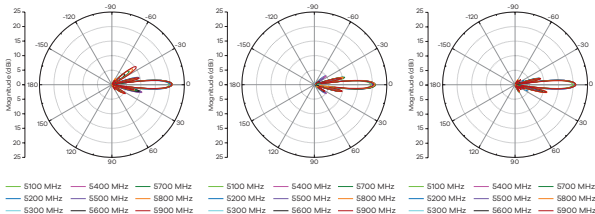
Model	ANT2206		ANT2105	
Product name	Dual-Band 6 dBi Directional Indoor Antenna		Dual-Band 5 dBi Omni-Directional Outdoor Antenna	
				
Space	Indoor		Outdoor	
Frequency band (MHz)	2400 - 2500	4900 - 5875	2400 - 2483	5150 - 5875
Gain	6 dBi	8 dBi	4.5 dBi	7 dBi
VSWR	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.
Polarization	Linear, vertical	Linear, vertical	Linear, vertical	Linear, vertical
Radiation pattern: H-plane				
	— 2400 MHz — 2450 MHz — 2500 MHz	— 4900 MHz — 5100 MHz — 5300 MHz — 5500 MHz — 5700 MHz — 5875 MHz	— 2400 MHz — 2450 MHz — 2500 MHz	— 5150 MHz — 5250 MHz — 5350 MHz — 5450 MHz — 5550 MHz — 5650 MHz — 5750 MHz — 5850 MHz — 5875 MHz
Radiation pattern: V-plane				
	— 2400 MHz — 2450 MHz — 2500 MHz	— 4900 MHz — 5100 MHz — 5300 MHz — 5500 MHz — 5700 MHz — 5875 MHz	— 2400 MHz — 2450 MHz — 2500 MHz	— 5150 MHz — 5250 MHz — 5350 MHz — 5450 MHz — 5550 MHz — 5650 MHz — 5750 MHz — 5850 MHz — 5875 MHz
HPBW/Horizontal	65°	50°	360°	360°
HPBW/Vertical	75°	50°	30°	15°
Front to back ratio	12 dB	-	-	-
Impedance	50Ω	-	50Ω	-
Connector	RP-SMA plug	-	N type plug	-
Survival wind speed	-	-	216 km/hr	-
Temperature	-10°C to 55°C/14°F to 131°F	-	-40°C to 80°C/-40°F to 176°F	-
Humidity	95% at 55°C (131°F)	-	95% at 55°C (131°F)	-
Radome color	White, black	-	White	-
Radome material	ABS, UV resistant	-	ABS	-
Dimensions (WxDxH)(mm/in.)	76 x 86 x 118/2.99 x 3.39 x 4.65	-	f 22 x 183	-
Weight (g/lb.)	110/0.24	-	70/0.15	-
Accessory kit	<ul style="list-style-type: none"> Screw kit Quick installation guide 	-	-	-

Model	ANT3108	ANT3218
Product name	5 GHz 8 dBi Omni-Directional Outdoor Antenna	5 GHz 18 dBi Directional Outdoor Antenna
		
Space	Outdoor	Outdoor
Frequency band (MHz)	5150 - 5875	5150 - 5875
Gain	8 dBi	18 dBi
VSWR	2.0:1 Max.	2.0:1 Max.
Polarization	Linear, vertical	Linear, vertical
Radiation pattern: H-plane		
Radiation pattern: V-plane		
HPBW/Horizontal	360°	15.5°
HPBW/Vertical	20°	15.5°
Front to back ratio	-	27 dB
Impedance	50Ω	50Ω
Connector	N type jack	N type jack
Survival wind speed	216 km/hr	216 km/hr
Temperature	-40°C to 80°C/-40°F to 176°F	-40°C to 80°C/-40°F to 176°F
Humidity	95% at 55°C (131°F)	95% at 55°C (131°F)
Radome color	White	Gray-white
Radome material	ABS, UV resistant	ABS, UV resistant
Dimensions (WxDxH)(mm/in.)	f 20 x 260	210 x 210 x 73/8.27 x 8.27 x 2.87
Weight (g/lb.)	206/0.46	700/1.54
Accessory kit	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide

MIMO Antenna




Model	ANT1310		ANT1313		ANT1314	
Product name	2.4 GHz 10 dBi MIMO Ceiling Mount Indoor Antenna		2.4 GHz 13 dBi MIMO Directional Outdoor Antenna		2.4 GHz 14 dBi MIMO Directional Outdoor Antenna	
						
Space	Indoor		Outdoor		Outdoor	
Frequency band (MHz)	2300 - 2700		2400 - 2500		2400 - 2500	
Gain	9 - 10 dBi		13 - 13.5 dBi		14±0.5 dBi	
VSWR	1.5:1 Max.		2.0:1 Max.		2.0:1 Max.	
Polarization	Linear/ Horizontal	Linear/ Vertical	Cross polarization ±45°		Linear; ±45°	
Radiation pattern: H-plane	Port A	Port B	Port A	Port B	Port A	Port B
						
