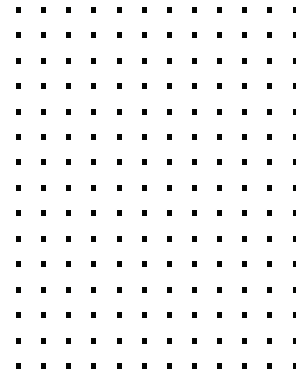# Wireless Product Matrix
September 2024

Large campuses, distributed enterprises, and small businesses all have diverse WLAN architecture needs. That's why Fortinet provides a variety of models, from 2×2 to 4×4, internal or external antenna, to address any use case. Fortinet offers flexibility for configuration and control, either using our FortiGate security appliance as a controller or our cloud platform FortiLAN Cloud.
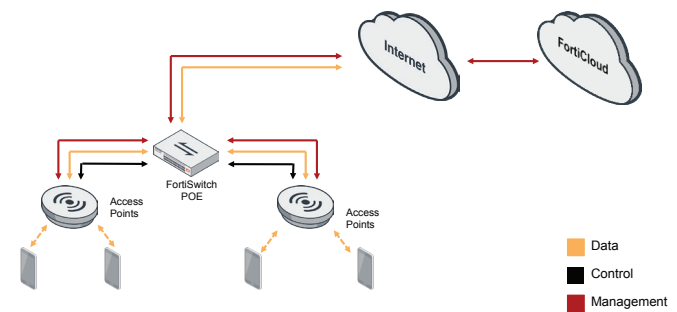
FortiGate Managed

The FortiGate Wireless Controller is built into all FortiGate models and does not require any additional licensing to use. This results in security-driven networking, where the network is converged with, and driven by security. The FortiLink protocol allows the FortiGate appliance to extend its best in class security directly to the wireless edge. Base NAC features are also included, giving more features and lower TCO. As part of our Security Fabric, the FortiGate Managed offering also allows for an extensive set of troubleshooting and reporting tools with FortiWLM and Artificial Intelligence with Machine Learning using FortiAIOps all within our Fabric Management Center.
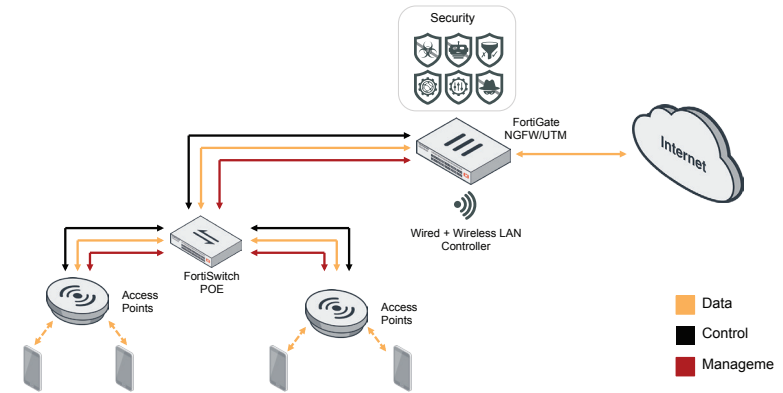
FortiLAN Cloud Managed

FortiLAN Cloud management allows for centralized hosted cloud control of standalone FortiAP devices, scaling from a handful to thousands of FortiAPs. A FortiLAN Cloud subscription enables advanced features & troubleshooting plus additional configuration options and log retention.

