

FortiAP™ Series

Cloud or FortiOS-managed Access Points

FortiAP access points are managed centrally by the integrated WLAN controller of any FortiGate® security appliance or can be managed through the free FortiCloud provisioning and management portal. With the integration of the wireless controller functionality into the market leading FortiGate appliance, **Fortinet delivers a true Unified Access Layer. This enables you to easily manage wired and wireless security from a Single-pane-of-glass management console and protects your network from the latest security threats.**



Unified Management

Unified management console simplifies operations, ensuring consistent and effective policy enforcement and compliance.



Advanced Security Protection

Wireless LAN security done right, from the leader in network security. Integrated Firewall, IPS, Application Control, and Web Filtering protect the wireless LAN from the latest security threats.



Built-in WiFi Security

Protects the network from advanced wireless threats and satisfies PCI DSS compliance.

Product Offerings

FAP-24D

2x2 MIMO AP with single radio and LAN ports

FAP-224D

IP66-rated outdoor AP with dual radios

FAP-14C

FAP-21D

Remote APs with multiple Ethernet ports

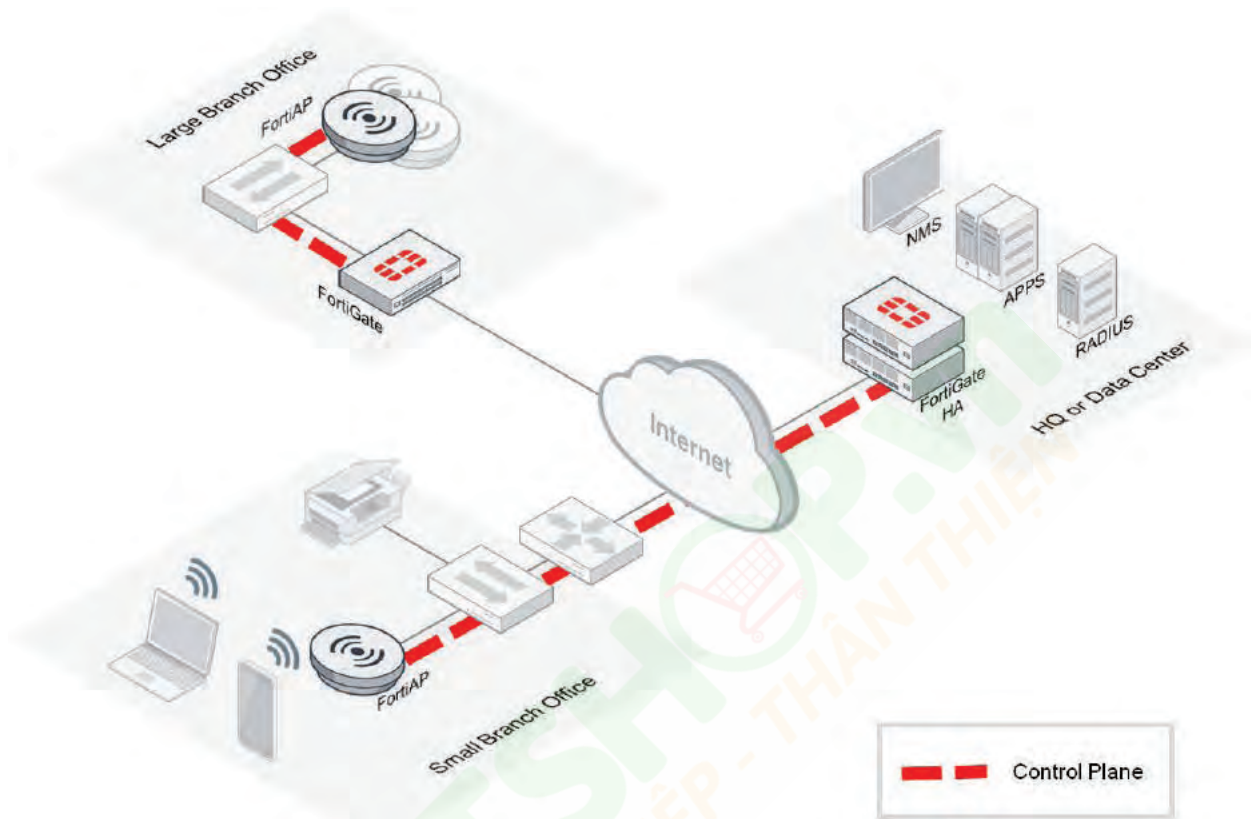
FAP-25D

FAP-28C

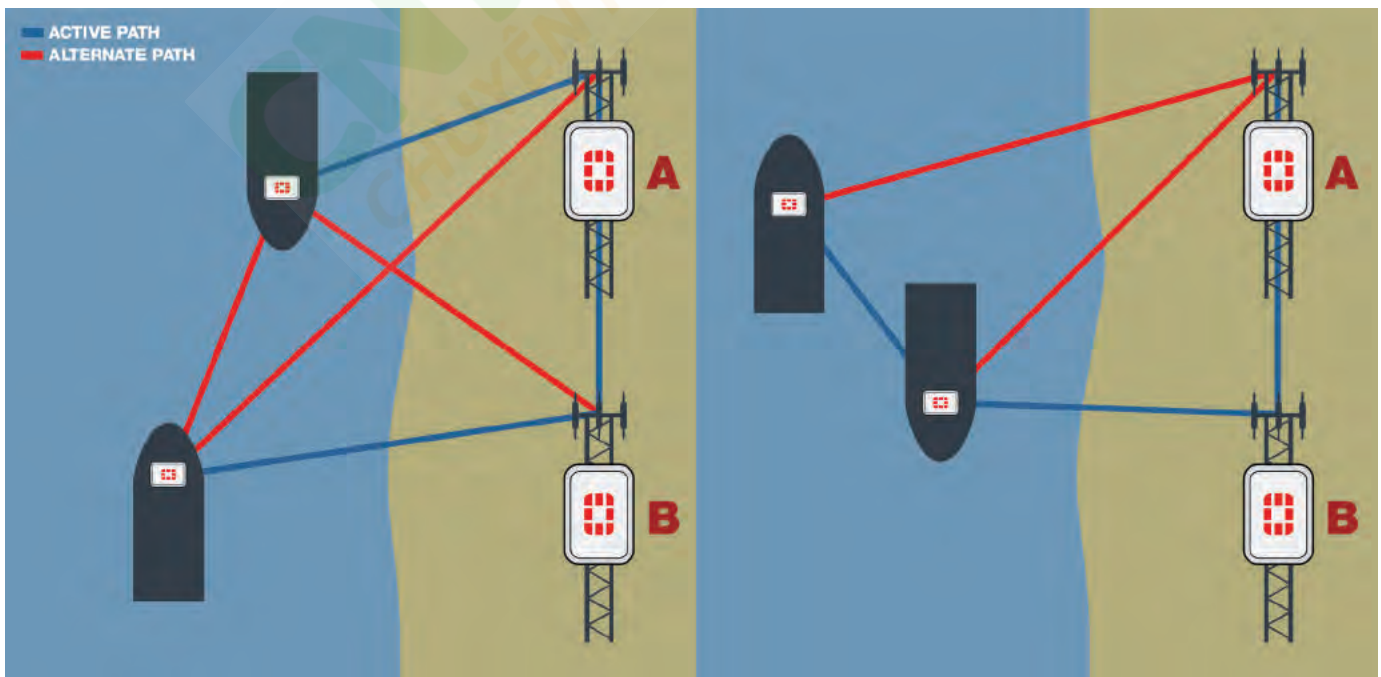
802.11n

DEPLOYMENT

Centralized or Local Wireless Controller

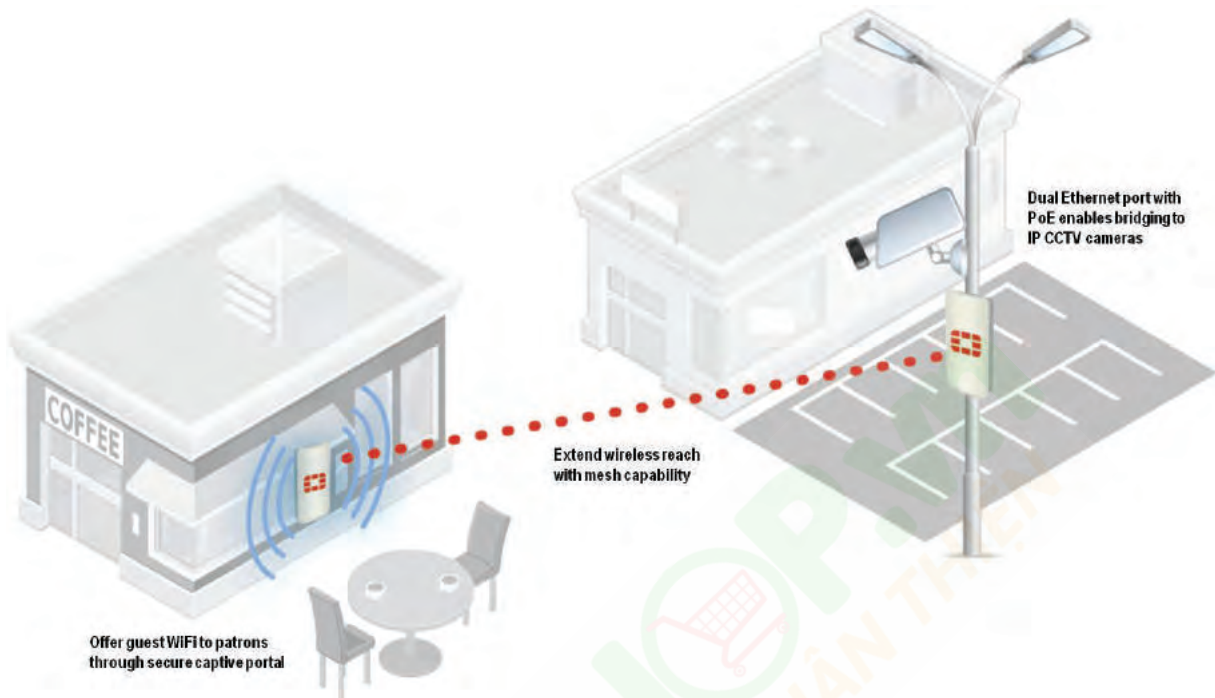


Outdoor Point-to-Point Bridging or Multipoint Mesh Deployment



DEPLOYMENT

Outdoor Mesh and PoE Pass-Through Deployment



