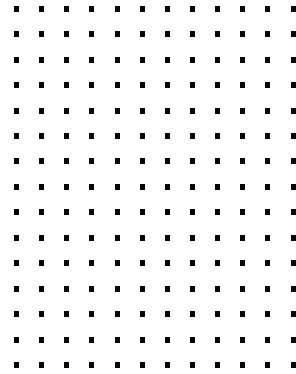


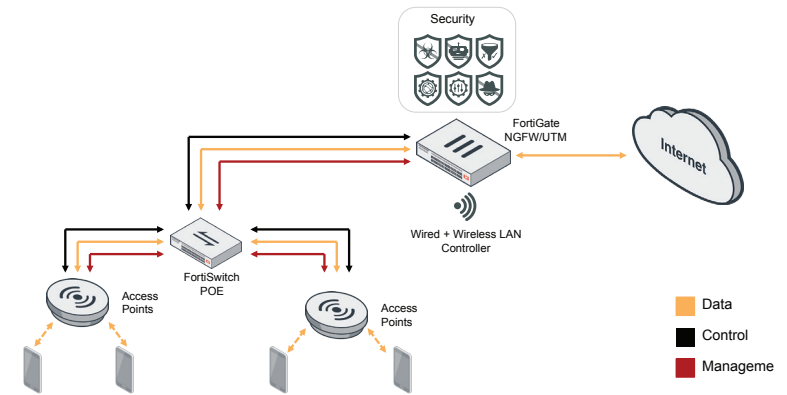
# Wireless Product Matrix

June 2021



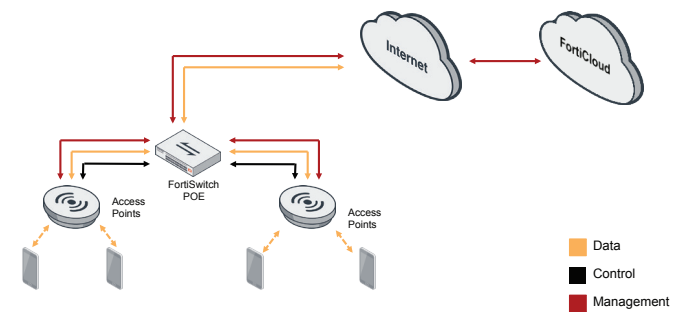
## Integrated - FortiGate-Managed

Our Integrated offering leverages the wireless controller built into our FortiOS operating system. It features a family of controller-managed access points which function in cooperation with a FortiGate, our industry leading enterprise firewall. In addition to consolidating all the functions of a network firewall, IPS, anti-malware, VPN, WAN optimization, Web filtering, and application control in a single platform, FortiGate also has an integrated Wi-Fi controller. Wi-Fi is either integrated directly into the FortiGate (FortiWiFi) or connected as an access point (FortiAP) directly to a FortiGate to provide comprehensive wireless coverage.







## Cloud-Managed




FortiAP Cloud offers management capabilities for standalone FortiAPs that scale from individual organizations managing a handful of APs, to large enterprises managing several thousand. FortiAP Cloud allows you to provision, monitor, troubleshoot, and optimize your deployment through an easy-to-understand user interface.





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

	FAP-231F	FAP-431F	FAP-433F	FAP-831F
				
<b>Suggested Use Case</b>	802.11ax indoor	High performance 802.11ax indoor	High performance 802.11ax indoor	High performance 802.11ax indoor
<b>Hardware</b>				
<b>Number of Radios</b>	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE
<b>Number of Antennas</b>	3 Internal + 1 BLE Internal	5 Internal + 1 BLE Internal	5 External + 1 BLE Internal	13 Internal + 1 BLE Internal
<b>Antenna Type and Peak Gain</b>	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
<b>Radio 1 Capabilities</b>	2.4 GHz 4x4 20/40MHz	2.4 GHz 4x4 20/40MHz	2.4 GHz 4x4 20/40MHz	2.4 GHz 4x4 20/40MHz
<b>Radio 2 Capabilities</b>	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)
<b>Radio 3 Capabilities (Monitor Only)</b>	2.4/5.0 GHz (1x1)	2.4/5.0 GHz (1x1)	2.4/5.0 GHz (1x1)	2.4/5.0 GHz (1x1)
<b>Maximum Data Rate</b>	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
<b>BLE/ZigBee</b>	• / •	• / -	• / -	• / -
<b>Interfaces</b>	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
<b>Power over Ethernet (PoE)</b>	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
<b>Power Consumption (Max.)</b>	17 W	24.5 W	24.5 W	33 W
<b>Simultaneous SSIDs</b>	16 (14 if background scanning enabled)	16 (14 if background scanning enabled)	16 (14 if background scanning enabled)	
<b>Maximum Tx Power</b>	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
<b>SSID Types Supported</b>	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh
<b>Per Radio Client Capacity</b>	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
<b>Certifications</b>				
<b>Wi-Fi Alliance Certified</b>	•	•	•	•
<b>DFS Certified</b>	CE, FCC, IC, Taiwan	FCC, IC, CE, Japan, Korea, Taiwan	FCC, IC, CE, Japan, Korea, Taiwan	CE