FortiAP™ Integrated or Cloud Managed Wi-Fi 7 (802.11be) Access Points

	FAP-441K	FAP-443K		
Suggested Use Case	WiFi-7 indoor	WiFi-7 indoor		
Hardware				
Number of Radios	4 + 1 BLE	4 + 1 BLE		
Number of Antennas	10 Internal + 1 BLE Internal + 1 Internal GPS	10 External + 1 BLE External + 1 Internal GPS		
Antenna Type and Peak Gain	Refer to Data Sheet	Refer to Data Sheet		
Radio 1 Capabilities	2.4 GHz 4×4 20/40MHz	2.4 GHz 4×4 20/40MHz		
Radio 2 Capabilities	5.0 GHz 4×4 20/40/80/160/240MHz	5.0 GHz 4×4 20/40/80/160/240MHz		
Radio 3 Capabilities	6.0 GHz 4×4 20/40/80/160/320MHz	2.4/5.0/6.0 GHz 2×2 20/40/80/160/320MHz		
Radio 4 Capabilities (scanning only)	2.4/5.0/6.0GHz 2×2 20/40/80/160MHz	2.4/5.0/6.0GHz 2×2 20/40/80/160MHz		
Maximum Data Rate	Radio 1: up to 1.148 Gbps Radio 2: up to 8.648 Gbps Radio 3: up to 11.530 Gbps	Radio 1: up to 1.148 Gbps Radio 2: up to 8.648 Gbps Radio 3: up to 11.530 Gbps		
BLE/ZigBee	• / •	• / •		
Interfaces	2× 10/5/2.5/GE RJ45, 1x RS-232 RJ45 Serial Port	2× 10/5/2.5/GE RJ45, 1x RS-232 RJ45 Serial Port		
Power over Ethernet (PoE)	802.3bt PoE default or x2 802.3at PoE (Dual PoE current sharing)	02.3bt PoE default or x2 802.3at PoE (Dual PoE current sharing)		
Power Consumption (Max.)	41.7 W	41.7 W		
Simultaneous SSIDs	Up to 24	Up to 24		
Maximum Tx Power	Radio 1: 2.4GHz: 29 dBm / 794 mW (4 chains combined) Radio 2: 5GHz: 27.8 dBm / 602 mW (4 chains combined) Radio 3: 6GHz: 23 dBm 200 mW (4 chains combined @ 160MHz BW)	Radio 1: 2.4GHz: 29 dBm / 794 mW (4 chains combined) Radio 2: 5GHz: 27.8 dBm / 602 mW (4 chains combined) Radio 3: 6GHz: 23 dBm 200 mW (4 chains combined @ 160MHz BW)		
SSID Types Supported	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh		
Per Radio Client Capacity	Up to 512 per radio (Radio1, 2 & 3)	Up to 512 per radio (Radio1, 2 & 3)		
Certifications				
Wi-Fi Alliance Certified	•	•		
DFS Certified				

FortiAP™ Integrated or Cloud Managed Wi-Fi 6E (802.11ax) Access Points

	FAP-231G	FAP-233G	FAP-431G	FAP-433G
Suggested Use Case	WiFi-6E indoor	WiFi-6E indoor	High performance WiFi-6E indoor	High performance WiFi-6E indoor
Hardware				
Number of Radios	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE
Number of Antennas	4 Internal + 1 BLE Internal	4 External + 1 BLE Internal	8 Internal + 1 BLE Internal	8 External + 1 BLE Internal
Antenna Type and Peak Gain	PIFA: 4.5 dBi for 2.4GHz, 5.5 dBi for 5 GHz & 5.5dBi for 6GHz	4.5 dBi for 2.4GHz, 4.5 dBi for 5 GHz & 4.5dBi for 6GHz	PIFA: 4.0 dBi for 2.4GHz, 6.0 dBi for 5 GHz & 5.7dBi for 6GHz	5.0 dBi for 2.4GHz, 5.0 dBi for 5 GHz & 4.0dBi for 6GHz
Radio 1 Capabilities	2.4 GHz 2×2 20/40MHz	2.4 GHz 2×2 20/40MHz	2.4 GHz 4×4 20/40MHz	2.4 GHz 4×4 20/40MHz
Radio 2 Capabilities	5.0 GHz 2×2 20/40/80MHz	5.0 GHz 2×2 20/40/80MHz	5.0 GHz 4×4 20/40/80MHz	5.0 GHz 4×4 20/40/80MHz
Radio 3 Capabilities (Service and Scanning)	2.4/5.0/6.0 GHz 2×2 20/40/80MHz	2.4/5.0/6.0 GHz 2×2 20/40/80MHz	2.4/5.0/6.0 GHz 4×4 20/40/80/160MHz	2.4/5.0/6.0 GHz 4×4 20/40/80/160MHz
Maximum Data Rate	Radio 1: up to 574 Mbps Radio 2: up to 1201 Mbps Radio 3: up to 2401 Mbps	Radio 1: up to 574 Mbps Radio 2: up to 1201 Mbps Radio 3: up to 2401 Mbps	Radio 1: up to 1148 Mbps Radio 2: up to 2402 Mbps Radio 3: up to 4804 Mbps	Radio 1: up to 1148 Mbps Radio 2: up to 2402 Mbps Radio 3: up to 4804 Mbps
BLE/ZigBee	• / •	• / •	• / •	• / •
Interfaces	1× 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	1× 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	2× 5GE RJ45, 1x RS-232 RJ45 Serial Port	2× 5GE RJ45, 1x RS-232 RJ45 Serial Port
Power over Ethernet (PoE)	802.3at PoE default	802.3at PoE default	1× 802.3bt PoE default or 2× 802.3at PoE (Dual PoE current sharing)	1× 802.3bt PoE default or 2× 802.3at PoE (Dual PoE current sharing)
Power Consumption (Max.)	Depends on PoE connected	Depends on PoE connected	31.7 W	31.7 W
Simultaneous SSIDs	Up to 24	Up to 24	Up to 24	Up to 24
Maximum Tx Power	Radio 1: 2.4GHz: 23 dBm / 200 mW (2 chains combined) Radio 2: 5GHz: 23 dBm / 158 mW (2 chains combined) Radio 3: 6GHz: 21 dBm 80 mW (2 chains combined @ 160MHz BW)	Radio 1: 2.4GHz: 23 dBm / 200 mW (2 chains combined) Radio 2: 5GHz: 23 dBm / 158 mW (2 chains combined) Radio 3: 6GHz: 21 dBm 80 mW (2 chains combined @ 160MHz BW)	Radio 1: 2.4GHz: 27 dBm / 501 mW (4 chains combined) Radio 2: 5GHz: 26 dBm / 400 mW (4 chains combined) Radio 3: 6GHz: 24 dBm 251 mW (4 chains combined @ 160MHz BW)	Radio 1: 2.4GHz: 27 dBm / 501 mW (4 chains combined) Radio 2: 5GHz: 26 dBm / 400 mW (4 chains combined) Radio 3: 6GHz: 24 dBm 251 mW (4 chains combined @ 160MHz BW)
SSID Types Supported	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh
Per Radio Client Capacity	Up to 512 per radio (Radio1, 2 & 3)	Up to 512 per radio (Radio1, 2 & 3)	Up to 512 per radio (Radio1, 2 & 3)	Up to 512 per radio (Radio1, 2 & 3)
Certifications				
Wi-Fi Alliance Certified		•	•	
DFS Certified	CE	CE	CE	CE