Remote AP Deployment

FortiAP Remote WLAN access points have been purpose-built for installation in remote locations, with coverage areas of up to 300m². Preprovisioned APs can be shipped to a remote user and connect back to the FortiGate wireless controller via a secure tunnel over any Internet connection. The AP can broadcast the same SSID at the remote location as it does at headquarters, providing a

seamless roaming experience for users. The wired ports can also be bridged to an SSID, enabling devices such as VoIP phones to seamlessly connect back to the corporate network. The remote series of FortiAPs are designed to increase the security remote wireless LANs, while simplifying management and reducing helpdesk calls.

Remote Telecommuter or SOHO Deployment



Remote Deployment with Local Bridging



HIGHLIGHTS

FortiAP 24D

The FortiAP 24D is a cost-effective single radio 802.11n AP, designed for non-mission critical applications in low density indoor environments like small branch offices.

The integrated switch-ports allow you to connect additional wired devices directly to the AP, such as PCs or printers.



 **802.11n | 2.4/5 GHz Radio | 2 Internal Antennas**

 **2x2 MIMO | Up to 300 Mbps**

SPECIFICATIONS

FORTIAP 24D	
Hardware	
Hardware Type	Indoor
Number of Radios	1
Number of Antennas	2 Internal
Peak Antenna Gain	4.6 dBi for 2.4 GHz, 6.3 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
Frequency of Radio 1	2.4 GHz b/g/n or 5 GHz a/n
Frequency of Radio 2	–
Throughput	Up to 300 Mbps
Tx/Rx Streams	2x2 MIMO 2 spatial stream
