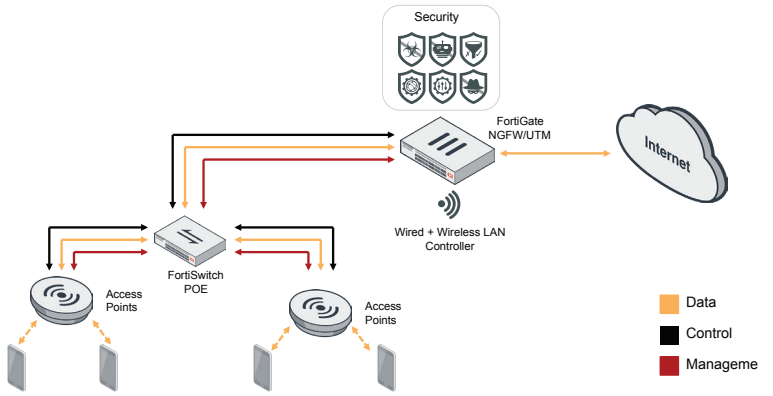
Wireless Product Matrix

March 2021

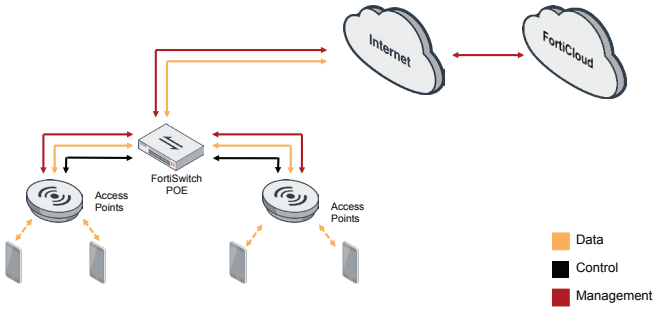
Integrated - FortiGate-Managed

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 Indoor Wi-Fi 6 (802.11ax) Access Points

	FAP-231F	FAP-431F	FAP-433F	FAP-432F	FAP-234F	FAP-23JF
						
Suggested Use Case	802.11ax indoor	High performance 802.11ax indoor	High performance 802.11ax indoor	High performance 802.11ax outdoor	802.11ax outdoor	802.11ax wall plate
Hardware						
Number of Radios	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE	3 + 1 BLE
Number of Antennas	2 Internal + 1 BLE Internal	5 Internal + 1 BLE Internal	5 External + 1 BLE Internal	5 External + 1 BLE External	3 External + 1 BLE External	5 Internal + 1 BLE Internal
Antenna Type and Peak Gain	PIFA antenna: 4.5dBi for 2.4Ghz and 5.5dBi for 5GHz	PIFA antenna: 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	Dipole: 5.5 dBi for 2.4 GHz and 7.2 dBi for 5 GHz	Dipole: 10 dBi for 2.4 GHz band, 10 dBi for 5.0 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	2.4 GHz 20/40MHz	2.4 GHz 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 4x4 20/40/80MHz, 2x2 160MHz	5.0 GHz 2x2 20/40/80MHz	5.0 GHz 2x2 20/40/80MHz
Radio 3 Capabilities	2.4/5.0 GHz (1x1)	2.4/5.0 GHz (1x1)	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 2402 Mbps Radio 3: scan only	Radio 1: up to 574 Mbps Radio 2: up to 1200 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 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	2 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
Power over Ethernet (PoE)	802.3af/at	802.3at & dual redundant 802.3af/at	802.3at & dual redundant 802.3af/at	802.3af/at	802.3af/at	802.3af/at
Power Consumption (Max.)	17 W	24.5 W	24.5 W	25 W w/o PSE out / 37.9 W with PSE out	15.5 W	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)	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: 2.4GHz: 20 dBm / 100 mW (1 chain) 5GHz: 19 dBm / 80 mW (1 chain)	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: 2.4 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: 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: 25 dBm / 158 mW (2 chains combined)* Radio 2: 5 GHz: 21 dBm / 158 mW (2 chains combined)* Radio 3: N/A
Kensington Lock	•	•	•	•	•	•
SSID Types Supported	Local-Bridge, Tunnel & Mesh	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 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	Up to 512 per radio Radio1 and Radio2	Up to 512 per radio Radio1 and Radio2
UL2043 Plenum Material						
Mounting Options	Ceiling, T-Rail, and Wall	Ceiling, T-Rail, and Wall	Ceiling, T-Rail, and Wall	Ceiling, T-Rail, and Wall	Ceiling, T-Rail, and Wall	Ceiling, T-Rail, and Wall
Cellular Coexistence**	•	•	•	•	•	•
LED Off Mode	•	•	•	•	•	•
Certifications						
Wi-Fi Alliance Certified						
DFS Certified	CE	FCC, IC, CE, Japan	FCC, IC, CE, Japan		CE	