FortiAP™ Integrated or Cloud Managed Wi-Fi 6E (802.11ax) Outdoor Access Points

	FAP-234G	FAP-432G		
Suggested Use Case	WiFi-6E Outdoor	WiFi-6E Outdoor		
Hardware				
Number of Radios	3 + 1 BLE	3 + 1 BLE		
Number of Antennas	8 Internal + 1 BLE Internal, 1 GPS Internal	8 External + 1 BLE		
Antenna Type and Peak Gain	Refer to Data Sheet	Refer to Data Sheet		
Radio 1 Capabilities	2.4 GHz 2×2 20/40MHz	2.4 GHz 4×4 20/40MHz		
Radio 2 Capabilities	5.0 GHz 2×2 20/40/80MHz	5.0 GHz 4×4 20/40/80MHz		
Radio 3 Capabilities (Service and Scanning)	2.4/5.0/6.0 GHz 2×2 20/40/80/160 MHz	2.4/5.0/6.0 GHz 4×4 20/40/80/160 MHz		
Maximum Data Rate	Radio 1: up to 574 Mbps Radio 2: up to 1201 Mbps Radio 3: up to 2401 Mbps	Radio 1: up to 1182 Mbps Radio 2: up to 2475 Mbps Radio 3: Up to 4804 Mbps		
BLE/ZigBee	• / •	• / •		
Interfaces	1× 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	1× 10GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port		
Power over Ethernet (PoE)	802.3bt	802.3bt		
Power Consumption (Max.)	28 W	41.2 W		
Simultaneous SSIDs	Up to 24	Up to 8 per client serving radio		
Maximum Tx Power	Radio 1: 2.4GHz: 26 dBm / 398 mW (2 chains combined) Radio 2: 5GHz: 26 dBm / 398 mW (2 chains combined) Radio 3: 5GHz: 26 dBm / 398 mW (2 chains combined), 6GHz: 26dBm/398 mW (2 chians combined EIRP)	Radio 1: 2.4GHz: 29.8 dBm / 955 mW (4 chains combined) Radio 2: 5GHz: 29.8 dBm / 955 mW (4 chains combined) Radio 3: 6GHz: 26 dBm / 400 mW (4 chains combined @ 160MHz BW)		
SSID Types Supported	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh		
Per Radio Client Capacity	Up to 512 per radio (Radio1, 2 & 3)	Up to 512 per radio (Radio1, 2 & 3)		
Certifications				
Wi-Fi Alliance Certified				
DFS Certified				