Ethernet Ports	1x GE RJ45 WAN port, 4x FE RJ45 LAN ports
USB Port	1x Type A
Serial Console Port	–
Power over Ethernet (PoE)	IEEE 802.3af (12.9 W)
WME Multimedia Extensions	Yes (4 priority queues for voice, video, data and background traffic)
Simultaneous SSIDs	8 (7 if background scanning is enabled)
EAP Type(s)	EAP-TLS, EAP-TTLS/MSCVAPY2, 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
Maximum Tx Power	18 dBm (63 mW) *
Physical Security	–
Mean Time Between Failures	> 10 years
IEEE Specifications	802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x
802.11ac 80MHz Channel	–
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
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

FORTIAP 24D	
Mounting Options	Wall
Included Accessories	Wall mount kit
FortiPresence Capable	Yes
Wireless Monitoring Capabilities	
Frequencies scanned	2.4 and 5 GHz
Background scan with client access on 2.4 and 5 GHz	–
Full-time scan as dedicated monitor	Yes
Full-time scan with client access on 5G GHz	–
Dimensions	
Length x Width x Height	6.69 x 4.37 x 1.02 inches (17.0 x 11.1 x 2.6 cm)
Weight	0.5 lb (0.225 kg)
Package (shipping) Weight	1.1 lb (0.5 kg)
Environment	
Power Supply	Adapter Input: 100–240V, 50/60Hz, 0.4A Output: 12V DC, 2A
Power Consumption (Average)	3 W
Power Consumption (Maximum)	3.36 W
Humidity	5–90% non condensing
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	–4–140°F (–20–60°C)
Directives	Low Voltage Directive • RoHS
Warranty	
Limited Lifetime Warranty	Yes

* Frequency selection and power may be restricted to abide by regional regulatory compliance laws.