FortiAP™ Integrated Indoor or Cloud Managed Indoor (802.11ac W2) Access Points

	FAP-221E	FAP-223E	FAP-231E	FAP-321E	FAP-421E	FAP-423E
						
Suggested Use Case	Medium density indoor	Medium density indoor	Medium density indoor	Medium Density indoor	High density, high performance indoor	High density, high performance indoor
Hardware						
Number of Radios	2	2	3 + 1 BLE	2 + 1 BLE	2	2
Number of Antennas	4 Internal	4 External (RP-SMA)	6 Internal + 1 BLE internal	6 Internal (RP-SMA) + 1 BLE internal	8 Internal	8 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	PIFA: 4 dBi for 2.4 GHz, 5 dBi for 5 GHz	PIFA: 3 dBi for 2.4 GHz, 4 dBi for 5 GHz	PIFA: 4 dBi for 2.4 GHz, 5 dBi for 5 GHz	Dipole: 3 dBi for 2.4 GHz, 3 dBi for 5 GHz
Radio 1 Capabilities	2.4 GHz b/g/n (2x2:2) 20/40 MHz (256 QAM)	2.4 GHz b/g/n (2x2:2) 20/40 MHz (256 QAM)	2.4 GHz or 5.0 GHz (high band) a/b/g/n/ac W2 (2x2:2) 20/40/80 MHz	2.4 GHz b/g/n (3x3:3) 20/40 MHz	2.4 GHz b/g/n (4x4:4) 20/40 MHz (256 QAM)	2.4 GHz b/g/n (4x4:4) 20/40 MHz (256 QAM)
Radio 2 Capabilities	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)	5.0 GHz a/n/ac W2 (2x2:2) 20/40/80 MHz	5 GHz a/n/ac (3x3:3) 20/40/80 MHz	5 GHz a/n/ac (4x4:4) 20/40/80 MHz (256 QAM)	5 GHz a/n/ac (4x4:4) 20/40/80 MHz (256 QAM)
Radio 3 Capabilities	-	-	2.4/5.0 GHz dual band b/g/n (2x2:2) 20/40 MHz	-	-	-
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	Radio 1: up to 867 Mbps Radio 2: up to 867 Mbps Radio 3: up to 400 Mbps	Radio 1: up to 450 Mbps Radio 2: up to 1,300 Mbps	Radio 1: up to 800 Mbps Radio 2: up to 1,733 Mbps	Radio 1: up to 800 Mbps Radio 2: up to 1,733 Mbps
Bluetooth (BT/BLE)	•	•	•	•		
Interfaces	1x GE RJ45	1x GE RJ45	2x GE RJ45, 1x RS-232 RJ45 Serial Port	1x GE RJ45, 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
Power over Ethernet (PoE)	IEEE 802.3af	IEEE 802.3af	802.3af & 802.3at	IEEE 802.3af & 802.3at	Dual redundant PoE power ports, IEEE 802.3at or 2x2 operation with 802.3af)	Dual redundant PoE power ports, IEEE 802.3at or 2x2 operation with 802.3af)
Power Consumption (Max.)	12.36 W	12.36 W	17 W with 802.3at PoE, 12.9 W with 802.3af PoE	16.8 W	23 W max power draw in 802.3at mode, 12.95 W max power draw when in 802.3af power mode	23 W max power draw in 802.3at mode, 12.95 W max power draw when in 802.3af power mode
Simultaneous SSIDs	16 (14 client,2 monitor)	16 (14 client,2 monitor)	24 (21 client,3 monitor)	16 (14 client,2 monitor)	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)**	2.4 GHz: 24 dBm / 251 mW (2 chains combined) 5 GHz: 25 dBm / 316 mW (2 chains combined)	2.4 GHz: 27.7 dBm/588 mW (3 chains combined)* 5 GHz: 27.7 dBm / 588 mW (3 chains combined)*	2.4 GHz: 24 dBm / 251 mW (4 chains combined)* 5 GHz: 25 dBm / 316 mW (4 chains combined)*	2.4 GHz: 24 dBm / 251 mW (4 chains combined)* 5 GHz: 25 dBm / 316 mW (4 chains combined)*
Kensington Lock	•	•	•	•	•	•
SSID Types Supported	Local-Bridge, Tunnel, Mesh	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 for Radio 1 & 2. Up to 128 for Radio 3	Up to 512	Up to 512	Up to 512
UL2043 Plenum Material	•	•	•	•	•	•
Mounting Options	Ceiling, T-Rail and Wall	Ceiling, T-Rail and Wall	Ceiling, T-Rail, and Wall	Ceiling, T-Rail and Wall	Ceiling, T-Rail and Wall	Ceiling, T-Rail and Wall
Cellular Coexistence**	•	•	•	•		
LED Off Mode	•	•	•	•	•	•
Certifications						
Wi-Fi Alliance Certified	•	•	•		•	•
DFS Certified	FCC, IC, CE, Japan, Taiwan, Korea	FCC, IC, CE, Japan, Taiwan, Korea	FCC, CE	FCC, IC	FCC, IC, CE, Japan, Taiwan, Korea	FCC, IC, CE, Japan, Taiwan, Korea