FortiAP™ Integrated or Cloud Managed Wi-Fi 6 (802.11ax) Access Points

	FAP-231F	FAP-431F	FAP-433F	FAP-831F
Suggested Use Case	802.11ax indoor	High performance 802.11ax indoor	High performance 802.11ax indoor	High performance 802.11ax indoor
Hardware				
Number of Radios	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE
Number of Antennas	3 Internal + 1 BLE Internal	5 Internal + 1 BLE Internal	5 External + 1 BLE Internal	13 Internal + 1 BLE Internal
Antenna Type and Peak Gain	Directional patch antenna : 3.5 dBi in 2.4 GHz, 4.5 dBi in 5 GHz	PIFA: 4 dBi for 2.4 GHz, 5 dBi for 5 GHz	Omni directional rubber duck antenna : 4 dBi for 2.4 GHz, 6 dBi for 5 GHz	PIFA: 4 dBi for 2.4 GHz, 6 dBi for 5.0 GHz, 4 dBi for dual band Scanning
Radio 1 Capabilities	2.4 GHz 2×2 20/40MHz	2.4 GHz 4×4 20/40MHz	2.4 GHz 4×4 20/40MHz	2.4 GHz 4×4 20/40MHz
Radio 2 Capabilities	5.0 GHz 2×2 20/40/80MHz	5.0 GHz 4×4 20/40/80MHz, 2×2 160MHz	5.0 GHz 4×4 20/40/80MHz, 2×2 160MHz	5.0 GHz 8×8 (Mode 1), 4×4 = 4×4 (Mode 2)
Radio 3 Capabilities (Monitor Only)	2.4/5.0 GHz (1×1)	2.4/5.0 GHz (1×1)	2.4/5.0 GHz (1×1)	2.4/5.0 GHz (1×1)
Maximum Data Rate	Radio 1: up to 574 Mbps Radio 2: up to 1201 Mbps Radio 3: scan only	Radio 1: up to 1147 Mbps Radio 2: up to 2402 Mbps Radio 3: scan only	Radio 1: up to 1147 Mbps Radio 2: up to 2402 Mbps Radio 3: scan only	Radio 1: up to 1147 Mbps Radio 2: up to 4.804 Gbps Radio 3: scan only
BLE/ZigBee	• / •	• / -	• / -	• / -
Interfaces	2 x GE RJ45	1× 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	1× 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	1× 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port
Power over Ethernet (PoE)	802.3af/at	802.3at & dual redundant 802.3af/at	802.3at & dual redundant 802.3af/at	Dual 802.3at for full function, 802.3at with USB disabled
Power Consumption (Max.)	17 W	24.5 W	24.5 W	33 W
Simultaneous SSIDs	16 (14 if background scanning enabled)	16 (14 if background scanning enabled)	16 (14 if background scanning enabled)	
Maximum Tx Power	Radio 1: 2.4GHz: 23 dBm / 200 mW (2 chains combined) Radio 2: 5GHz: 22 dBm / 158 mW (2 chains combined) Radio 3: Radio 3: NA	Radio 1: 5GHz: 23 dBm / 200 mW (4 chains combined) Radio 2: 2.4GHz: 24 dBm / 251 mW (4 chains combined) 5GHz: 23 dBm / 200 mW (4 chains combined), Radio 3: NA	Radio 1: 5GHz: 23 dBm / 200 mW (4 chains combined) Radio 2: 2.4GHz: 24 dBm / 251 mW (4 chains combined) 5GHz: 23 dBm / 200 mW (4 chains combined), Radio 3: NA	Radio 1: 2.4GHz: 27 dBm / 500 mW (4 chains combined) Radio 2: 5GHz: 25.5 dBm / 354 mW (4 chains combined), Radio 3: NA
SSID Types Supported	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh
Per Radio Client Capacity	Up to 512 per radio Radio1 and Radio2	Up to 512 per radio Radio1 and Radio2	Up to 512 per radio Radio1 and Radio2	Up to 512 per radio Radio1 and Radio2
Certifications				
Wi-Fi Alliance Certified	•	•	•	•
DFS Certified	FCC, IC, CE, Japan, Brazil, Taiwan, Korea	FCC, IC, CE, Japan, Brazil, Taiwan	FCC, IC, CE, Japan, Brazil, Taiwan	FCC, IC, CE, Japan, Brazil

FortiAP™ Integrated or Cloud Managed Wi-Fi 6 (802.11ax) Outdoor and Wall Plate Access Points