RF RX/TX PERFORMANCE TABLE


FORTIAP 24D				
RADIO 1			RADIO 2	
802.11 a/g	5 GHz Tx Power (dBm)	Rx Sensitivity	2.4 GHz Tx Power (dBm)	Rx Sensitivity
6 Mbps	20	-94	20	-88
9 Mbps	19	-92	20	-88
12 Mbps	19	-90	20	-86
18 Mbps	19	-83	20	-84
24 Mbps	19	-80	20	-80
36 Mbps	18	-77	19	-77
48 Mbps	18	-76	19	-74
54 Mbps	17	-73	18	-72
802.11n HT20				
MCS0	20	-92	20	-92
MCS1	19	-90	20	-90
MCS2	19	-87	20	-87
MCS3	19	-85	20	-85
MCS4	19	-82	20	-82
MCS5	18	-79	19	-78
MCS6	18	-76	19	-77
MCS7	17	-74	18	-74
802.11n HT40				
MCS0 /8	20	-91	20	-92
MCS1 /9	19	-88	20	-89
MCS2 /10	19	-85	20	-86
MCS3 /11	19	-82	20	-83
MCS4 /12	19	-79	20	-80
MCS5 /13	18	-76	19	-77
MCS6 /14	18	-74	19	-74
MCS7 /15	17	-72	18	-71

HIGHLIGHTS

FortiAP 224D

The FortiAP 224D is an 802.11n outdoor AP designed for medium density outdoor applications, like municipal WiFi or outdoor school environments. The IP66-rated enclosure protects the AP from the normal weather conditions you would expect outdoors and the RP-SMA antenna connections support the connection of external directional or panel antennas for extended coverage in challenging locations.



 **802.11n | Dual Radio 2.4 and 5 GHz | 4 External Antennas**

 **2x2 MIMO | Up to 300 + 300 Mbps**

SPECIFICATIONS

FORTIAP 224D	
Hardware	
Hardware Type	Outdoor IP66 rated
Number of Radios	2
Number of Antennas	4 external RP-SMA
Peak Antenna Gain	5 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
Frequency of Radio 1	5 GHz a/n
Frequency of Radio 2	2.4 GHz b/g/n
Throughput	Radio 1: Up to 300 Mbps, Radio 2: Up to 300 Mbps
Tx/Rx Streams	2x2 MIMO 2 spatial stream
Ethernet Ports	1x GE RJ45
USB Port	—
Serial Console Port	—
Power over Ethernet (PoE)	IEEE 802.3af
WME Multimedia Extensions	Yes (4 priority queues for voice, video, data and background traffic)
Simultaneous SSIDs	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
User/Device Authentication	WPA™ and WPA2™ with 802.1x or Preshared key, WEP and Web Captive Portal, MAC blacklist & whitelist
Maximum Tx Power	20 dBm (100 mW) *
Physical Security	Concrete and pole mount
Mean Time Between Failures	> 10 years
IEEE Specifications	802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x, 802.3af
802.11ac 80MHz Channel	—
802.11n Features	20 MHz and 40MHz 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) Transmit beamforming (TxBF)

FORTIAP 224D	
Advanced 802.11n to enhance rate-over-range including:	Maximum Ratio Combining (MRC) for improved receiver
Mounting Options	Wall or pole
Included Accessories	PoE injector with AC power adapter, pole mount kit, wall mount kit, grounding cable and 4x dipole antennas
FortiPresence Capable	Yes
Wireless Monitoring Capabilities	
Frequencies scanned	2.4 and 5 GHz
Background scan with client access on 2.4 and 5 GHz	Yes
Full-time scan as dedicated monitor	Yes
Dimensions	
Length x Width x Height	6.9 x 6.9 x 1.9 inches (176 x 176 x 47 mm)
Weight	0.77 lb (0.35 kg)
Package (shipping) Weight	1.33 lb (0.6 kg)
Environment	
Power Supply	Adapter Input: 100–240V, 50/60Hz, 0.4A Output: 12V DC, 1.25A
Power Consumption (Average)	6.78 W
Power Consumption (Maximum)	11.76 W
Humidity	10–90% non condensing
Operating Temperature	23–110°F (-5–45°C)
Storage Temperature	-4–58°F (-20–70°C)
Directives	Low Voltage Directive • RoHS
Certifications	
WiFi Alliance Certified	Yes

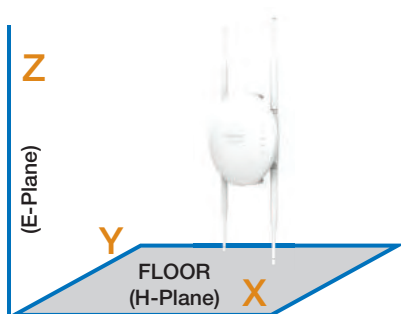
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RF RX/TX PERFORMANCE TABLE