Radiation pattern: V-plane						
HPBW/Horizontal	51°	66°	33°		60°	
HPBW/Vertical	66°	51°	35°		13°	
Side lobes level	-14 dB Max.	-14 dB Max.	-13 dB		-	
Front to back ratio	-13 dB Max.	-13 dB Max.	-25 dB Max.		-25 dB Max.	
Impedance	50Ω		50Ω		50Ω	
Connector	SMA jack x 2		N type jack x 2		N type jack x 2	
Survival wind speed	N/A		216 km/hr		216 km/hr	
Temperature	-10°C to 55°C/14°F to 131°F		-40°C to 80°C/-40°F to 176°F		-40°C to 80°C/-40°F to 176°F	
Humidity	95% at 55°C (131°F)		95% at 55°C (131°F)		95% at 55°C (131°F)	
Radome color	White		Gray-white		Gray	
Radome material	ABS, UV resistant		ABS, UV resistant		ABS, UV resistant	
Dimensions (WxDxH)(mm/in.)	ø133 x 42/ø5.24 x 1.65		210 x 210 x 73/8.27 x 8.27 x 2.87		560 x 120 x 145/22.04 x 4.72 x 5.71	
Weight (g/lb.)	130/0.29		800/1.76		800/1.76	
Accessory kit	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 		<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 		<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 	

Model	ANT3315		ANT3316	
Product name	5 GHz 15 dBi MIMO Directional Outdoor Antenna		5 GHz 16 dBi MIMO Directional Outdoor Antenna	
				
Space	Outdoor		Outdoor	
Frequency band (MHz)	5150 - 5875		5150 - 5875	
Gain	15±0.5 dBi		15 - 16 dBi	
VSWR	2.0:1 Max.		2.0:1 Max.	
Polarization	Linear, ±45°		Linear, ±90°	
Radiation pattern: H-plane	Port A 	Port B 	Port A 	Port B 
Radiation pattern: V-plane				
HPBW/Horizontal	60°		19°	
HPBW/Vertical	8°		21°	
Side lobes level	-5 dB Max.		-	
Front to back ratio	-30 dB Max.		-20 dB Max.	
Impedance	50Ω		50Ω	
Connector	N type jack x 2		N type jack x 2	
Survival wind speed	216 km/hr		216 km/hr	
Temperature	-40°C to 80°C/-40°F to 176°F		-40°C to 80°C/-40°F to 176°F	
Humidity	95% at 55°C (131°F)		95% at 55°C (131°F)	
Radome color	Gray		Gray-white	
Radome material	ABS, UV resistant		ABS, UV resistant	
Dimensions (WxDxH)(mm/in.)	560 x 120 x 145/22.04 x 4.72 x 5.71		210 x 210 x 73/8.27 x 8.27 x 2.87	
Weight (g/lb.)	1400/3.09		800/1.76	
Accessory kit	<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 		<ul style="list-style-type: none"> • Mounting kit • Quick installation guide 	

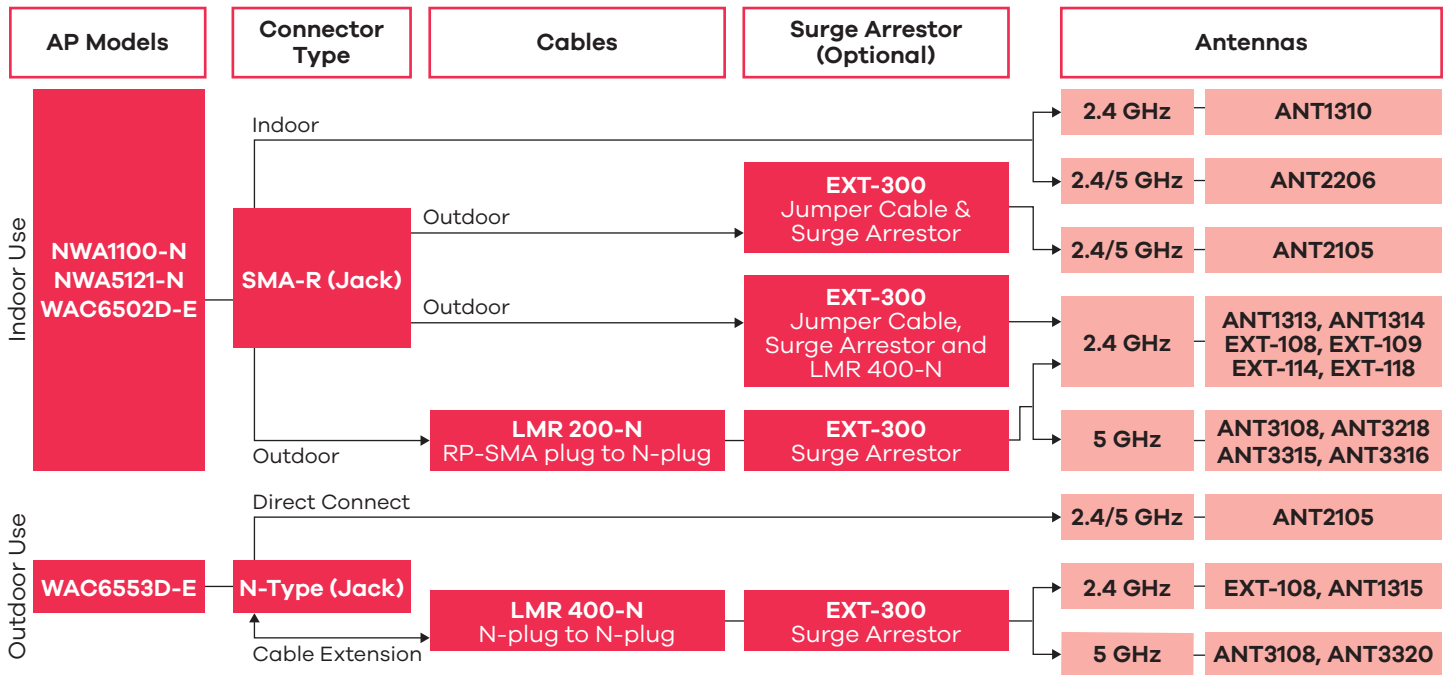
Model	ANT1315			ANT3320		
Product name	2.4 GHz 15 dBi MIMO Directional Outdoor Antenna			5 GHz 20 dBi MIMO Directional Outdoor Antenna		
						