	FAP-234F	FAP-432F	FAP-432FR	FAP-23JF
Suggested Use Case	802.11ax outdoor	High performance 802.11ax outdoor	Ruggedized indoor/outdoor/industrial	802.11ax wall plate
Hardware				
Number of Radios	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE
Number of Antennas	3 Internal + 1 BLE External	5 External + 1 BLE External	5 External + 1 BLE External	3 Internal + 1 BLE Internal
Antenna Type and Peak Gain	Dipole: 10 dBi for 2.4 GHz band, 10 dBi for 5.0 GHz	Dipole: 5.5 dBi for 2.4 GHz and 7.2 dBi for 5 GHz	Dipole: 5.5 dBi for 2.4 GHz and 7.2 dBi for 5 GHz	PCB: 4.0 dBi for 2.4 GHz and 4.0 dBi for 5 GHz
Radio 1 Capabilities	2.4 GHz 20/40MHz	2.4 GHz 20/40MHz	2.4 GHz 20/40MHz	2.4 GHz 20/40MHz
Radio 2 Capabilities	5.0 GHz 2×2 20/40/80MHz	5.0 GHz 4×4 20/40/80MHz, 2×2 160MHz	5.0 GHz 4×4 20/40/80MHz, 2×2 160MHz	5.0 GHz 2×2 20/40/80MHz
Radio 3 Capabilities (Monitor Only)	2.4/5.0 GHz (1×1)	2.4/5.0 GHz (1×1)	2.4/5.0 GHz (1×1)	2.4/5.0 GHz (1×1)
Maximum Data Rate	Radio 1: up to 574 Mbps Radio 2: up to 1200 Mbps Radio 3: scan only	Radio 1: up to 1147 Mbps Radio 2: up to 2402 Mbps Radio 3: scan only	Radio 1: up to 1147 Mbps Radio 2: up to 2402 Mbps Radio 3: scan only	Radio 1: up to 574 Mbps Radio 2: up to 1200 Mbps Radio 3: scan only
Bluetooth (BT/BLE)	• / •	• / •	• / •	• / •
Interfaces	2 x GE RJ45, 1x RS-232 RJ45 Serial Port	1× 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	1× 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	2x GE RJ45, 1× 802.3at PoE (PD), 1× 802.3af PoE (PSE), 2x pass-thru (in and out), 1x RS-232 RJ45 Serial Port
Power over Ethernet (PoE)	802.3af/at	802.3bt/at	802.3bt/at	802.3af/at
Power Consumption (Max.)	15.5 W	25 W w/o PSE out / 37.9 W with PSE out	25 W w/o PSE out / 37.9 W with PSE out	17.5W w/o PSE out / 31W with PSE out
Simultaneous SSIDs	16 (14 if background scanning enabled)	16 (14 if background scanning enabled)	16 (14 if background scanning enabled)	16 (14 if background scanning enabled)
Maximum Tx Power	Radio 1: 2.4 GHz: 27 dBm / 500 mW (2 chains combined)* Radio 2: 5 GHz: 25.5 dBm / 354 mW (2 chains combined)* Radio 3: N/A	Radio 1: 2.4 GHz 30 dBm / 1000 mW (4 chains combined)* Radio 2: 5 GHz 26 dBm / 398 mW (4 chains combined)* Radio 3: N/A	Radio 1: 2.4 GHz 29 dBm / 794 mW (4 chains combined)* Radio 2: 5 GHz 28 dBm / 630 mW (4 chains combined)* Radio 3: N/A	Radio 1: 2.4 GHz: 25 dBm / 158 mW (2 chains combined)* Radio 2: 5 GHz: 21 dBm / 158 mW (2 chains combined)* Radio 3: N/A
SSID Types Supported	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh
Per Radio Client Capacity	Up to 512 per radio Radio1 and Radio2	Up to 512 per radio Radio1 and Radio2	Up to 512 per radio Radio1 and Radio2	Up to 512 per radio Radio1 and Radio2
Certifications				
Wi-Fi Alliance Certified	•	•	•	•
DFS Certified	FCC, IC, CE, Japan, Brazil, Taiwan, Korea	FCC, IC, CE, Japan, Brazil, Taiwan	FCC, IC, CE, Japan, Brazil, Taiwan	FCC, IC, CE, Japan, Brazil, Taiwan, Korea

FortiAP™ Integrated Indoor and Wall Plate Indoor 802.11ac Access Points

	FAP-221E	FAP-223E		
Suggested Use Case	Medium density indoor	Medium density indoor		
Hardware				
Number of Radios	2	2		
Number of Antennas	4 Internal	4 External (RP-SMA)		
Antenna Type and Peak Gain	Patch: 4 dBi for 2.4 GHz, 5 dBi for 5 GHz	Dipole: 4 dBi for 2.4 GHz, 5 dBi for 5 GHz		
Radio 1 Capabilities	2.4 GHz b/g/n (2×2:2) 20/40 MHz (256 QAM)	2.4 GHz b/g/n (2×2:2) 20/40 MHz (256 QAM)		
Radio 2 Capabilities	5 GHz a/n/ac (2×2:2) 20/40/80 MHz (256 QAM)	5 GHz a/n/ac (2×2:2) 20/40/80 MHz (256 QAM)		
Radio 3 Capabilities (Monitor Only)	-	-		
Maximum Data Rate	Radio 1: up to 400 Mbps Radio 2: up to 867 Mbps	Radio 1: up to 400 Mbps Radio 2: up to 867 Mbps		
Bluetooth (BT/BLE)	•	•		
Interfaces	1x GE RJ45	1x GE RJ45		
Power over Ethernet (PoE)	IEEE 802.3af	IEEE 802.3af		
Power Consumption (Max.)	12.36 W	12.36 W		
Simultaneous SSIDs	16 (14 client,2 monitor)	16 (14 client,2 monitor)		
Maximum Tx Power	2.4 GHz: 23 dBm / 200 mW (2 chains combined)** 5 GHz: 24 dBm / 251 mW (2 chains combined)**	2.4 GHz: 23 dBm / 200 mW (2 chains combined)** 5 GHz: 24 dBm / 251 mW (2 chains combined)**		
SSID Types Supported	Local-Bridge, Tunnel, Mesh	Local-Bridge, Tunnel, Mesh		
Per Radio Client Capacity	Up to 512	Up to 512		
Certifications				
Wi-Fi Alliance Certified	•	•		
DFS Certified	FCC, IC, CE, Japan, Taiwan, Korea	FCC, IC, CE, Japan, Taiwan, Korea		