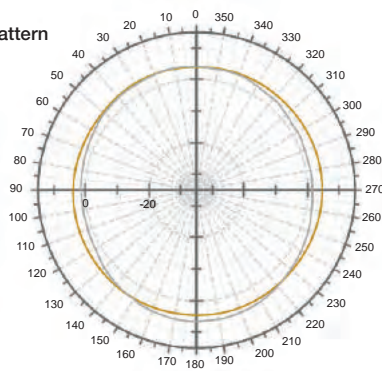
FORTIAP 224D				
	RADIO 1		RADIO 2	
802.11 a/g	5 GHz Tx Power (dBm)	Rx Sensitivity (dBm)	2.4 GHz Tx Power (dBm)	Rx Sensitivity (dBm)
6Mbps	20	-87	20	-93
9Mbps	19	-85	20	-91
12Mbps	19	-83	20	-88
18Mbps	19	-81	20	-85
24Mbps	19	-78	20	-80
36Mbps	18	-77	19	-77
48Mbps	18	-76	19	-74
54Mbps	17	-75	18	-72
802.11n HT20				
MSC 0/8	20	-86	20	-86
MSC 1/9	19	-83	20	-83
MSC 2/10	19	-81	20	-81
MSC 3/11	19	-78	20	-78
MSC 4/12	19	-76	20	-76
MSC 5/13	18	-74	19	-72
MSC 6/14	18	-73	19	-71
MSC 7/15	17	-72	18	-70
802.11n HT40				
MSC 0/8	20	-83	20	-83
MSC 1/9	19	-80	20	-80
MSC 2/10	19	-78	20	-78
MSC 3/11	19	-75	20	-75
MSC 4/12	19	-73	20	-74
MSC 5/13	18	-72	19	-73
MSC 6/14	18	-70	19	-72
MSC 7/15	17	-69	18	-70

ANTENNA RADIATION PATTERNS

FAP-224D

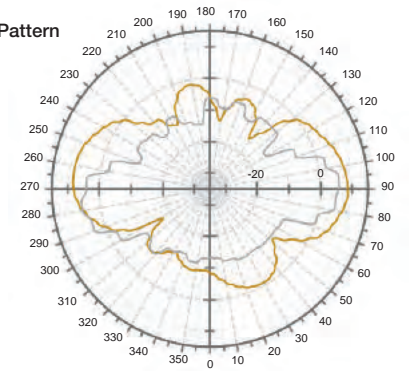


H-Plane Pattern



Radio 1 – 5.5 GHz Radio 2 – 2.4 GHz

E-Plane Pattern



Radio 1 – 5.5 GHz Radio 2 – 2.4 GHz

HIGHLIGHTS

FortiAP 14C

The FortiAP 14C is a cost-effective 1x1 MIMO access point, with integrated 5 port 10/100 Ethernet switch in small desktop form factor. The AP is designed for deployment in small remote offices or hotels, allowing a number of additional wired devices to be connected directly to the AP, such as PCs, VoIP phones or printers.



 **802.11n | 2.4 GHz Radio | 1 Internal Antenna**

 **1x1 MIMO | Up to 150 Mbps**

SPECIFICATIONS

FORTIAP 14C	
Hardware	
Hardware Type	Remote (Indoor)
Number of Radios	1
Number of Antennas	1 internal
Peak Antenna Gain	2 dBi for 2.4 GHz
Frequency Bands (GHz) *	2.400–2.4835
Frequency of Radio 1	2.4 GHz b/g/n
Frequency of Radio 2	–
Throughput	Up to 150 Mbps
Tx/Rx Streams	1x1 MIMO 1 spatial stream
Ethernet Ports	5x FE RJ45 ports (1x WAN port, 4x LAN ports)
USB Port	–
Serial Console Port	–
Power over Ethernet (PoE)	–
WME Multimedia Extensions	Yes (4 priority queues for voice, video, data and background traffic)
Simultaneous SSIDs	8 (7 if background scanning enabled)
EAP Type(s)	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
Maximum Tx Power	17 dBm (50 mW) *
Physical Security	–
Mean Time Between Failures	>10 years
IEEE Specifications	802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x
Mounting Options	Desktop, Wall
Included Accessories	AC power adapter and wall mount kit
FortiPresence Capable	Yes

FORTIAP 14C	
Wireless Monitoring Capabilities	
Frequencies scanned	–
Background scan with client access on 2.4 and 5 GHz	–
Full-time scan as dedicated monitor	–
Dimensions	
Length x Width x Height	3.86 x 4.92 x 1.06 inches (9.8 x 12.5 x 2.7 cm)
Weight	0.1 lbs (0.2 kg)
Package (shipping) Weight	1.2 lbs (0.56 kg)
Environment	
Power Supply	Adapter Input: 100–240V AC, 50–60 Hz
Power Consumption (Average)	3.35 W
Power Consumption (Maximum)	3.85 W
Humidity	20–90% non-condensing
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)
Directives	Low Voltage Directive • RoHS
Warranty	
Limited Lifetime Warranty	Yes

* Frequency selection and power may be restricted to abide by regional regulatory compliance laws.

HIGHLIGHTS

FortiAP 21D

The FortiAP 21D is a tiny 2x2 MIMO access point, powered from a standard USB port (or included USB power adapter). This AP is perfect for deployment as cost-effective FortiPresence analytics sensor, or for traveling employees. The dual Ethernet ports enable bridging of devices like VoIP phones back to the corporate network.



