

## Supply & Deliver x12 FortiAPs Access Points – 7Day Web Tenders

### X6 FAP 321C

### X6 FAP 223C

## SPECIFICATIONS

	FORTIAP 24D	FORTIAP 221C	FORTIAP 223C	FORTIAP 320C	FORTIAP 321C
<b>Hardware</b>					
Hardware Type	Indoor	Indoor	Indoor	Indoor Plenum Rated	Indoor
Number of Radios	1	2	2	2	2
Number of Antennas	2 Internal	4 Internal	4 RP-SMA External	6 Internal	6 Internal
Peak Antenna Gain	4.6 dBi for 2.4 GHz, 6.3 dBi for 5 GHz	3.5 dBi for 2.4 GHz, 6 dBi for 5 GHz	3 dBi for 2.4 GHz, 3 dBi for 5 GHz	5 dBi for 2.4 GHz, 6 dBi for 5 GHz	4 dBi for 2.4 GHz, 5 dBi for 5 GHz
Frequency Bands (GHz) *	2.400–2.4835, 5.150–5.250, 5.250–5.350, 5.470–5.725, 5.725–5.850	2.400–2.4835, 5.150–5.250, 5.250–5.350, 5.470–5.725, 5.725–5.850	2.400–2.4835, 5.150–5.250, 5.250–5.350, 5.470–5.725, 5.725–5.850	2.400–2.4835, 5.150–5.250, 5.250–5.350, 5.470–5.725, 5.725–5.850	2.400–2.4835, 5.150–5.250, 5.250–5.350, 5.470–5.725, 5.725–5.850
Frequency of Radio 1	2.4 GHz b/g/n or 5 GHz a/n	2.4 GHz b/g/n or 5 GHz a/n	2.4 GHz b/g/n or 5 GHz a/n	2.4 GHz b/g/n	2.4 GHz b/g/n
Frequency of Radio 2	-	5 GHz a/n/ac	5 GHz a/n/ac	5 GHz a/n/ac	5 GHz a/n/ac
Throughput	Up to 300 Mbps	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 1300 Mbps	Radio 1: Up to 450 Mbps, Radio 2: Up to 1300 Mbps
Tx/Rx Streams	2x2 MIMO 2 spatial stream	2x2 MIMO 2 spatial stream	2x2 MIMO 2 spatial stream	3x3 MIMO with 3 spatial streams	3x3 MIMO with 3 spatial streams
Ethernet Ports	1x GE RJ45 WAN port, 4x FE RJ45 LAN ports	1x GE RJ45	1x GE RJ45	2x GE RJ45	1x GE RJ45
USB Port	1x Type A	-	-	1x Type A	-
Serial Console Port	-	-	-	Yes	-
Power over Ethernet (PoE)	IEEE 802.3af (12.9 W)	IEEE 802.3af (12.9 W)	IEEE 802.3af (12.9 W)	Dual redundant PoE power ports with support for IEEE 802.3af (12.9 W)	IEEE 802.3af (12.9 W)
WME Multimedia Extensions	Yes (4 priority queues for voice, video, data and background traffic)	Yes (4 priority queues for voice, video, data and background traffic)	Yes (4 priority queues for voice, video, data and background traffic)	Yes (4 priority queues for voice, video, data and background traffic)	Yes (4 priority queues for voice, video, data and background traffic)
Simultaneous SSIDs	8 (7 if background scanning is 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)
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