FortiAP Unified Threat Protection Capable Indoor Access Points

	FAP-U231F	FAP-U431F	FAP-U433F
Suggested Use Case	Mid-range 802.11ax indoor	High performance 802.11ax indoor	High performance 802.11ax indoor
Hardware			
Number of Radios	3 + 1 BLE	3 + 1 BT/BLE	3 + 1 BT/BLE
Number of Antennas	4 Internal + 1 BLE/ZigBee Internal	10 Internal + 1 BT/BLE Internal	10 External (RP-SMA) + 1 BT/BLE Internal
Antenna Type and Peak Gain	PIFA: 4 dBi for 2.4GHz, 6 dBi for 5GHz	PIFA: 4 dBi for 2.4 GHz, 6 dBi for 5 GHz	Dipole: 3.5 dBi for 2.4 GHz, 5 dBi for 5 GHz
Radio 1 Capabilities	2.4 GHz or 5.0 GHz(High Band) a/b/g/n/ac/ax (2×2:2) 20/40/80MHz (BPSK, QPSK, 64/256/1024 QAM	5.0 GHz a/n/ac/ax (4×4:4) 20/40/80/160 MHz (64, 1024 QAM)	5.0 GHz a/n/ac/ax (4×4:4) 20/40/80/160 MHz (64, 1024 QAM)
Radio 2 Capabilities	5.0 GHz a/n/ac/ax (2×2:2) 20/40/80MHz (BPSK, QPSK, 64/256/1024 QAM)	2.4/5.0 GHz a/b/g/n/ac/ax (4×4:4) 20/40/80/160 MHz (64, 1024 QAM)	2.4/5.0 GHz a/b/g/n/ac/ax (4×4:4) 20/40/80/160 MHz (64, 1024 QAM)
Radio 3 Capabilities	2.4 GHz service b/g/n/ax (2×2:2), dual band scan, 20/40MHz (BPSK, QPSK, 64/256/1024 QAM)	2.4/5.0 GHz a/b/g/n/ac (2×2:2) 20/40 MHz (64 QAM)	2.4/5.0 GHz a/b/g/n/ac (2×2:2) 20/40 MHz (64 QAM)
Maximum Data Rate	Radio 1: up to 1201 Mbps Radio 2: up to 1201 Mbps Radio 3: up to 574 Mbps	Radio 1: up to 4,804 Mbps Radio 2: up to 4,804 Mbps Radio 3: up to 300 Mbps	Radio 1: up to 4,804 Mbps Radio 2: up to 4,804 Mbps Radio 3: up to 300 Mbps
BLE/ZigBee	• / •	• / -	• / -
Interfaces	2x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port	1× 2.5GE RJ45, 1x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port	1× 2.5GE RJ45, 1x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port
Power over Ethernet (PoE)	1 × 802.3at PoE default, 1 × 802.af PoE with reduce TX power and no USB function	Dual redundant PoE power ports with support for IEEE 802.3af & 802.3at	Dual redundant PoE power ports with support for IEEE 802.3af & 802.3at
Power Consumption (Max.)	18.5W	24.5 W	24.5 W
Simultaneous SSIDs	24 (21 if background scanning enabled)	16 (14 client,2 monitor)	16 (14 client,2 monitor)
Maximum Tx Power	Radio 1: 2.4GHz: 23 dBm / 200 mW (2 chains combined)* 5GHz: 22 dBm / 158 mW (2 chains combined)* Radio 2: 5GHz: 22 dBm / 158 mW (2 chains combined)* Radio 3: 2.4GHz: 23 dBm / 200 mW (2 chains combined)* 5GHz: 22 dBm / 158 mW (2 chains combined)	Radio 1: 5 GHz: 24 dBm / 251 mW (4 chains combined)* Radio 2: 2.4 GHz: 26 dBm / 398 mW (4 chains combined)* 5 GHz: 24 dBm / 251 mW (4 chains combined)* Radio 3: 2.4 GHz: 22 dBm / 158 mW (2 chains combined)*	Radio 1: 5 GHz: 24 dBm / 251 mW (4 chains combined)* Radio 2: 2.4 GHz: 26 dBm / 398 mW (4 chains combined)* 5 GHz: 24 dBm / 251 mW (4 chains combined)* Radio 3: 2.4 GHz: 22 dBm / 158 mW (2 chains combined)*
SSID Types Supported	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh
Per Radio Client Capacity	Up to 512	Up to 512	Up to 512
Certifications			
Wi-Fi Alliance Certified		•	•
DFS Certified		FCC, IC, CE,Japan, Taiwan, Korea	FCC, IC, CE,Japan, Taiwan, Korea