 **802.11n | 2.4 GHz Radio | 2 Internal Antennas**

 **2x2 MIMO | Up to 300 Mbps**

SPECIFICATIONS

FORTIAP 21D	
Hardware	
Hardware Type	Remote (Indoor)
Number of Radios	1
Number of Antennas	2 Internal
Peak Antenna Gain	2.5 dBi for 2.4 GHz
Frequency Bands (GHz) *	2.400–2.4835
Frequency of Radio 1	2.4 GHz b/g/n
Frequency of Radio 2	–
Throughput	Up to 300 Mbps
Tx/Rx Streams	2x2 MIMO 2 spatial stream
Ethernet Ports	2x FE RJ45 ports (1x WAN port, 1x LAN port)
USB Port	1x Type A
Serial Console Port	–
Power over Ethernet (PoE)	–
WME Multimedia Extensions	Yes (4 priority queues for voice, video, data and background traffic)
Simultaneous SSIDs	8 (7 if background scanning enabled)
EAP Type(s)	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
Maximum Tx Power	17 dBm (50 mW) *
Physical Security	–
Mean Time Between Failures	>10 years
IEEE Specifications	802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x
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
Advanced 802.11n to enhance rate-over-range including:	Low-density parity check (LDPC) encoding Maximum likelihood demodulation (MLD) Transmit beamforming (TxBF) Maximum Ratio Combining (MRC) for improved receiver

FORTIAP 21D	
Mounting Options	Desktop, Wall
Included Accessories	AC power adapter and wall mount kit
FortiPresence Capable	Yes
Wireless Monitoring Capabilities	
Frequencies scanned	–
Background scan with client access on 2.4 and 5 GHz	–
Full-time scan as dedicated monitor	–
Dimensions	
Length x Width x Height	2.9 x 3.2 x 0.9 inches (7.3 x 8.1 x 2.2 cm)
Weight	0.14 lbs (65 g)
Package (shipping) Weight	0.77 lbs (0.35 kg)
Environment	
Power Supply	"USB Mini-B Powered, 5V 2A Adapter Input: 100–240V AC, 50–60 Hz"
Power Consumption (Average)	3.3 W
Power Consumption (Maximum)	5.5 W
Humidity	10–85%, non-condensing (Operating)
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)
Directives	Low Voltage Directive • RoHS
Warranty	
Limited Lifetime Warranty	Yes

* Frequency selection and power may be restricted to abide by regional regulatory compliance laws.

HIGHLIGHTS

FortiAP 25D

The FortiAP 25D is a small power-strip design dual-band 2x2 MIMO access point. With 5 Ethernet ports, this AP is well suited to desktop deployments in hotels or hospitality environments, enabling the connection of Point-of-Sale and other remote equipment back to the corporate network.



 **802.11n | 2.4 or 5 GHz Radio | 2 Internal Antennas**

 **2x2 MIMO | Up to 300 Mbps**

SPECIFICATIONS

FORTIAP 25D	
Hardware	
Hardware Type	Remote (Indoor)
Number of Radios	1
Number of Antennas	2 internal
Peak Antenna Gain	2 dBi for 2.4 GHz, 3 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
Frequency of Radio 1	2.4 GHz b/g/n, 5 GHz a/n
Frequency of Radio 2	–
Throughput	Up to 300 Mbps
Tx/Rx Streams	2x2 MIMO 2 spatial stream
Ethernet Ports	1x GE RJ45 WAN port, 4x FE RJ45 LAN ports
USB Port	–
Serial Console Port	–
Power over Ethernet (PoE)	–
WME Multimedia Extensions	Yes (4 priority queues for voice, video, data and background traffic)
Simultaneous SSIDs	8 (7 if background scanning enabled)
EAP Type(s)	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
Maximum Tx Power	16 dBm (40 mW) *
Physical Security	–
Mean Time Between Failures	>10 years
IEEE Specifications	802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x
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

FORTIAP 25D	
Advanced 802.11n to enhance rate-over-range including:	Low-density parity check (LDPC) encoding
	Maximum likelihood demodulation (MLD)
	Transmit beamforming (TxBF)
	Maximum Ratio Combining (MRC) for improved receiver
Mounting Options	Desktop, Wall
Included Accessories	AC power adapter and wall mount kit
FortiPresence Capable	Yes
Wireless Monitoring Capabilities	
Frequencies scanned	2.4 and 5 GHz
Background scan with client access on 2.4 and 5 GHz	–
Full-time scan as dedicated monitor	Yes
Dimensions	
Length x Width x Height	0.9 x 2.8 x 1.4 inches (2.28 x 7 x 3.5 cm)
Weight	0.62 lbs (0.28 kg)
Package (shipping) Weight	1.01 lbs (0.46 kg)
Environment	
Power Supply	Adapter Input: 100–240V AC, 50–60 Hz
Power Consumption (Average)	2.5 W
Power Consumption (Maximum)	2.7 W
Humidity	0–90% non-condensing
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)
Directives	Low Voltage Directive • RoHS
Warranty	
Limited Lifetime Warranty	Yes

* Frequency selection and power may be restricted to abide by regional regulatory compliance laws.

