

# Araknis Networks® Wi-Fi 6 520 Series Outdoor Wireless Access Point

AN-520-AP-O



## 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-520 features 2x2 antenna design supporting peak data rates of up to 3000Mbps at 160MHz Channel bandwidth and a 2.5Gbps LAN port-in to offer support for multi-gig jobs.

### 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.

### Built-in Switch with PoE Out Option

A built-in, two-port Switch on the WAP with an option to provide PoE-out (15W) when powered by 802.3bt (60W) for quick and easy connectivity to an adjacent device, such as IP Camera or IoT device.

### Weather Resistant

This outdoor WAP is IP55 weather resistant, which means you can provide Wi-Fi access to the backyard, pool, or guest house without worrying about the elements.

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Specs

Wi-Fi	
Peak PHY Rates	2.4GHz: 574 Mbps
	5GHz: 2400 Mbps (160MHz) 1200 Mbps (80MHz)
Wi-Fi Standards	IEEE 802.11a/b/g/n/ac/ax
Supported Rates	802.11ax: 8.6 to 2402 Mbps
	802.11ac: 6.5 to 866 Mbps
	802.11n: 6.5 to 400 Mbps
	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	2x2 SU-MIMO
	2x2 MU-MIMO
Spatial Streams	2 streams SU/MU MIMO 5GHz
	2 streams SU/MU MIMO 2.4GHz
Radio Chains and Streams	2x2:2 (5GHz)
	2x2:2 (2.4GHz)
Channelization	20, 40, 80, 160MHz
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
Operating Modes	Access Point Mode
RF	
Antenna Gain (max)	2.4GHz: Up to 5.61dBi
	5GHz: Up to 7.33dBi
Peak Transmit Power	2.4GHz: 25dBm
	5GHz: 26dBm
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 TX Power Target (Per Chain)	
Rate (MCS0)	Power Out (dBm)
HE20 CH48	19
HE20 CH100	13
HE20 CH149	23
HE40 CH46	19
HE40 CH102	15.5
HE40 CH159	23
HE80 CH42	19
HE80 CH106	18
HE80 CH155	23
HE160 CH50	18
HE160 CH114	18

2.4GHz Receive Sensitivity (dBm)							
HT20		HT40		VHT20		VHT40	
MCS0	MCS7	MCS0	MCS7	MCS0	MCS8	MCS0	MCS9
-92	-74	-91	-72	-92	-70	-91	-66
HE20				HE40			
MCS0	MCS7	MCS9	MCS11	MCS0	MCS7	MCS9	MCS11
-92	-74	-67	-62	-90	-71	-65	-59

2.4GHz TX Power Target (Per Chain)	
Rate (MCS0)	Power Out (dBm)
HE20 CH1	21
HE20 CH6	22
HE20 CH11	20.5
HE40 CH1	20
HE40 CH6	22
HE40 CH11	20

5GHz Receive Sensitivity (dBm)															
VHT20				VHT40				VHT80				VHT160			
MCS0	MCS7	MCS8	MCS9	MCS0	MCS7	MCS8	MCS9	MCS0	MCS7	MCS8	MCS9	MCS0	MCS7	MCS8	MCS9
-92	-72	-69		-89	-70	-66	-64	-86	-67	-63	-61	-83	-64	-60	-59
HE20				HE40				HE80				HE160			
MCS0	MCS7	MCS9	MCS11	MCS0	MCS7	MCS9	MCS11	MCS0	MCS7	MCS9	MCS11	MCS0	MCS7	MCS9	MCS11
-92	-72	-67	-61	-89	-68	-64	-58	-86	-67	-61	-56	-83	-64	-59	-53

\*Power table may vary based on country selection.

# Araknis Networks® Wi-Fi 6 520 Series Outdoor Wireless Access Point

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
Other Features	Wireless Client Isolation
	Device Fingerprinting (via OvrC)
	Band Steering
	STP
	SNMP v2/v3
	Site Survey
	Channel Utilization

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

Physical Characteristics	
Physical Size	13.08in (L) x 8.04in (W) x 1.34in (H)
	33.2cm (L) x 20.4cm (W) x 3.4cm (H)
Weight	2.96 lbs
	1.34 kg
Mounting	Pole or Wall
Operating Temperature	-20 °C (-4 °F) - 60 °C (140 °F)
Operating Humidity	Up to 90% non-condensing
Storage Temperature	-30 °C (-22 °F) - 70 °C (158 °F)

Performance and Capacity	
Measured Throughput	2.4GHz: 420 Mbps
	5GHz: 1730 Mbps
Client Capacity	Up to 254 clients per AP
SSID	Up to 9 SSID Per Radio including Guest Wi-Fi (Total 18 SSIDs)

Power Consumption		
Power Supply	Operating Characteristics	Max Power Consumption
802.3bt (PoE++)	<ul style="list-style-type: none"> <li>Full Wi-Fi Functionality with Heater ON</li> <li>PoE-Out (15.4W)</li> </ul> <p>*Heater turns on when CPU temperature is below 5 °C</p>	42.5W
802.3at (PoE+)	<ul style="list-style-type: none"> <li>Full Wi-Fi Functionality with Heater OFF</li> <li>PoE Out not supported</li> </ul>	16.5W
	<ul style="list-style-type: none"> <li>Limited Wi-Fi Functionality with Heater ON</li> <li>PoE Out not supported</li> </ul> <p>*Limited Wi-Fi Functionality:</p> <ul style="list-style-type: none"> <li>2.4GHz Radio 1x1 @ 21dBm transmit Power</li> <li>5GHz Radio 2x2 @ 21dBm transmit Power</li> </ul> <p>*Heater turns on when CPU temperature is below 5 °C</p>	25.3W

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, IEC60950-22, IEC/UL 62368-1 3rd, IP55
	FCC DFS, IC DFS, CE DFS, AS DFS

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

