FORTINET®

FortiAP

	FortiAP C220C	FortiAP C225C	FortiAP S321CR	FortiAP S322C	FortiAP S322CR	FortiAP S323CR	FortiAP S421E	FortiAP S422E	FortiAP S423E
Hardware									
Suggested Use Case	Entry Level cloud managed AP with basic connectivity features	Entry Level cloud managed AP with basic connectivity features	High density, high performance 802.11ac indoor	High density, high performance 802.11ac outdoor	High density, high performance 802.11ac indoor	High density, high performance 802.11ac indoor	High density, high performance 802.11ac outdoor	High density, high performance 802.11ac outdoor	High density, high performance 802.11ac outdoor
Form Factor	Wall or ceiling wall mountable	Wall or ceiling wall mountable	Wall or ceiling wall mountable	Wall or ceiling wall mountable	Outdoor	Wall or ceiling wall mountable	Wall or ceiling wall mountable	Wall or ceiling wall mountable	Wall or ceiling wall mountable
Dimension	8.5 x 8.5 x 1.38 in	8.5 x 8.5 x 1.38 in	D: 7.69 in, H:1.49 in	11.6 x 8.9 x 5.06 in	8.6 x 9.8 x 2 in	D: 7.69 in, H:1.49 in	215.6mmx215.6mmx60mm	210mmx210mmx51mm	215.6mmx215.6mmx60mm
Ethernet Interfaces	1x GE RJ45	1x GE RJ45	2x GE RJ45	1x GE RJ45	2x GE RJ45 (redundant PoE)	2x GE RJ45	2x GE RJ45	2x GE RJ45	2x GE RJ45
PoE	802.3af	802.3af	IEEE 802.3at (30W)	IEEE 802.3at (30W)	IEEE 802.3at (30W)	IEEE 802.3at (30W)	IEEE 802.3at (30W)	IEEE 802.3at (30W)	IEEE 802.3at (30W)
Serial Console Port	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
IEEE Specifications	802.11 a/b/g/n/ac	802.11 a/b/g/n/ac	802.11a/b/e/g/h/i/j/n/ac	802.11a/b/e/g/h/i/j/n/ac	802.11a/b/e/g/h/i/j/n/ac	802.11a/b/e/g/h/i/j/n/ac	802.11a/b/e/g/h/i/j/n/ac	802.11a/b/e/g/h/i/j/n/ac	802.11a/b/e/g/h/i/j/n/ac
Number of Radios	2	2	2	2	2	2	2	2	2
Number of Antennas	4 Internal	4 RP-SMA external	6 internal	6 N-type external	6 N-type external	6 RP-SMA external	8 internal	8 external	8 external
Peak Antenna Gain	2.4GHz-3.5 dBi/5GHz-6dBi	2.4GHz-3.5 dBi/5GHz-6dBi	2.4GHz-4 dBi/5GHz-5dBi	2.4GHz- 5dBi/ 5GHz-7dBi	2.4GHz- 5dBi/ 5GHz-7dBi	2.4GHz- 4dBi/5GHz-6dBi	2.4GHz-4dBi/5dBi-5GHz	2.4GHz-5dBi/5GHz-7dBi	2.4GHz-4dBi/5GHz-5dBi
Simulataneous SSIDs	16	16	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)	16 (14 client,2 monitor)
Frequency of Radio 1	2.4 GHz (up to 300 Mbps)	2.4 GHz (up to 300 Mbps)	2.4 GHz b/g/n (450 Mbps)	2.4 GHz b/g/n (450 Mbps)	2.4 GHz b/g/n (450 Mbps)	2.4 GHz b/g/n (450 Mbps)	2.4 GHz b/g/n (600 Mbps)	2.4 GHz b/g/n (600 Mbps)	2.4 GHz b/g/n (600 Mbps)
Frequency of Radio 2	5 GHz (up to 867 Mbps)	5 GHz (up to 867 Mbps)	5 GHz a/n/ac (1300 Mbps)	5 GHz a/n/ac (1300 Mbps)	5 GHz a/n/ac (1300 Mbps)	5 GHz a/n/ac (1300 Mbps)	5 GHz a/n/ac (1733 Mbps)	5 GHz a/n/ac (1733 Mbps)	5 GHz a/n/ac (1733 Mbps)
EAP Type(s)	EAP-TLS, EAP-TTLS/MSCHAPv2, EAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC EAP-SIM, EAP-AKA, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, EAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC EAP-SIM, EAP-AKA, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, EAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC EAP-SIM, EAP-AKA, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, EAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC EAP-SIM, EAP-AKA, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, EAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC EAP-SIM, EAP-AKA, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, EAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC EAP-SIM, EAP-AKA, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, EAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC EAP-SIM, EAP-AKA, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, EAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC EAP-SIM, EAP-AKA, EAP-FAST	EAP-TLS, EAP-TTLS/MSCHAPv2, EAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC EAP-SIM, EAP-AKA, EAP-FAST
User/Device Authentication	WPA™ and WPA2™ with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist & whitelist	WPA™ and WPA2™ with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist & whitelist	WPA™ and WPA2™ with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist & whitelist	WPA™ and WPA2™ with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist & whitelist	WPA™ and WPA2™ with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist & whitelist	WPA™ and WPA2™ with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist & whitelist	WPA™ and WPA2™ with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist & whitelist	WPA™ and WPA2™ with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist & whitelist	WPA™ and WPA2™ with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist & whitelist
Maximum Tx Power	20 dBm(100mW)*	20 dBm(200mW)*	20 dBm (100 mW)	20 dBm (100 mW)	20 dBm (100 mW)	20 dBm (100 mW)	23 dBm (100 mW) in 2.4GHz band and and 22dBm in 5.0GHz band	23 dBm (100 mW) in 2.4GHz band and and 22dBm in 5.0GHz band	23 dBm (100 mW) in 2.4GHz band and and 22dBm in 5.0GHz band
Included Accessories	Ceiling, T-Rail and wall mount kit	Ceiling, T-Rail and wall mount kit	Ceiling, T-Rail and wall mount kit	Ceiling, T-Rail and wall mount kit	Ceiling, T-Rail and wall mount kit	Ceiling, T-Rail and wall mount kit	Ceiling, T-Rail and wall mount kit	Ceiling, T-Rail and wall mount kit	Ceiling, T-Rail and wall mount kit
FortiPresence Capable	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wireless Mesh Capable	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Certifications									
Wi-Fi Alliance Certified	No	No	No	No	No	No	No	No	No
Warranty									
Limited Lifetime Warranty	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Controllers