Space	Outdoor			Outdoor		
Frequency band (MHz)	2400 - 2500			5150 - 5875		
Gain	Port 1*	Port 2	Port 3	Port 1	Port 2	Port 3
	14.5 - 15 dBi	13 - 14 dBi	14.5 - 15 dBi	20±1 dBi	20±1 dBi	20±1 dBi
VSWR	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.	2.0:1 Max.
Polarization	Linear, +45°	Linear, 90°	Linear, -45°	Linear, 0°	Linear, 90°	Linear, -45°
Radiation pattern: H-plane						
Radiation pattern: V-plane						
HPBW/Horizontal	39° - 48°	32° - 37°	39° - 48°	17°		
HPBW/Vertical	19° - 20°	19°	19° - 20°	8°		
Sidelobes level	-10 dB Max.	-7 dB Max.	-10 dB Max.	-10 dB Max.		
Front to back ratio	-19 dB Max.	-14 dB Max.	-10 dB Max.	-35 dB Max.		
Impedance	50Ω			50Ω		
Connector	N type jack x 3			N type jack x 3		
Survival wind speed	216 km/hr			216 km/hr		
Temperature	-40°C to 80°C/-40°F to 176°F			-40°C to 80°C/-40°F to 176°F		
Humidity	95% at 55°C (131°F)			95% at 55°C (131°F)		
Radome color	Gray			Gray-white		
Radome material	PC, UV Resistant			PC, UV Resistant		
Dimensions (WxDxH)(mm/in.)	320 x 320 x 43/12.60 x 12.60 x 1.69			371 x 371 x 165/14.61 x 14.61 x 6.50 (inclusive of mounting kit)		
Weight (g/lb.)	1140/2.51			2500/5.51 (inclusive of mounting kit)		
Accessory kit	<ul style="list-style-type: none"> Mounting kit Quick installation guide 			<ul style="list-style-type: none"> Mounting kit Quick installation guide 		

* Port 1 connector is on the right side.

Cable

Model	LMR 200-N	LMR 400-N	EXT-300
Product name	RP-SMA Plug to N-plug Cable	N-plug to N-plug Cable	Surge Arrestor with Jumper Cable SMA-R to N
			
Connector	N-plug, RP-SMA plug	N-plug, N-plug	RP-SMA plug, N-jack (Jumper cable)/ N-plug, N-jack (Surge arrester)
Cable length	3m, 9m	1m, 9m	0.5m
Outer diameter	4.95 mm	10.29 mm	-
Operating temperature	-40°C to 85°C/-40°F to 185°F	-40°C to 85°C/-40°F to 185°F	-40°C to 85°C/-40°F to 185°F
Attenuation	55.4 dB/100m @2.5 GHz	22.2 dB/100m @2.5 GHz	1.5 dB @0 - 6 GHz (Jumper cable) 0.8 dB @0 - 6 GHz (Surge arrester)

Installation Compatibility



For more product information, visit us on the web at www.zyxel.com

Copyright © 2018 Zyxel Communications Corp. All rights reserved. Zyxel, Zyxel logo are registered trademarks of Zyxel Communications Corp. All other brands, product names, or trademarks mentioned are the property of their respective owners. All specifications are subject to change without notice.



5-100-00718013 04/18