HIGHLIGHTS

FortiAP 28C

The FortiAP 28C is designed for larger remote offices, featuring a higher performance dual-band 2x2 MIMO radio and a 10 port Gigabit Ethernet switch. This AP can be deployed to provide all of the wired and wireless connectivity and security for your remote office.



 **802.11n | 2.4 or 5 GHz Radio | 2 Internal Antennas**

 **2x2 MIMO | Up to 300 Mbps**

SPECIFICATIONS

FORTIAP 28C	
Hardware	
Hardware Type	Remote (Indoor)
Number of Radios	1
Number of Antennas	2 Internal
Peak Antenna Gain	3 dBi for 2.4 GHz, 4 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
Frequency of Radio 1	2.4 GHz b/g/n, 5 GHz a/n
Frequency of Radio 2	–
Throughput	Up to 300 Mbps
Tx/Rx Streams	2x2 MIMO 2 spatial stream
Ethernet Ports	10x GE RJ45 ports (2x GE WAN ports, 8x GE LAN ports)
USB Port	2x Type A, 1x Type B
Serial Console Port	–
Power over Ethernet (PoE)	–
WME Multimedia Extensions	Yes (4 priority queues for voice, video, data and background traffic)
Simultaneous SSIDs	8 (7 if background scanning enabled)
EAP Type(s)	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
Maximum Tx Power	17 dBm (50 mW) *
Physical Security	Kensington Lock
Mean Time Between Failures	>10 years
IEEE Specifications	802.11a, 802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1x
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
Advanced 802.11n to enhance rate-over-range including:	Low-density parity check (LDPC) encoding Maximum likelihood demodulation (MLD) Transmit beamforming (TxBF) Maximum Ratio Combining (MRC) for improved receiver

FORTIAP 28C	
Mounting Options	Desktop, Wall
Included Accessories	AC power adapter and wall mount kit
FortiPresence Capable	Yes
Wireless Monitoring Capabilities	
Frequencies scanned	2.4 and 5 GHz
Background scan with client access on 2.4 and 5 GHz	–
Full-time scan as dedicated monitor	Yes
Dimensions	
Length x Width x Height	7.09 x 8.43 x 1.38 inches (18 x 21.4 x 3.5 cm)
Weight	1.1 lbs (0.5 kg)
Package (shipping) Weight	3.2 lbs (1.47 kg)
Environment	
Power Supply	Adapter Input: 100–240V AC, 50–60 Hz
Power Consumption (Average)	14 W
Power Consumption (Maximum)	15 W
Humidity	20–90% non-condensing
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-13–158°F (-25–70°C)
Directives	Low Voltage Directive • RoHS
Warranty	
Limited Lifetime Warranty	Yes

* Frequency selection and power may be restricted to abide by regional regulatory compliance laws.

PERFORMANCE MATRIX

802.11ac PERFORMANCE — DATA RATES (Mbps)								
Descriptor	Data Streams	VHT20		VHT40		VHT80		
		Normal GI	Short GI	Normal GI	Short GI	Normal GI	Short GI	
MCS 0	1	6.5	7.2	13.5	15	29.3	32.5	
MCS 1	1	13	14.4	27	30	58.5	65.0	
MCS 2	1	19.5	21.7	40.5	45	87.8	97.5	
MCS 3	1	26	28.9	54	60	117.0	130.0	
MCS 4	1	39	43.3	81	90	175.5	195.0	
MCS 5	1	52	57.8	108	120	234.0	260.0	
MCS 6	1	58.5	65	121.5	135	263.3	292.5	
MCS 7	1	65	72.2	135	150	292.5	325.0	
MCS 8	1	78.0	86.7	162.0	180.0	351.0	390.0	
MCS 9	1	NA	NA	180.0	200.0	390.0	433.3	
MCS 0	2	13	14.4	27	30	58.5	65.0	
MCS 1	2	26	28.9	54	60	117.0	130.0	
MCS 2	2	39	43.3	81	90	175.5	195.0	
MCS 3	2	52	57.8	108	120	234.0	260.0	
MCS 4	2	78	86.7	162	180	351.0	390.0	
MCS 5	2	104	115.6	216	240	468.0	520.0	
MCS 6	2	117	130	243	270	526.5	585.0	
MCS 7	2	130	144.4	270	300	585.0	650.0	
MCS 8	2	156.0	173.3	324.0	360.0	702.0	780.0	
MCS 9	2	NA	NA	360.0	400.0	780.0	866.7	
MCS 0	3	19.5	21.7	40.5	45	87.8	97.5	
MCS 1	3	39	43.3	81	90	175.5	195.0	
MCS 2	3	58.5	65	121.5	135	263.3	292.5	
MCS 3	3	78	86.7	162	180	351.0	390.0	
MCS 4	3	117	130	243	270	526.5	585.0	
MCS 5	3	156	173.3	324	360	702.0	780.0	
MCS 6	3	175.5	195	364.5	405	NA	NA	
MCS 7	3	195	216.7	405	450	877.5	975.0	
MCS 8	3	234.0	260.0	486.0	540.0	1053.0	1170.0	
MCS 9	3	260.0	288.9	540.0	600.0	1170.0	1300.0	
MCS 0	4	26	28.9	54	60	117	130	
MCS 1	4	52	57.8	108	120	234	260	
MCS 2	4	78	86.7	162	180	351	390	
MCS 3	4	104	115.6	216	240	468	520	
MCS 4	4	156	173.3	324	360	702	780	
MCS 5	4	208	231.1	432	480	936	1040	
MCS 6	4	234	260	486	540	1053	1170	
MCS 7	4	260	288.9	540	600	1170	1300	
MCS 8	4	312	346.7	648	720	1404	1560	
MCS 9	4	NA	NA	720	800	1560	1733.3	