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

	FAP-234F	FAP-234F	FAP-23JF		
					
<b>Suggested Use Case</b>	802.11ax outdoor	High performance 802.11ax outdoor	802.11ax wall plate		
<b>Hardware</b>					
<b>Number of Radios</b>	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE		
<b>Number of Antennas</b>	3 Internal + 1 BLE External	5 External + 1 BLE External	5 Internal + 1 BLE Internal		
<b>Antenna Type and Peak Gain</b>	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		
<b>Radio 1 Capabilities</b>	2.4 GHz 20/40MHz	2.4 GHz 20/40MHz	2.4 GHz 20/40MHz		
<b>Radio 2 Capabilities</b>	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		
<b>Radio 3 Capabilities (Monitor Only)</b>	2.4/5.0 GHz (1×1)	2.4/5.0 GHz (1×1)	2.4/5.0 GHz (1×1)		
<b>Maximum Data Rate</b>	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		
<b>Bluetooth (BT/BLE)</b>	• / •	• / •	• / •		
<b>Interfaces</b>	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, 1x 802.3at PoE (PD), 1x 802.3af PoE (PSE), 2x pass-thru (in and out), 1x RS-232 RJ45 Serial Port		
<b>Power over Ethernet (PoE)</b>	802.3af/at	802.3bt/at	802.3af/at		
<b>Power Consumption (Max.)</b>	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		
<b>Simultaneous SSIDs</b>	16 (14 if background scanning enabled)	16 (14 if background scanning enabled)	16 (14 if background scanning enabled)		
<b>Maximum Tx Power</b>	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		
<b>SSID Types Supported</b>	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh		
<b>Per Radio Client Capacity</b>	Up to 512 per radio Radio1 and Radio2	Up to 512 per radio Radio1 and Radio2	Up to 512 per radio Radio1 and Radio2		
<b>Certifications</b>					
<b>Wi-Fi Alliance Certified</b>	•	•	•		
<b>DFS Certified</b>	CE	CE	CE		







