Araknis Networks® Wi-Fi 6 820 Series Indoor Wireless Access Point

AN-820-AP-I

Product Photos

The lightning-fast speeds of Wi-Fi 6 combined with the unmatched control provided by OvrC Wi-Fi management delivers enhanced performance and convenience to your networking portfolio. With cloud configuration for projects with multiple access points, you can easily configure, manage, monitor, and troubleshoot the network from the OvrC mobile or web app, eliminating hours of manual setup time.

For added efficiency, the OvrC Connect app empowers your clients to resolve common issues on their own.

A Fast & Efficient Network

Wi-Fi 6 standard helps with increased speed, coverage, and capacity. Installing a Wi-Fi 6 access point in your networks can also extend the battery life of Wi-Fi 6-connected devices.

The AN-820's 4x4 antenna provides a more powerful connection for more devices, making sure your network won't sacrifice speed for size.

Powerful & Reliable Performance

Wi-Fi 6 utilizes OFDMA (orthogonal frequency-division multiple access) to tackle high-density environments by allowing simultaneous communication between multiple devices. This technology helps optimize bandwidth, thereby reducing congestion and improving speeds.

Pro-Friendly Features

Create multiple SSIDs and customize each to meet specific network requirements such as enabling/disabling Fast Roaming, Band Steering, or Wi-Fi 6 compatibility per SSID. This ensures the best Wi-Fi experience and provides tools necessary to support older IoT devices without impacting the main network.

This AP also offers DFS (Dynamic Frequency Selection) channel support to increase the number of Wi-Fi channels when available and WPA3 mode to offer latest security.

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Specs

Wi-Fi	
Peak PHY Rates	2.4GHz: 1148Mbps
	5GHz: 2400Mbps
Wi-Fi Standards	IEEE 802/11a/b/g/n/ac/ax
Supported Rates	802.11ax: 4 to 2402 Mbps
	802.11ac: 6.5 to 1560 Mbps
	802.11n: 6.5 to 800Mbps
	802.11a/g: 6 to 54 Mbps
	802.11b: 1 to 11 Mbps
Frequency Modulation	2.4Ghz: Up to 1024-QAM
	5GHz: Up to 1024-QAM
Supported Channels	2.4Ghz: 1-13
	5GHz: 36-64, 100-144, 149-165
MIMO	4x4 SU-MIMO
	4x4 MU-MIMO
Spatial Streams	4 streams SU/MU MIMO 5GHz
	4 streams SU/MU MIMO 2.4GHz
Radio Chains and Streams	4x4:4 (5GHz)
	4x4:4 (2.4GHz)
Channelization	20, 40, 80MHz
OFDMA	Downlink, Uplink
Security	Open, WPA Mixed, WPA-PSK Mixed, WPA2 AES, WPA2-PSK AES, WPA3, WPA3-SAE, WPA3-SAE Mixed
Power Save	STBC, U-APSD
Other Wi-Fi Features	WMM, TX Beamforming, 802.11r/k/v, BSS Coloring, TWT, LDPC

RF	
Antenna Gain (max)	2.4GHz: Up to 4dBi
	5GHz: Up to 5dBi
Peak Transmit Power	2.4GHz: 25dBm
	5GHz: 25dBm
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)

5GHz Receive Sensitivty (dBm)

VHT20				VHT40				VHT80			
MCS0	MCS7	MCS8	MCS9	MCS0	MCS7	MCS8	MCS9	MCS0	MCS7	MCS8	MCS9
-89	-72	-66		-86	-69	-64	-63	-83	-66	-61	-59
HE20				**HE40**				**HE80**			
MCS0	MCS7	MCS9	MCS11	MCS0	MCS7	MCS9	MCS11	MCS0	MCS7	MCS9	MCS11
-89	-72	-65	-60	-86	-69	-63	-58	-83	-66	-60	-55

5GHz TX Power Target (Per Chain)	
Rate (MCS0)	Power Out (dBm)
HE20 CH48	18.5
HE20 CH100	12
HE20 CH149	23
HE40 CH46	22
HE40 CH102	15.5
HE40 CH159	23.5
HE80 CH42	16.5
HE80 CH106	16.5
HE80 CH155	20.5

