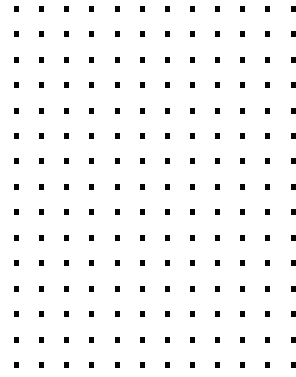


Wireless Product Matrix

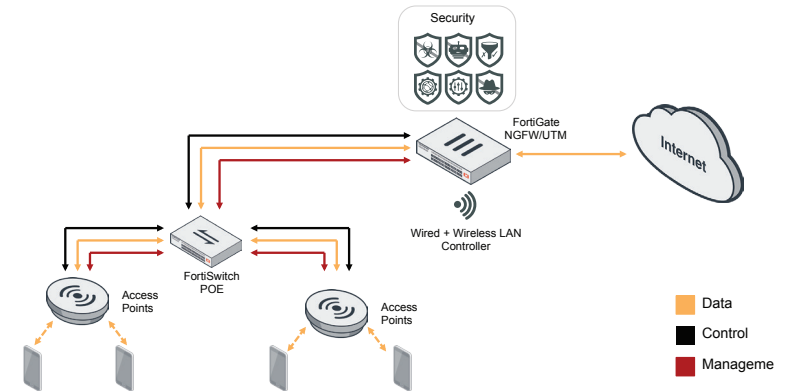
April 2023



Large campuses, distributed enterprises, and small businesses all have diverse WLAN architecture needs. That's why Fortinet provides a variety of models, from 2x2 to 4x4, 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.

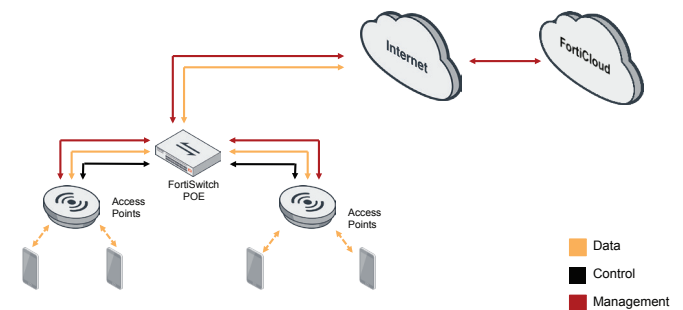
FortiGate Managed

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.







Non-FortiGate 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 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 2x2 20/40MHz	2.4 GHz 2x2 20/40MHz	2.4 GHz 4x4 20/40MHz	2.4 GHz 4x4 20/40MHz
Radio 2 Capabilities	5.0 GHz 2x2 20/40/80MHz	5.0 GHz 2x2 20/40/80MHz	5.0 GHz 4x4 20/40/80MHz	5.0 GHz 4x4 20/40/80MHz
Radio 3 Capabilities (Service and Scanning)	2.4/5.0/6.0 GHz 2x2 20/40/80MHz	2.4/5.0/6.0 GHz 2x2 20/40/80MHz	2.4/5.0/6.0 GHz 4x4 20/40/80/160MHz	2.4/5.0/6.0 GHz 4x4 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	1x 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	1x 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	2x 5GE RJ45, 1x RS-232 RJ45 Serial Port	2x 5GE RJ45, 1x RS-232 RJ45 Serial Port
Power over Ethernet (PoE)	802.3at PoE default	802.3at PoE default	1x 802.3bt PoE default or 2x 802.3at PoE (Dual PoE current sharing)	1x 802.3bt PoE default or 2x 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 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	PIFA: 4.5dBi for 2.4GHz and 5.5dBi for 5GHz	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 2x2 20/40MHz	2.4 GHz 4x4 20/40MHz	2.4 GHz 4x4 20/40MHz	2.4 GHz 4x4 20/40MHz
Radio 2 Capabilities	5.0 GHz 2x2 20/40/80MHz	5.0 GHz 4x4 20/40/80MHz, 2x2 160MHz	5.0 GHz 4x4 20/40/80MHz, 2x2 160MHz	5.0 GHz 8x8 (Mode 1), 4x4 = 4x4 (Mode 2)
Radio 3 Capabilities (Monitor Only)	2.4/5.0 GHz (1x1)	2.4/5.0 GHz (1x1)	2.4/5.0 GHz (1x1)	2.4/5.0 GHz (1x1)
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	1x 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	1x 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	1x 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-23JF		
					