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

	FAP-221E	FAP-223E	FAP-C24JE
			
<b>Suggested Use Case</b>	Medium density indoor	Medium density indoor	Indoor Wall Plate AP
<b>Hardware</b>			
<b>Number of Radios</b>	2	2	2
<b>Number of Antennas</b>	4 Internal	4 External (RP-SMA)	4 Internal
<b>Antenna Type and Peak Gain</b>	Patch: 4 dBi for 2.4 GHz, 5 dBi for 5 GHz	Dipole: 4 dBi for 2.4 GHz, 5 dBi for 5 GHz	Chip: 1.5 dBi for 2.4 GHz, 2 dBi for 5 GHz
<b>Radio 1 Capabilities</b>	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)	2.4 GHz b/g/n (2×2:2) 20/40 MHz (64 QAM)
<b>Radio 2 Capabilities</b>	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)	5 GHz a/n/ac (2×2:2) 20/40/80 MHz (256 QAM)
<b>Radio 3 Capabilities (Monitor Only)</b>	-	-	-
<b>Maximum Data Rate</b>	Radio 1: up to 400 Mbps Radio 2: up to 867 Mbps	Radio 1: up to 400 Mbps Radio 2: up to 867 Mbps	Radio 1: up to 300 Mbps, Radio 2: up to 867 Mbps
<b>Bluetooth (BT/BLE)</b>	•	•	
<b>Interfaces</b>	1x GE RJ45	1x GE RJ45	2 + 6x GE RJ45 Ports (1× 802.3at PoE (PD), 1× 802.3af PoE (PSE), 1x pass-thru in, 1x pass-thru out), 1x RS-232 RJ45 Serial Port
<b>Power over Ethernet (PoE)</b>	IEEE 802.3af	IEEE 802.3af	802.3af (max PSE output of 4W) or 802.3at (full 802.3af PSE output)
<b>Power Consumption (Max.)</b>	12.36 W	12.36 W	Depends on PoE connected
<b>Simultaneous SSIDs</b>	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)	8
<b>Maximum Tx Power</b>	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)**	23 dBm / 100mW (2 chains combined)*
<b>SSID Types Supported</b>	Local-Bridge, Tunnel, Mesh	Local-Bridge, Tunnel, Mesh	Local-Bridge, Tunnel
<b>Per Radio Client Capacity</b>	Up to 512	Up to 512	Up to 64
<b>Certifications</b>			
<b>Wi-Fi Alliance Certified</b>	•	•	
<b>DFS Certified</b>	FCC, IC, CE, Japan, Taiwan, Korea	FCC, IC, CE, Japan, Taiwan, Korea	



# FortiAP-U Universally Manageable Wi-Fi 6 (802.11ax) Access Points

	FAP-U231F	FAP-U431F	FAP-U433F		
					
<b>Suggested Use Case</b>	Mid-range 802.11ax indoor	High performance 802.11ax indoor	High performance 802.11ax indoor		
<b>Hardware</b>					
<b>Number of Radios</b>	3 + 1 BLE	3 + 1 BT/BLE	3 + 1 BT/BLE		
<b>Number of Antennas</b>	4 Internal + 1 BLE/ZigBee Internal	10 Internal + 1 BT/BLE Internal	10 External (RP-SMA) + 1 BT/BLE Internal		
<b>Antenna Type and Peak Gain</b>	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		
<b>Radio 1 Capabilities</b>	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)		
<b>Radio 2 Capabilities</b>	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)		
<b>Radio 3 Capabilities</b>	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)		
<b>Maximum Data Rate</b>	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		
<b>BLE/ZigBee</b>	• / •	• / -	• / -		
<b>Interfaces</b>	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		
<b>Power over Ethernet (PoE)</b>	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		
<b>Power Consumption (Max.)</b>	18.5W	24.5 W	24.5 W		
<b>Simultaneous SSIDs</b>	24 (21 if background scanning enabled)	16 (14 client,2 monitor)	16 (14 client,2 monitor)		
<b>Maximum Tx Power</b>	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)*		
<b>SSID Types Supported</b>	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh		
<b>Per Radio Client Capacity</b>	Up to 512	Up to 512	Up to 512		
<b>Certifications</b>					
<b>Wi-Fi Alliance Certified</b>		•	•		
<b>DFS Certified</b>		FCC, IC, CE,Japan, Taiwan, Korea	FCC, IC, CE,Japan, Taiwan, Korea		