	Forti WLC 50D	FortiWLC 200D	Forti WLC 500D
Application	Small enterprise, remote offices	Mid enterprise	Large enterprise
Hardware			
10/100/1000 Interfaces (Copper, RJ-45)	4	4	4
GE SFP Port	—	—	4
10 GE SFP+ Port	—	—	2
Console Port (RJ45, serial)	1	1	1
Internal Storage	60 GB SSD	120 GB SSD	2x 240 GB SSD
Capacity			
Maximum Access Points	50	200	500
Maximum Clients	1,250	2,500	6,250
Security			
Access Control	WEP, WPA-PSK, WPA-TKIP, WPA2-AES, 802.11i, 802.1X (EAP-TLS, EAP-TTLS, PEAP, LEAP, EAP-FAST, EAP-SIM, EAP-AKA, and EAP-MD5) 802.1X and captive portal authentication against local database on the controller, RADIUS, and Active Directory RADIUS-assisted per-user and per-ESSID access control via MAC filtering		
Policy	Per-user firewall with fine-grained policy management: admission control, packet prioritization, QoS flows, packet drop policy, bandwidth scaling, filter ID, network protocol, and source port filtering. System-configured or per-user, RADIUS-configured firewall policies		
Management & Networking			
Zero Configuration	Access points automatically discover controllers and download configuration settings for zero-touch, plug-and-play deployment		
System Management	Upgrades and management using System Director/Network Manager, support for SNMP, centralized WLAN security policies with multiple ESS profiles, VLAN-specific administrative/security policies		
Intelligent RF Management	Coordination of access points with load balancing for predictable performance		
VLAN Support	IEEE 802.1Q VLAN tagging, GRE Tunneling		
QoS	WMM support, dynamic WMM rate adaptation, configurable QoS rules per user and application		
Physical			
Mounting	rack mount (mounting kit required; included)	rack mount (mounting kit required; included)	rack mount (mounting kit required; included)
Height x Width x Length (inches)	17.32 x 1.73 x 8.62	17.01 x 1.73 x 9.8	17.24 x 1.73 x 16.18
Height x Width x Length (mm)	440 x 44 x 219	432 x 44 x 249	438 x 44 x 411
Weight	6.39 lbs (2.9 kg)	12.79 lbs (5.8 kg)	16.98 lbs (7.7 kg)
Form Factor	1 RU	1 RU	1 RU
Environment & Power			
Power Source	100–240V AC, 60–50 Hz, 65 W openframe single PSU	100–240V AC, 50–60Hz, 250 W single PSU	100–240V AC, 60–50 Hz, 300 W Redundant PSU
Power Consumption (Average / Maximum)	31 W / 24 W	105 W / 76 W	197 W / 141 W
Current (Maximum)	100V/1.5A, 240V/1.5A	100V/4A, 240V/2A	100V/5A, 240V/3A
Heat Dissipation	106 BTU/h	358 BTU/h	672 BTU/h
Operating Temperature	32–104°F (0–40°C)	32–104°F (0–40°C)	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)	-13–158°F (-25–70°C)	-13–158°F (-25–70°C)
Humidity	5–95% (non-condensing)	5–95% (non-condensing)	5–95% (non-condensing)
Compliance			
Regulatory Approval	FCC Part 15B Class A, UL 60950-1, CSA C22.2 No. 60950-1-07, EN 60950-1, IEC 60950-1, ICES-003 Class B, EN55022 Class B, EN55024, VCCI Class B, RCM, BSMI		
Certification	RoHS, REACH, WEEE		