FortiAP Unified Threat Protection Capable Outdoor Access Points

	FAP-U234F	FAP-U432F		
Suggested Use Case	Mid-range 802.11ax Outdoor	High performance 802.11ax Outdoor		
Hardware				
Number of Radios	3 + 1 BLE	3 + 1 BLE		
Number of Antennas	3 Internal + 1 BLE External	10 External + 1 BT/BLE		
Antenna Type and Peak Gain	Directional patch Antenna	Dual band Dipole Omni Directional Peak Gain 5.5dBi for 2.4GHz and 7dBi for 5.0GHz		
Radio 1 Capabilities	2.4 GHz a/b/g/n (2×2:2) or 5.0 GHz (high band) a/b/g/n/ac/ax (2×2:2) (64/256/1024 QAM)	2.4 GHz a/b/g/n (4×4:4) (64 QAM) or 5.0 GHz (high band) a/b/g/n/ac/ax (4×4:4) (64/256/1024 QAM)		
Radio 2 Capabilities	5.0 GHz a/n/ac/ax (2×2:2) 20/40/80/160 MHz (64/256/1024 QAM)	5.0 GHz a/b/g/n/ac/ax (4×4:4) 20/40/80/160 MHz (64/256/1024 QAM)		
Radio 3 Capabilities	2.4/5.0 GHz dual band b/g/n/ac (2×2:2) 20/40 MHz (64 QAM)	2.4/5.0 GHz dual band b/g/n/ac (2×2:2) 20/40 MHz (64 QAM)		
Maximum Data Rate	Radio 1: up to 2,402 Mbps Radio 2: up to 2,402 Mbps Radio 3: up to 300 Mbps	Radio 1: up to 4,804 Mbps Radio 2: up to 4,804 Mbps Radio 3: up to 300 Mbps		
Bluetooth (BT/BLE)	• / -	• / -		
Interfaces	1 x GE RJ45, 1 × 2.5GE RJ45, 1x RS-232 RJ45 Serial Port	1 x GE RJ45, 1 × 2.5GE RJ45, 1x RS-232 RJ45 Serial Port		
Power over Ethernet (PoE)	802.3at	802.3at		
Power Consumption (Max.)	21 W	32W max (without PSE) & 45W max (with PSE 12.99W)		
Simultaneous SSIDs	16 (14 if background scanning enabled)	16 (14 if background scanning enabled)		
Maximum Tx Power	Radio 1: 2.4GHz: 25 dBm / 316 mW (2 chains combined)*, 5GHz: 25 dBm / 316 mW (2 chains combined)* Radio 2: 5GHz: 25 dBm / 316 mW (2 chains combined)* Radio 3: 2.4GHz: 27 dBm / 501 mW (2 chains combined)* 5GHz: 25 dBm / 316 mW (2 chains combined)*	Radio 1: 2.4 GHz: 29 dBm / 794 mW (4 chains combined)* 5.0 GHz: 28 dBm /630 mW (4 chains combined)* Radio 2: 5.0 GHz: 26 dBm / 400 mW (2 chains combined)* Radio 3: 2.4 GHz: 26 dBm / 400 mW (2 chains combined) 5.0 GHz: 24 dBm / 251 mW (2 chains combined)*		
SSID Types Supported	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh		
Per Radio Client Capacity	Up to 512 per radio Radio1 and Radio2	Up to 512 per radio Radio1 and Radio2		
Certifications				
Wi-Fi Alliance Certified				
DFS Certified		CE		