# FortiAP-U Universally Manageable Indoor Access Points

	FAP-U221EV	FAP-U223EV	FAP-U321EV	FAP-U323EV	FAP-U421EV	FAP-U423EV
						
<b>Suggested Use Case</b>	Medium Density, 802.11ac indoor	Medium Density, 802.11ac indoor	High density, 802.11ac W2 indoor	High density, 802.11ac W2 indoor	High density, 802.11ac W2 indoor	High density, 802.11ac W2 indoor
<b>Hardware</b>						
<b>Number of Radios</b>	2 + 1 BT/BLE	2 + 1 BT/BLE	2 + 1 BT/BLE	2 + 1 BT/BLE	2 + 1 BT/BLE	2 + 1 BT/BLE
<b>Number of Antennas</b>	4 Internal + 1 BT/BLE Internal	4 External (RP-SMA) + 1 BT/BLE Internal	6 Internal + 1 BT/BLE Internal	6 External (RP-SMA) + 1 BT/BLE Internal	8 Internal + 1 BT/BLE Internal	8 External (RP-SMA) + 1 BT/BLE Internal
<b>Antenna Type and Peak Gain</b>	Patch: 3 dBi for 2.4 GHz, 4 dBi for 5 GHz	Dipole: 3 dBi for 2.4 GHz, 4 dBi for 5 GHz	Patch: 4.5 dBi for 2.4 GHz, 6.5 dBi for 5 GHz	Dipole: 3.5 dBi for 2.4 GHz, 5 dBi for 5 GHz	Patch: 4 dBi for 2.4 GHz, 5 dBi for 5 GHz	Dipole: 3 dBi for 2.4 GHz, 3 dBi for 5 GHz
<b>Radio 1 Capabilities</b>	2.4 GHz b/g/n (2x2:2) 20/40 MHz (64 QAM)	2.4 GHz b/g/n (2x2:2) 20/40 MHz (64 QAM)	2.4 GHz b/g/n (3x3:3) 20/40 MHz (64 QAM)	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 (4x4:4) 20/40 MHz (64 QAM)
<b>Radio 2 Capabilities</b>	5 GHz a/n/ac (2x2:2) 20/40/80 MHz (256 QAM)	5 GHz a/n/ac (2x2:2) 20/40/80 MHz (256 QAM)	5 GHz a/n/ac (3x3:3) 20/40/80 MHz (256/1024 QAM)	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)	5 GHz a/n/ac (4x4:4) 20/40/80/160 MHz (256/1024 QAM)
<b>Radio 3 Capabilities</b>	-	-	-	-	-	-
<b>Maximum Data Rate</b>	Radio 1: up to 300 Mbps Radio 2: up to 867 Mbps	Radio 1: up to 300 Mbps Radio 2: up to 867 Mbps	Radio 1: up to 450 Mbps Radio 2: up to 2,600 Mbps	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	Radio 1: up to 600 Mbps Radio 2: up to 3,466 Mbps
<b>Bluetooth (BT/BLE)</b>	•	•	•	•	•	•
<b>Interfaces</b>	1x GE RJ45, 1x Type A USB	1x GE RJ45, 1x Type A USB	2x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port	2x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port	2x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port	2x GE RJ45, 1x Type A USB, 1x RS-232 RJ45 Serial Port
<b>Power over Ethernet (PoE)</b>	IEEE 802.3af or 802.3at	IEEE 802.3af or 802.3at	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	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
<b>Power Consumption (Max.)</b>	12.5 W	12.5 W	15 W when supplied by 802.3at power and 12.8 W when in 802.3af power mode	15 W when supplied by 802.3at power and 12.8 W when in 802.3af power mode	24.5 W when supplied by 802.3at power and 12.5 W when in 802.3af power mode	24.5 W when supplied by 802.3at power and 12.5 W when in 802.3af power mode
<b>Simultaneous SSIDs</b>	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)
<b>Maximum Tx Power</b>	2.4 GHz: 25 dBm / 316 mW (2 chains combined)* 5 GHz: 23 dBm / 200 mW (2 chains combined)*	2.4 GHz: 25 dBm / 316 mW (2 chains combined)* 5 GHz: 23 dBm / 200 mW (2 chains combined)*	2.4 GHz: 26.7 dBm / 468 mW (3 chains combined)* 5 GHz: 24.7 dBm / 295 mW (3 chains combined)*	2.4 GHz: 26.7 dBm / 468 mW (3 chains combined)* 5 GHz: 24.7 dBm / 295 mW (3 chains combined)*	2.4 GHz: 28 dBm / 631 mW (4 chains combined)* 5 GHz: 26 dBm / 398mW (4 chains combined)*	2.4 GHz: 28 dBm / 631 mW (4 chains combined)* 5 GHz: 26 dBm / 398mW (4 chains combined)*
<b>SSID Types Supported</b>	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel & Mesh
<b>Per Radio Client Capacity</b>	Up to 128	Up to 128	Up to 256	Up to 256	Up to 256	Up to 256
<b>Certifications</b>						
<b>Wi-Fi Alliance Certified</b>	•	•	•	•	•	•
<b>DFS Certified</b>	FCC, CE, Japan	FCC, CE, Japan	FCC, CE, IC, Japan	FCC, CE, IC, Japan	FCC, CE, IC, Japan, Taiwan, Korea	FCC, CE, IC, Japan, Taiwan, Korea