FortiAP™ Integrated or Cloud Managed Indoor, Outdoor and Wall Plate Access Points

	FAP-222E	FAP-224E	FAP-C24JE
			
Suggested Use Case	IP67 High density outdoor	IP67 High density outdoor	Indoor Wall Plate AP
Hardware			
Number of Radios	2 + 1 BT/BLE	2 + 1 BT/BLE	2
Number of Antennas	4 External (Type N) + 1 BT/BLE External (RP-SMA)	4 Internal + 1 BT/BLE Internal	4 Internal
Antenna Type and Peak Gain	Dipole: 5 dBi for 2.4 GHz, 7 dBi for 5 GHz	Dipole: 6 dBi for 2.4 GHz, 8 dBi for 5 GHz	Chip: 1.5 dBi for 2.4 GHz, 2 dBi for 5 GHz
Radio 1 Capabilities	2.4 GHz b/g/n (2x2:2) 20/40 MHz (256 QAM)	2.4 GHz b/g/n (2x2:2) 20/40 MHz (256 QAM)	2.4 GHz b/g/n (2x2:2) 20/40 MHz (64 QAM)
Radio 2 Capabilities	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 (2x2:2) 20/40/80 MHz (256 QAM)
Radio 3 Capabilities	-	-	-
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	Radio 1: up to 300 Mbps, Radio 2: up to 867 Mbps
Bluetooth (BT/BLE)	•	•	
Interfaces	1x GE RJ45	1x GE RJ45, 1x GE RJ45 (PoE), 1x SFP slot	2 + 6x GE RJ45 Ports (1x 802.3at PoE (PD), 1x 802.3af PoE (PSE), 1x pass-thru in, 1x pass-thru out), 1x RS-232 RJ45 Serial Port
Power over Ethernet (PoE)	IEEE 802.3af/at	IEEE 802.3af/at	802.3af (max PSE output of 4W) or 802.3at (full 802.3af PSE output)
Power Consumption (Max.)	12.95 W	12.95 W	Depends on PoE connected
Simultaneous SSIDs	16 (14 client,2 monitor)	16 (14 client,2 monitor)	8
Maximum Tx Power	2.4 GHz: 27.2 dBm / 525 mW (2 chains combined)* 5 GHz: 29.5 dBm / 891 mW (2 chains combined)*	2.4 GHz: 24 dBm / 251 mW (2 chains combined)* 5 GHz: 24 dBm / 251 mW (2 chains combined)*	23 dBm / 100mW (2 chains combined)*
Kensington Lock	•		
SSID Types Supported	Local-Bridge, Tunnel & Mesh (when managed by controller)	Local-Bridge, Tunnel & Mesh (when managed by controller)	Local-Bridge, Tunnel
Per Radio Client Capacity	Up to 512	Up to 512	Up to 64
UL2043 Plenum Material			
Mounting Options	Wall Mount or Pole Mount	Wall Mount or Pole Mount	Wall Plate
Cellular Coexistence**	•		
LED Off Mode	•	•	•
Certifications			
Wi-Fi Alliance Certified	•	•	
DFS Certified	DFS FCC, IC, CE, Japan, Taiwan	CE	

FortiAP-U Universally Manageable Wi-Fi 6 (802.11ax) 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: 3.97 dBi for 2.4GHz, 5.89 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 (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)
Radio 2 Capabilities	5.0 GHz a/b/g/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)
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 b/g/n/ac (2x2:2) 20/40 MHz (64 QAM)	2.4/5.0 GHz 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
Bluetooth (BT/BLE)	•	•	•
Interfaces	2x GE RJ45, 1x Type 2.0 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
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
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)*
Kensington Lock	•	•	•
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
UL2043 Plenum Material	•	•	•
Mounting Options	Wall Mount or Pole Mount	Wall Mount or Pole Mount	Wall plate or desk stand
Cellular Coexistence**	•	•	•
LED Off Mode	•	•	•
Certifications			
Wi-Fi Alliance Certified		•	•
DFS Certified		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
						