2.4GHz Receive Senstivity (dBm)

HT20		HT40		VHT20		VHT40	
MCS0	MCS7	MCS0	MCS7	MCS0	MCS8	MCS0	MCS9
-92	-74	-89	-72	-92	-70	-89	-66
HE20				**HE40**			
MCS0	MCS7	MCS9	MCS11	MCS0	MCS7	MCS9	MCS11
-92	-74	-69	-63	-89	-72	-66	-60

2.4GHz TX Power Target (Per Chain)	
Rate (MCS0)	Power Out (dBm)
HE20 CH1	17.5
HE20 CH6	24
HE20 CH11	17.5
HE40 CH1	15
HE40 CH6	16.5
HE40 CH11	15.5

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Networking	
IP	IPv4
VLAN	802.1Q (1 per BSSID)
802.1x	Supplicant
Policy Management Tools	Rate Limiting
	L2 Access Control List
	WiFi Scheduler
	Max Client Limit
	Wireless Client Isolation
Other Features	Device Fingerprinting (via OvrC)
	Band Steering
	STP
	SNMP v2/v3
	Site Survey
	Channel Utilization

Performance and Capacity	
Measured Throughput	2.4GHz: 860 Mbps
	5GHz: 1920 Mbps
Client Capacity	Up to 254 clients per AP
SSID	Up to 18 per AP

Certifications and Compliance	
Wi-Fi Alliance	Wi-Fi 6 CERTIFIED a, b, g, n, ac, ax
	Agile Multiband (MBO)
	WMM
	WPA/WPA2/WPA3
Standards Compliance	IEC 60950-1, IEC 62368-1 3rd
	FCC DFS, IC DFS, CE DFS, AS DFS

Physical Interfaces	
Ethernet	1 x 2.5G BASE-T Ethernet (RJ45)
	1 x 1G BASE-T Ethernet (RJ45)
	Power over Ethernet (802.3af/at/bt)

Physical Characteristics	
Physical Size	9.29in (L) x 9.29in (W) x 1.89in (H)
	23.6cm (L) x 23.6cm (W) x 4.8cm (H)
Weight	2.82 lbs
	1.28 kg
Mounting	Ceiling or Wall
Operating Temperature	0˚C (32˚F) - 50˚C (122˚F)
Operating Humidity	Up to 90% non-condensing
Storage Temperature	-30˚C (-22˚F) - 70˚C (158˚F)

Power Consumption		
Power Supply	Operating Characteristics	Max Power Consumption
DC Power 12V/4A	Full Functionality	25.3W
802.3bt (PoE++)	Full Functionality	25.97W
802.3at (PoE+)	Full Functionality	25.22W
	Full Functionality	
802.3af (PoE)	2.4Ghz Radio 1x4 Tx 21dBm	12.74W
	5GHz Radio 1x4 Tx 21dBm	

Warranty	
2-Year Limited Warranty	Araknis Networks® products have a 2-Year Limited Warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products which have been abused, modified, or disassembled. Products to be repaired under this warranty must be returned to Snap One or a designated service center with prior notification and an assigned return authorization number (RA).