# FortiAP-U Universally Manageable Outdoor and Wall Plate Access Points

	FAP-U422EV	FAPU24JEV			
					
<b>Suggested Use Case</b>	IP67 High performance 802.11ac W2 outdoor	Low cost, compact 802.11ac wall-plug/wall plate			
<b>Hardware</b>					
<b>Number of Radios</b>	2 + 1 BT/BLE	1 or 2 + 1 BT/BLE			
<b>Number of Antennas</b>	8 External (Type N) + 1 BT/BLE Internal	2 Internal + 1 BT/BLE Internal			
<b>Antenna Type and Peak Gain</b>	Dipole: 5 dBi for 2.4 GHz, 7 dBi for 5 GHz	Patch: 3 dBi for 2.4 GHz, 4 dBi for 5 GHz			
<b>Radio 1 Capabilities</b>	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)			
<b>Radio 2 Capabilities</b>	5 GHz a/n/ac (4x4:4) 20/40/80/160 MHz (256/1024 QAM)	5 GHz a/n/ac (1x1:1) 20/40/80 MHz (256 QAM)			
<b>Maximum Data Rate</b>	Radio 1: up to 600 Mbps Radio 2: up to 3,466 Mbps	up to 867 Mbps			
<b>Bluetooth (BT/BLE)</b>	•	•			
<b>Interfaces</b>	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)			
<b>Power over Ethernet (PoE)</b>	Proprietary or 802.3at	802.3af (max PSE output of 4W) or 802.3at (full 802.3af PSE output)			
<b>Power Consumption (Max.)</b>	22 W	24W (Depends on PoE connected and USB power consumed)			
<b>Simultaneous SSIDs</b>	16 (14 client, 2 monitor)	16 (14 client, 2 monitor)			
<b>Maximum Tx Power</b>	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)*			
<b>SSID Types Supported</b>	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel			
<b>Per Radio Client Capacity</b>	Up to 256	Up to 128			
<b>Certifications</b>					
<b>Wi-Fi Alliance Certified</b>	•	•			
<b>DFS Certified</b>	FCC, IC, CE, Japan	CE, Japan			

# FortiWiFi™ Firewall and WiFi Gateway

	FWF-30E	FWF-40F	FWF-50E	FWF-60E	FWF-60F
					
<b>Suggested Deployment</b>	Home/small office	Home/small office	Home/small office	Distributed office	Distributed office
<b>Hardware</b>					
<b>Form Factor</b>	Desktop, wall mountable	Desktop, wall mountable	Desktop, wall mountable	Desktop, wall mountable	Desktop, wall mountable
<b>Dimension</b>	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
<b>Kensington Lock</b>					
<b>Ethernet Interfaces</b>	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
<b>Other WiFi Variants</b>	—	—	+ Storage (FWF-51E)	+ Storage (FWF-61E)	+ Storage (FWF-61F)
<b>Wireless</b>					
<b>IEEE Standard</b>	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
<b>Number of Radios</b>	1	1	1	1	1
<b>Radio 1 Band (association rate)</b>	2.4GHz / 5GHz (300Mbps)	2.4GHz / 5GHz (450 / 1300Mbps)	2.4GHz / 5GHz (300Mbps)	2.4GHz / 5GHz (300 / 867 Mbps)	2.4GHz / 5GHz (450 / 1300Mbps)
<b>Radio 2 Band (association rate)</b>	—	—	—	—	—
<b>MIMO</b>	2×2	3×3	2×2	2×2	3×3
<b>Max / recommended number of concurrent clients</b>	128 / 30	128 / 30	128 / 30	128 / 30	128 / 30
<b>Antenna Type and Count</b>	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)
<b>Antenna Gain</b>	3 dBi/(3dBi-5GHz)	4.2 dBi/(3.5dBi-5GHz)	3 dBi/(3dBi-5GHz)	3 dBi/(6dBi-5GHz)	4.2 dBi/(3.5dBi-5GHz)
<b>Max TX Power</b>	17dBm	20dBm	17dBm	17dBm	20dBm
<b>Number of SSIDs</b>	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)
<b>Traffic Queues</b>	4 queues	4 queues	4 queues	4 queues	4 queues
<b>Rogue AP scanning</b>					
<b>Dual Band Scanning</b>	•	•	•	•	•
<b>Background Scan</b>	•	•	•	•	•
<b>Full-time dedicated monitor</b>	•	•	•	•	•
<b>Single Radio Dual band scanning</b>	•	•	•	•	•
<b>Management</b>					
<b>WebUI &amp; CLI</b>	•	•	•	•	•
<b>Max managed APs</b>	2	16	10	30	64
<b>Cloud deployment support</b>	•	•	•	•	•
<b>Certifications</b>					
<b>Wi-Fi Alliance Certified</b>					
<b>DFS Certified</b>					