FortiWiFi™ Firewall and WiFi Gateway

	FWF-30E	FWF-40F	FWF-50E	FWF-60E	FWF-60F	FWF-80F-2R
Suggested Deployment	Home/small office	Home/small office	Home/small office	Distributed office	Distributed office	Distributed office
Hardware						
Form Factor	Desktop, wall mountable	Desktop, wall mountable	Desktop, wall mountable	Desktop, wall mountable	Desktop, wall mountable	Desktop, wall mountable
Dimension	1.61 × 8.27 × 5.24 in	1.6 × 8.5 × 6.61in	1.44 × 5.5 × 8.52	1.5 × 8.5 × 6.3 in	1.5 × 8.5 × 6.3 in	2.4 × 8.5 × 7 in
Kensington Lock						
Ethernet Interfaces	1 x GE RJ45 WAN, 4 x GE RJ45 Switch ports	1 x GE RJ45 WAN, 4 x GE RJ45 Switch ports	2 x GE RJ45 WAN, 5 x GE RJ45 Switch ports	3 x GE RJ45 WAN/DMZ, 7 x GE RJ45 Switch ports	3 x GE RJ45 WAN/DMZ, 7 x GE RJ45 Switch ports	2 x RJ45/SFP shared media, 8 x GE RJ45 Switch ports
Other WiFi Variants	—	—	+ Storage (FWF-51E)	+ Storage (FWF-61E)	+ Storage (FWF-61F)	+ Storage (FWF-81F-2R)
Wireless						
IEEE Standard	802.11 a/b/g/n	802.11 a/b/g/n/ac-W2	802.11 a/b/g/n	802.11 a/b/g/n/ac	802.11 a/b/g/n/ac-W2	802.11 a/b/g/n/ac/ax
Number of Radios	1	1	1	1	1	2 wifi + 1 scan
Radio 1 Band (association rate)	2.4GHz / 5GHz (300Mbps)	2.4GHz / 5GHz (450 / 1300Mbps)	2.4GHz / 5GHz (300Mbps)	2.4GHz / 5GHz (300 / 867 Mbps)	2.4GHz / 5GHz (450 / 1300Mbps)	2.4 GHz (574 Mbps)
Radio 2 Band (association rate)	—	—	—	—	—	5.0 GHz (1201 Mbps)
MIMO	2×2	3×3	2×2	2×2	3×3	2×2
Max / recommended number of concurrent clients	128 / 30	128 / 30	128 / 30	128 / 30	128 / 30	128 / 30
Antenna Type and Count	2 F-type antennas (RP-SMA)	3 di-pole antennas (RP-SMA)	2 F-type antennas (RP-SMA)	2 di-pole antennas (RP-SMA)	3 di-pole antennas (RP-SMA)	3 di-pole antennas (RP-SMA)
Antenna Gain	3 dBi/(3dBi-5GHz)	4.2 dBi/(3.5dBi-5GHz)	3 dBi/(3dBi-5GHz)	3 dBi/(6dBi-5GHz)	4.2 dBi/(3.5dBi-5GHz)	4.5 dBi/(5.5dBi-5GHz)
Max TX Power	17dBm	20dBm	17dBm	17dBm	20dBm	23 dBm
Number of SSIDs	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)	8 (7 client, 1 monitor)
Traffic Queues	4 queues	4 queues	4 queues	4 queues	4 queues	8 (7 client, 1 monitor)
Rogue AP scanning						
Dual Band Scanning	•	•	•	•	•	•
Background Scan	•	•	•	•	•	•
Full-time dedicated monitor	•	•	•	•	•	•
Single Radio Dual band scanning	•	•	•	•	•	•
Management						
WebUI & CLI	•	•	•	•	•	•
Max managed APs	2	16	10	30	64	96
Cloud deployment support	•	•	•	•	•	•
Certifications						
Wi-Fi Alliance Certified						
DFS Certified						

* Certification covers following specifications: - 802.11a/b/g/n, Short Guard Interval, TX A-MPDU, STBC, 40 MHz operation in 5 GHzWPA™ Personal, WPA™ Enterprise /Personal, WPA2™ , Enterprise / Personal, WMM™, EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM, EAP-AKA, EAP-FAST, 802.11 d/h, WMM Power Save..

** Additional filtration added to reduce interference in 2.4GHz band from nearby cellular equipment.

FortiGate/FortiWiFi® Wireless Controller (with FortiOS 7.x)

	FortiGate/FortiWiFi 30 & 40 Series	FortiGate/FortiWiFi 60 & 70 Series	FortiGate/FortiWiFi 80 & 90 Series	FortiGate 100 Series	FortiGate 200 Series
Hardware					
Product Range / Form Factor	Entry / Desktop	Entry / Desktop	Entry / Desktop	Mid Range / 1 RU	Mid Range / 1 RU
GE PoE/PoE+ Interfaces	-	-	- / 8 (FG80/81F-POE)	-	-
Capacity					
Maximum Supported APs (Tunnel Mode)	8	32	48	64	128
Maximum Supported APs (Total)	16	64	96	128	256
Max number of SSIDs	16 - 32	16 - 32	16 - 32	256	256
Max CAPWAP throughput	3.5 Gbps	8 to 8.5 Gbps	9 to 23.6 Gbps	15 to 35 Gbps	20 Gbps

	FortiGate 400 Series	FortiGate 600 to 900 Series	FortiGate 1000 to 3000 Series	FG-4000 Series	FG-VM Series
Hardware					
Product Range / Form Factor	Mid Range / 1 RU	Mid Range / 1 RU	High End / 2-3 RU	High End / 3 RU	-
Capacity					
Maximum Supported APs (Tunnel Mode)	256	512 - 1,024	2,048	4,096	32 - 2,048
Maximum Supported APs (Total)	512	1,024- 2,048	4,096 - 8,192	8,192	64 - 4,096
Max number of SSIDs	256	512	1,024 - 4,096	4,096	32 - 1,024
Max CAPWAP throughput	14.8 - 65 Gbps	18 Gbps - 70 Gbps	11 Gbps - 65 Gbps	47 - 63 Gbps	Refer to Data Sheet

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This document is provided as a convenient comparison of Fortinet products and services. The datasheet for any product or service can be found on www.fortinet.com should be consulted for the most updated specifications.