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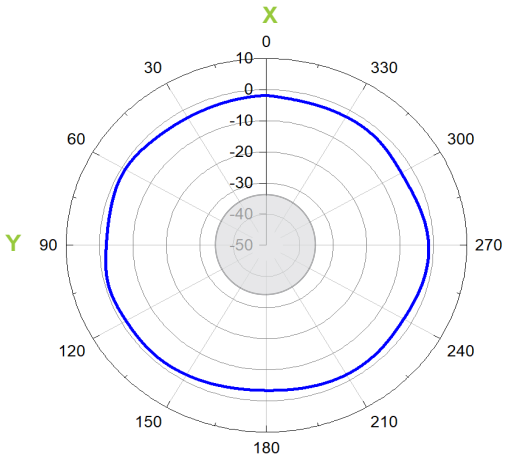
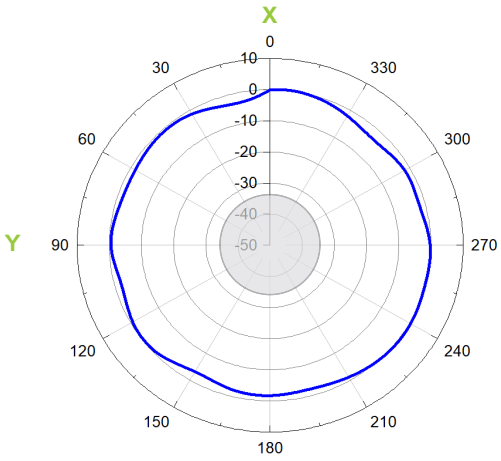
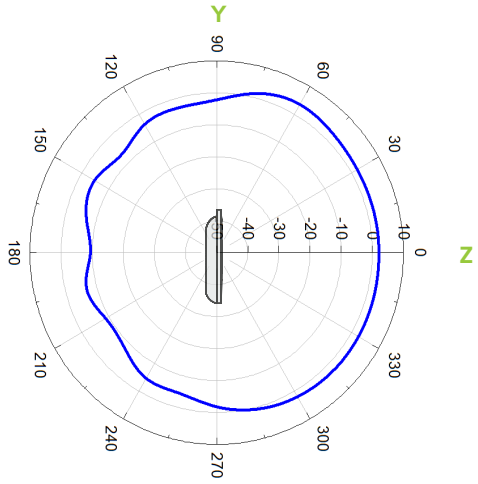
Propagation Patterns



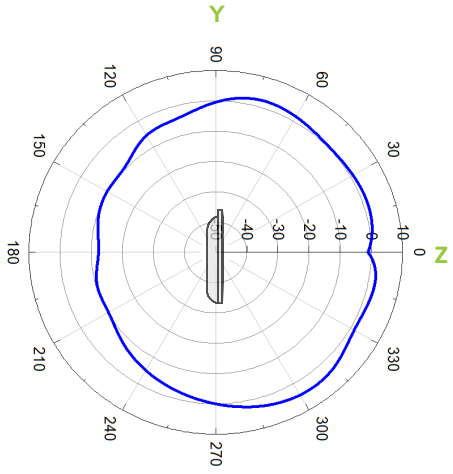
XY 2.45 GHz



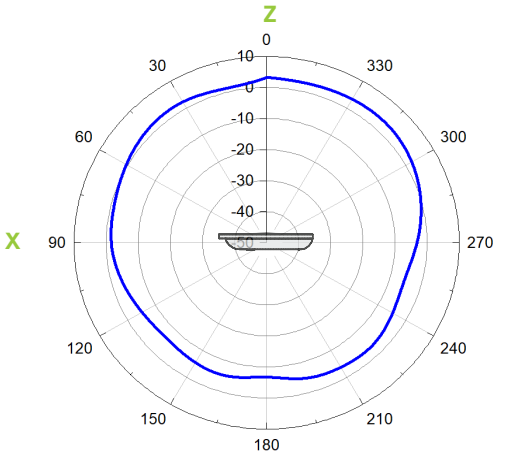
XY 5.5GHz



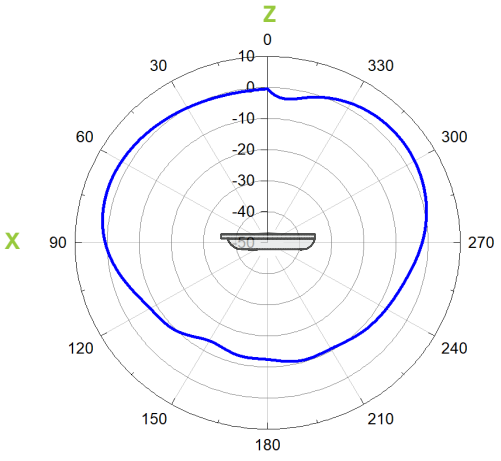
YZ 2.45 GHz



YZ 5.5GHz



XZ 2.45 GHz



XZ 5.5GHz