\* 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 30 to 50 Series	FortiGate/FortiWiFi 60 Series	FortiGate/FortiWiFi 80 Series	FortiGate 100 Series	FortiGate 200 Series
<b>Hardware</b>					
Product Range / Form Factor	Entry / Desktop	Entry / Desktop	Entry / Desktop-2 RU	Mid Range / 1 RU	Mid Range / 1 RU
GE PoE/PoE+ Interfaces	-	- / 8 (FG-60E-POE)	- / 12 (FG80/81E-POE)	16 (FG-140D-POE)	-
<b>Capacity</b>					
Maximum Supported APs (Tunnel Mode)	2 - 8	10 - 10	16 - 48	32 - 64	128
Maximum Supported APs (Total)	2 - 16	30 - 64	32 - 96	64 - 128	256
Max number of SSIDs	32	32	32	256	256
Max CAPWAP throughput	850 Mbps - 3.5 Gbps	890 Mbps - 8 Gbps	920 Mbps - 9 Gbps	1.5 - 15 Gbps	1.5 - 20 Gbps
	FortiGate 300 to 500 Series	FortiGate 600 to 900 Series	FortiGate 1000,2000 & 3000 Series	FG-5000 Series	FG-VM Series
<b>Hardware</b>					
Product Range / Form Factor	Mid Range / 1 RU	Mid Range / 1 RU	High End / 2-3 RU	High End / 3-13 RU	-
<b>Capacity</b>					
Maximum Supported APs (Tunnel Mode)	256	512	1,024 - 2,048	Up to 14,336 (1,024/blade)	32 - 2,048
Maximum Supported APs (Total)	512	1,024	4,096	Up to 57,344 (4,096/blade)	64 - 4,096
Max number of SSIDs	256	256	1,024	Up to 14,336 (1,024/blade)	32 - 1,024
Max CAPWAP throughput	5.4 - 18 Gbps	5.5 Gbps - 18 Gbps	11 Gbps - 57 Gbps	Refer to Datasheet	Refer to Data Sheet

## FortiWLC Wireless Controller

	FWC-VM-50	FWC-VM-200	FWC-VM-500	FWC-VM-1000	FWC-VM-3000
<b>Suggested Use Case</b>	Small enterprises	Medium enterprises	Medium enterprises	Large enterprises	Large enterprises
<b>Form Factor</b>	Supports VMware and KVM hypervisors.	Supports VMware and KVM hypervisors.	Supports VMware and KVM hypervisors.	Supports VMware and KVM hypervisors.	Supports VMware and KVM hypervisors.
<b>Capacity</b>					
<b>Maximum Access Points</b>	50	200	500	1,000	3,000
<b>Maximum Clients</b>	1,250	2,500	6,250	10,000	30,000

## FortiWLM Wireless Manager

	FWM-100D	FWM-1000D	FWM-VM	FWM-MEA	
					
<b>Suggested Use Case</b>	Small enterprises	Medium to large enterprises	Small to large enterprises	Medium enterprises	
<b>Hardware</b>					
<b>Form Factor</b>	1 RU	1 RU	Supports VMware, Hyper-V, AWS and KVM hypervisors.	MEA within FortiManager	
<b>Ethernet Interfaces</b>	4x GE RJ45	4x GE RJ45, 4x GE SFP	—	—	
<b>Capacity</b>					
<b>Number of Infrastructure APs</b>	2,000	15,000	20,000	2,000	
<b>Number of Stations</b>	20,000	100,000	150,000	25,000	

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](http://www.fortinet.com) should be consulted for the most updated specifications.



[www.fortinet.com](http://www.fortinet.com)

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