Suggested Use Case	802.11ax outdoor	High performance 802.11ax outdoor	802.11ax wall plate		
Hardware					
Number of Radios	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE		
Number of Antennas	3 Internal + 1 BLE External	5 External + 1 BLE External	5 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	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		
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 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)		
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 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	1x 2.5GE RJ45, 1 x GE RJ45, 1x RS-232 RJ45 Serial Port	2x GE RJ45, 1× 802.3at PoE (PD), 1x 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	802.3af/at		
Power Consumption (Max.)	15.5 W	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)		
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: 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		
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		
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, 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 Wi-Fi 6 (802.11ax) Access Points

	FAP-U231F	FAP-U431F	FAP-U433F	FAP-U234F	FAP-U432F
					
Suggested Use Case	Mid-range 802.11ax indoor	High performance 802.11ax indoor	High performance 802.11ax indoor	Mid-range 802.11ax Outdoor	High performance 802.11ax Outdoor
Hardware					
Number of Radios	3 + 1 BLE	3 + 1 BT/BLE	3 + 1 BT/BLE	3 + 1 BLE	3 + 1 BLE
Number of Antennas	4 Internal + 1 BLE/ZigBee Internal	10 Internal + 1 BT/BLE Internal	10 External (RP-SMA) + 1 BT/BLE Internal	3 Internal + 1 BLE External	10 External + 1 BT/BLE
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	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 or 5.0 GHz(High Band) a/b/g/n/ac/ax (2x2:2) 20/40/80MHz (BPSK, QPSK, 64/256/1024 QAM)	5.0 GHz a/n/ac/ax (4x4:4) 20/40/80/160 MHz (64, 1024 QAM)	5.0 GHz a/n/ac/ax (4x4:4) 20/40/80/160 MHz (64, 1024 QAM)	2.4 GHz a/b/g/n (2x2:2) or 5.0 GHz (high band) a/b/g/n/ac/ax (2x2:2) (64/256/1024 QAM)	2.4 GHz a/b/g/n (4x4:4) (64 QAM) or 5.0 GHz (high band) a/b/g/n/ac/ax (4x4:4) (64/256/1024 QAM)
Radio 2 Capabilities	5.0 GHz a/n/ac/ax (2x2:2) 20/40/80MHz (BPSK, QPSK, 64/256/1024 QAM)	2.4/5.0 GHz a/b/g/n/ac/ax (4x4:4) 20/40/80/160 MHz (64, 1024 QAM)	2.4/5.0 GHz a/b/g/n/ac/ax (4x4:4) 20/40/80/160 MHz (64, 1024 QAM)	5.0 GHz a/n/ac/ax (2x2:2) 20/40/80/160 MHz (64/256/1024 QAM)	5.0 GHz a/b/g/n/ac/ax (4x4:4) 20/40/80/160 MHz (64/256/1024 QAM)
Radio 3 Capabilities	2.4 GHz service b/g/n/ax (2x2:2), dual band scan, 20/40MHz (BPSK, QPSK, 64/256/1024 QAM)	2.4/5.0 GHz a/b/g/n/ac (2x2:2) 20/40 MHz (64 QAM)	2.4/5.0 GHz a/b/g/n/ac (2x2:2) 20/40 MHz (64 QAM)	2.4/5.0 GHz dual band b/g/n/ac (2x2:2) 20/40 MHz (64 QAM)	2.4/5.0 GHz dual band b/g/n/ac (2x2:2) 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	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
BLE/ZigBee	• / •	• / -	• / -	• / -	• / -
Interfaces	2x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port	1x 2.5GE RJ45, 1x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port	1x 2.5GE RJ45, 1x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port	1 x GE RJ45, 1 x 2.5GE RJ45, 1x RS-232 RJ45 Serial Port	1 x GE RJ45, 1 x 2.5GE RJ45, 1x RS-232 RJ45 Serial Port
Power over Ethernet (PoE)	1 x 802.3at PoE default, 1 x 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	802.3at	802.3at
Power Consumption (Max.)	18.5W	24.5 W	24.5 W	21 W	32W max (without PSE) & 45W max (with PSE 12.99W)
Simultaneous SSIDs	24 (21 if background scanning enabled)	16 (14 client,2 monitor)	16 (14 client,2 monitor)	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)* 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)*	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	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	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, Taiwan, Korea	FCC, IC, CE,Japan, Taiwan, Korea		CE