Suggested Use Case	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
Hardware						
Number of Radios	2 + 1 BT/BLE	2 + 1 BT/BLE	2 + 1 BT/BLE	2 + 1 BT/BLE	2 + 1 BT/BLE	2 + 1 BT/BLE
Number of Antennas	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
Antenna Type and Peak Gain	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
Radio 1 Capabilities	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)
Radio 2 Capabilities	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)
Radio 3 Capabilities	-	-	-	-	-	-
Maximum Data Rate	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
Bluetooth (BT/BLE)	•	•	•	•	•	•
Interfaces	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
Power over Ethernet (PoE)	IEEE 802.3af or 802.3.at	IEEE 802.3af or 802.3.at	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
Power Consumption (Max.)	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
Simultaneous SSIDs	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)
Maximum Tx Power	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)*
Kensington Lock	•	•	•	•	•	•
SSID Types Supported	Local-Bridge, Tunnel & Mesh	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 128	Up to 128	Up to 256	Up to 256	Up to 256	Up to 256
UL2043 Plenum Material					•	•
Mounting Options	Ceiling, T-Rail and Wall	Ceiling, T-Rail and Wall	Ceiling, T-Rail and Wall	Ceiling, T-Rail and Wall	Ceiling, T-Rail and Wall	Ceiling, T-Rail and Wall
Cellular Coexistence**	•	•	•	•	•	•
LED Off Mode	•	•	•	•	•	•
Certifications						
Wi-Fi Alliance Certified	•	•	•	•	•	•
DFS Certified	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
		
Suggested Use Case	IP67 High performance 802.11ac W2 outdoor	Low cost, compact 802.11ac wallplug/ wall plate
Hardware		
Number of Radios	2 + 1 BT/BLE	1 or 2 + 1 BT/BLE
Number of Antennas	8 External (Type N) + 1 BT/BLE Internal	2 Internal + 1 BT/BLE Internal
Antenna Type and Peak Gain	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 (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 (4x4:4) 20/40/80/160 MHz (256/1024 QAM)	
Maximum Data Rate	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 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)	Proprietary or 802.3at	802.3af (max PSE output of 4W) or 802.3at (full 802.3af PSE output)
Power Consumption (Max.)	22 W	24W (Depends on PoE connected and USB power consumed)
Simultaneous SSIDs	16 (14 client,2 monitor)	16 (14 client,2 monitor)
Maximum Tx Power	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)*
Kensington Lock		
SSID Types Supported	Local-Bridge, Tunnel & Mesh	Local-Bridge, Tunnel
Per Radio Client Capacity	Up to 256	Up to 128
UL2043 Plenum Material		
Mounting Options	Wall Mount or Pole Mount	Wall plate or desk stand
Cellular Coexistence**	•	•
LED Off Mode	•	•
Certifications		
Wi-Fi Alliance Certified	•	•
DFS Certified	FCC, IC, CE, Japan	CE, Japan

FortiWiFi™ Firewall and WiFi Gateway

	FWF-30E	FWF-40F	FWF-50E	FWF-60E	FWF-60F
					
Suggested Deployment	Home/small office	Home/small office	Home/small office	Distributed office	Distributed office
Hardware					
Form Factor	Desktop, wall mountable	Desktop, wall mountable	Desktop, wall mountable	Desktop, wall mountable	Desktop, wall mountable
Dimension	1.61 x 8.27 x 5.24 in	1.6 x 8.5 x 6.61in	1.44 x 5.5 x 8.52	1.5 x 8.5 x 6.3 in	1.5 x 8.5 x 6.3 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
Other WiFi Variants	—	—	+ Storage (FWF-51E)	+ Storage (FWF-61E)	+ Storage (FWF-61F)
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
Number of Radios	1	1	1	1	1
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)
Radio 2 Band (association rate)	—	—	—	—	—
MIMO	2x2	3x3	2x2	2x2	3x3
Max / recommended number of concurrent clients	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)
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)
Max TX Power	17dBm	20dBm	17dBm	17dBm	20dBm
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)
Traffic Queues	4 queues	4 queues	4 queues	4 queues	4 queues
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
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 6.4)

	FortiGate/FortiWiFi 30 to 50 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-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)	-
Capacity					
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
Hardware					
Product Range / Form Factor	Mid Range / 1 RU	Mid Range / 1 RU	High End / 2-3 RU	High End / 3-13 RU	-
Capacity					
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

FortiWLM Wireless Manager

	FWM-100D	FWM-1000D	FWM-VM
			
Suggested Use Case	Small enterprises	Medium to large enterprises	—
Hardware			
Form Factor	1 RU	1 RU	Supports VMware, Hyper-V, AWS and KVM hypervisors.
Ethernet Interfaces	4x GE RJ45	4x GE RJ45, 4x GE SFP	—
Capacity			
Number of Infrastructure APs	1,000	15,000	15,000
Number of Stations	5,000	75,000	75,000

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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.

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