	FORTIAP 24D	FORTIAP 221C	FORTIAP 223C	FORTIAP 320C	FORTIAP 321C
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
Maximum Tx Power	18 dBm (63 mW) *	20 dBm (100 mW) *	20 dBm (100 mW) *	21 dBm (126 mW) *	20 (100 mW) *
Physical Security	–	Kensington Lock	Kensington Lock	Kensington Lock	Kensington Lock
Mean Time Between Failures	> 10 years	> 10 years	> 10 years	> 10 years	> 10 years
IEEE Specifications	802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x	802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x, 802.3af, 802.11ac	802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x, 802.3af, 802.11ac	802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x, 802.3af, 802.11ac	802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x, 802.3af, 802.11ac
802.11ac 80MHz Channel	–	Yes	Yes	Yes	Yes
802.11n Features	20 MHz and 40 MHz High-Throughput (HT) Support Increased maximum frame transmission by incorporating A-MPDU and A-MSDU Packet Aggregation Conserve power via Dynamic MIMO power save	20 MHz and 40 MHz High-Throughput (HT) Support Increased maximum frame transmission by incorporating A-MPDU and A-MSDU Packet Aggregation Conserve power via Dynamic MIMO power save	20 MHz and 40 MHz High-Throughput (HT) Support Increased maximum frame transmission by incorporating A-MPDU and A-MSDU Packet Aggregation Conserve power via Dynamic MIMO power save	20 MHz and 40 MHz High-Throughput (HT) Support Increased maximum frame transmission by incorporating A-MPDU and A-MSDU Packet Aggregation Conserve power via Dynamic MIMO power save	20 MHz and 40 MHz High-Throughput (HT) Support Increased maximum frame transmission by incorporating A-MPDU and A-MSDU Packet Aggregation Conserve power via Dynamic MIMO power save
Advanced 802.11n to enhance rate-over-range including:	Low-density parity check (LDPC) encoding Maximum likelihood demodulation (MLD) Maximum Ratio Combining (MRC) for improved receiver performance	Low-density parity check (LDPC) encoding Maximum likelihood demodulation (MLD) Maximum Ratio Combining (MRC) for improved receiver performance	Low-density parity check (LDPC) encoding Maximum likelihood demodulation (MLD) Maximum Ratio Combining (MRC) for improved receiver performance	Low-density parity check (LDPC) encoding Maximum likelihood demodulation (MLD) Maximum Ratio Combining (MRC) for improved receiver performance	Low-density parity check (LDPC) encoding Maximum likelihood demodulation (MLD) Maximum Ratio Combining (MRC) for improved receiver performance
Mounting Options	Wall	Ceiling, T-Rail and wall	Ceiling, T-Rail and wall	Ceiling, T-Rail and wall	Ceiling, T-Rail and wall
Included Accessories	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	Yes	Yes	Yes	Yes	Yes
<b>Wireless Monitoring Capabilities</b>					
Frequencies scanned	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
Background scan with client access on 2.4 and 5 GHz	–	Yes	Yes	Yes	Yes
Full-time scan as dedicated monitor	Yes	Yes	Yes	Yes	Yes
Full-time scan with client access on 5G GHz	–	Yes	Yes	Yes	Yes
<b>Wireless Monitoring Capabilities</b>					
Frequencies scanned	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz	2.4 and 5 GHz
Background scan with client access on 2.4 and 5 GHz	–	Yes	Yes	Yes	Yes
Full-time scan as dedicated monitor	Yes	Yes	Yes	Yes	Yes
Full-time scan with client access on 5G GHz	–	Yes	Yes	Yes	Yes
<b>Dimensions</b>					
Length x Width x Height	6.69 x 4.37 x 1.02 inches (17.0 x 11.1 x 2.6 cm)	6.3 x 6.3 x 1.5 inches (16.0 x 16.0 x 3.8 cm)	6.3 x 6.3 x 1.5 inches (16.0 x 16.0 x 3.8 cm)	6.5 x 6.5 x 1.4 inches (16.5 x 16.5 x 3.5 cm)	6.3 x 6.3 x 1.66 inches (16.2 x 16.2 x 4.2 cm)
Weight	0.5 lb (0.225 kg)	0.64 lb (0.3 kg)	0.64 lb (0.3 kg)	1.33 lb (0.6 kg)	0.77 lb (0.35 kg)
Package (shipping) Weight	1.1 lb (0.5 kg)	1.21 lb (0.55 kg)	1.37 lb (0.62 kg)	1.79 lb (0.81 kg)	1.33 lb (0.6 kg)
<b>Environment</b>					
Power Supply	Adapter Input: 100–240V, 50/60Hz, 0.4A Output: 12V DC, 2A	Adapter Input: 100–240V, 50/60Hz, 0.4A Output: 12V DC, 2A	Adapter Input: 100–240V, 50/60Hz, 0.4A Output: 12V DC, 2A	Adapter Input: 100–240V, 50/60Hz, 0.4A Output: 12V DC, 2A	Adapter Input: 100–240V, 50/60Hz, 0.4A Output: 12V DC, 2A
Power Consumption (Average)	3 W	7.8 W	7.8 W	10.5 W	4.9 W
Power Consumption (Maximum)	3.36 W	15.72 W	12 W	12.08 W	12.48 W
Humidity	5–90% non condensing	5–90% non condensing	5–90% non condensing	5–90% non condensing	5–90% non condensing
Operating Temperature	32–104°F (0–40°C)	32–104°F (0–40°C)	32–104°F (0–40°C)	–4–122°F (–20–50°C)	32–113°F (0–45°C)
Storage Temperature	–4–140°F (–20–60°C)	–4–140°F (–20–60°C)	–4–140°F (–20–60°C)	–40–158°F (–40–70°C)	–4–140°F (–20–60°C)
Directives	Low Voltage Directive • RoHS	Low Voltage Directive • RoHS	Low Voltage Directive • RoHS	Low Voltage Directive • RoHS	Low Voltage Directive • RoHS
<b>Certifications</b>					
WiFi Alliance Certified	No	Yes	No	Yes	Yes
<b>Warranty</b>					
Limited Lifetime Warranty	Yes	Yes	Yes	Yes	Yes