Virtual Appliance

	FortiWLM 100D	FortiWLM 1000D
Target Deployment	Small enterprises	Medium to large enterprises
Interfaces		
GE RJ45 Port	4	4
SFP Port	—	4
SFP+ 10G Port	—	2
USB (Type-A)	1	2
Serial Console (RJ45)	1	1
Hard Disk	1x 1 TB	2x 1 TB
Capacity		
Maximum Number of FortiWC Controllers Supported	10	250
Maximum Number of FortiAP-N Access Points Supported	500	12,500
Maximum Number of Stations Supported	1000	50,000
Physical		
Mounting	1U rack mount	1U rack mount
Height x Width x Length (inches)	17.32 x 1.73 x 8.62	17.24 x 1.73 x 16.18
Height x Width x Length (mm)	440 x 44 x219	438 x 44 x 411
Weight	7.72 lbs (3.5 kg)	19.62 lbs (8.9 kg)
Form Factor	1 RU	1 RU
Environment & Power		
Power Source	100–240V AC, 60–50 Hz, 65 W openframe single PSU	100–240V AC, 60–50 Hz, 300 W Redundant PSU
Power Consumption (Average / Maximum)	36 W / 28 W	192 W / 137 W
Current (Maximum)	100V/1.5A, 240V/1.5A	100V/5A, 240V/3A
Heat Dissipation	123 BTU/h	655 BTU/h
Operating Temperature	32–104°F (0–40°C)	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)	-13–158°F (-25–70°C)
Humidity	5–95% non-condensing	5–95% non-condensing
Compliance		
Regulatory Approval	FCC part 15B Class B – USA UL 60950-1 – USA CSA C22.2 No. 60950-1-07 – Canada EN 60950-1 – EU IEC 60950-1 – International ICES-003 Class B – Canada EN55022 Class B – EU EN55024 – EU VCCI Class B – Japan	FCC part 15B Class A – USA UL 60950-1 – USA CSA C22.2 No. 60950-1-07 – Canada EN 60950-1 – EU IEC 60950-1 – International ICES-003 Class A – Canada EN55022 Class A – EU EN55024 – EU VCCI Class A – Japan
Certification	RoHS, REACH, WEEE	RoHS, REACH, WEEE
Warranty		
Limited Lifetime Warranty	One year	One year