FortiAP Unified Threat Protection Capable Access Points

	FAP-U321EV	FAP-U422EV	FAPU24JEV
			
Suggested Use Case	High density, 802.11ac W2 indoor	IP67 High performance 802.11ac W2 outdoor	Low cost, compact 802.11ac wallplug/wall plate
Hardware			
Number of Radios	2 + 1 BT/BLE	2 + 1 BT/BLE	1 or 2 + 1 BT/BLE
Number of Antennas	6 Internal + 1 BT/BLE Internal	8 External (Type N) + 1 BT/BLE Internal	2 Internal + 1 BT/BLE Internal
Antenna Type and Peak Gain	Patch: 4.5 dBi for 2.4 GHz, 6.5 dBi for 5 GHz	Dipole: 5 dBi for 2.4 GHz, 7 dBi for 5 GHz	Patch: 3 dBi for 2.4 GHz, 4 dBi for 5 GHz
Radio 1 Capabilities	2.4 GHz b/g/n (3x3:3) 20/40 MHz (64 QAM)	2.4 GHz b/g/n (4x4:4) 20/40 MHz (64 QAM)	2.4 GHz b/g/n (2x2:2) 20/40 MHz (64 QAM) or 5 GHz a/n/ac (2x2:2) 20/40/80 MHz (256 QAM) or 2.4 GHz b/g/n (1x1:1) 20/40 MHz (64 QAM) & 5 GHz a/n/ac (1x1:1) 20/40/80 MHz (256 QAM)
Radio 2 Capabilities	5 GHz a/n/ac (3x3:3) 20/40/80 MHz (256/1024 QAM)	5 GHz a/n/ac (4x4:4) 20/40/80/160 MHz (256/1024 QAM)	
Radio 3 Capabilities	-	-	-
Maximum Data Rate	Radio 1: up to 450 Mbps Radio 2: up to 2,600 Mbps	Radio 1: up to 600 Mbps Radio 2: up to 3,466 Mbps	up to 867 Mbps
Bluetooth (BT/BLE)	•	•	•
Interfaces	2x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port	2x GE RJ45, 1x RS-232 RJ45 Serial Port	2 + 4x GE RJ45 Ports (1x 802.3at PoE (PD), 1x 802.3af PoE (PSE), 1x pass-thru in, 1x pass-thru out)
Power over Ethernet (PoE)	Dual redundant PoE power ports with support for IEEE 802.3af & 802.3at	Proprietary or 802.3at	802.3af (max PSE output of 4W) or 802.3at (full 802.3af PSE output)
Power Consumption (Max.)	15 W when supplied by 802.3at power and 12.8 W when in 802.3af power mode	22 W	24W (Depends on PoE connected and USB power consumed)
Simultaneous SSIDs	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)
Maximum Tx Power	2.4 GHz: 26.7 dBm / 468 mW (3 chains combined)* 5 GHz: 24.7 dBm / 295 mW (3 chains combined)*	2.4 GHz: 24 dBm / 251 mW (4 chains combined)* 5 GHz: 24 dBm / 251 mW (4 chains combined)*	2.4 GHz: 23 dBm / 200 mW (2 chains combined)* 5 GHz: 21 dBm / 126 mW (2 chains combined)*
SSID Types Supported	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel
Per Radio Client Capacity	Up to 256	Up to 256	Up to 128
Certifications			
Wi-Fi Alliance Certified	•	•	•
DFS Certified	FCC, CE, IC, Japan	FCC, IC, CE, Japan	CE, Japan

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 GHz/WPA™ 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 7.0)

	FortiGate/FortiWiFi 40 Series	FortiGate/FortiWiFi 60 Series	FortiGate/FortiWiFi 80 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	32	32	32	256	256
Max CAPWAP throughput	3.5 Gbps	8 Gbps	9 Gbps	15 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	2,048	4,096	32 - 2,048
Maximum Supported APs (Total)	512	1,024	4,096 - 8,192	8,192	64 - 4,096
Max number of SSIDs	256	256	1,024 - 4,096	4,096	32 - 1,024
Max CAPWAP throughput	14.8 Gbps	5.5 Gbps - 18 Gbps	11 Gbps - 65 Gbps	47 - 63 Gbps	Refer to Data Sheet

FortiWLM Wireless Manager

	FWM-100D	FWM-1000D	FWM-VM	FWM-MEA
				
Suggested Use Case	Small enterprises	Medium to large enterprises	Small to large enterprises	Medium enterprises
Hardware				
Form Factor	1 RU	1 RU	Supports VMware, Hyper-V, AWS and KVM hypervisors.	MEA within FortiManager
Ethernet Interfaces	4x GE RJ45	4x GE RJ45, 4x GE SFP	—	—
Capacity				
Number of APs	2,000	15,000	20,000	3,200
Number of Stations	20,000	100,000	150,000	64,000



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.

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