PERFORMANCE MATRIX

802.11n PERFORMANCE — DATA RATES (Mbps)						
Descriptor	Spatial Streams	HT20		HT40		
		Normal GI	Short GI	Normal GI	Short GI	
MCS 0	1	6.5	7.2	13.5	15	
MCS 1	1	13	14.4	27	30	
MCS 2	1	19.5	21.7	40.5	45	
MCS 3	1	26	28.9	54	60	
MCS 4	1	39	43.3	81	90	
MCS 5	1	52	57.8	108	120	
MCS 6	1	58.5	65	121.5	135	
MCS 7	1	65	72.2	135	150	
MCS8	2	13	14.4	27	30	
MCS9	2	26	28.9	54	60	
MCS10	2	39	43.3	81	90	
MCS11	2	52	57.8	108	120	
MCS12	2	78	86.7	162	180	
MCS13	2	104	115.6	216	240	
MCS14	2	117	130	243	270	
MCS15	2	130	144.4	270	300	
MCS16	3	19.5	21.7	40.5	45	
MCS17	3	39	43.3	81	90	
MCS18	3	58.5	65	121.5	135	
MCS19	3	78	86.7	162	180	
MCS20	3	117	130	243	270	
MCS21	3	156	173.3	324	360	
MCS22	3	175.5	195	364.5	405	
MCS23	3	195	216.7	405	450	

ORDER INFORMATION

Product	SKU	Description
FortiAP-24D	FAP-24D	Indoor wireless AP — 1x GE RJ45 WAN port, 4x FE RJ45 LAN ports, single radio (802.11 a/b/g/n, 2x2 MIMO), Integrated wall mount, Power adapter not included. For Gigabit PoE injector order: GPI-115. For AC power adapter order: SP-FG20C-PA.
	FC-10-P0024-311-02-DD	8x5 Enhanced FortiCare
	FC-10-P0024-247-02-DD	24x7 Comprehensive FortiCare
	SP-FG20C-PA	AC Power Adapter for FAP-24D
Gigabit PoE Injector	GPI-115	1-Port Gigabit PoE Power Injector, 802.3af 15.4 Watts 10/100/1000.
FortiAP 224D	FAP-224D	Outdoor wireless AP — 1x GE RJ45 port, dual radio (802.11 b/g/n and 802.11 a/n, 2x2 MIMO), IP66 rated, external antennas, pole/wall mount kit included, 802.3af PoE injector with AC power adapter included.
	FC-10-P0227-311-02-DD	8x5 Enhanced FortiCare
	FC-10-P0227-247-02-DD	24x7 Comprehensive FortiCare
	SP-FAP221B-PA	AC Power Adapter for FAP-224D
FortiAP 14C	FAP-14C	Remote wireless AP — 5x FE RJ45 ports (including 1x WAN port, 4x LAN ports), single radio (802.11 b/g/n, 1x1 MIMO), Integrated wall mount, AC power adapter included.
	FC-10-P0014-311-02-DD	8x5 FortiCare Contract
	FC-10-P0014-247-02-DD	24x7 FortiCare Contract
	SP-FAP14C-PA	AC Power Adapter for FAP-14C
FortiAP 21D	FAP-21D	Remote wireless AP — 2x FE RJ45 ports (including 1x WAN port, 1x LAN port), 1x USB-A port, single radio (802.11 b/g/n, 2x2 MIMO), Mounting kit not applicable, AC power adapter included.
	FC-10-P0021-311-02-DD	8x5 Enhanced FortiCare
	FC-10-P0021-247-02-DD	24x7 Comprehensive FortiCare
FortiAP 25D	FAP-25D	Remote wireless AP — 1x GE RJ45 WAN port, 4x FE RJ45 LAN ports, single radio (802.11 a/b/g/n, 2x2 MIMO), Integrated wall mount magnet and anchoring recesses, AC power adapter included.
	FC-10-P0025-311-02-DD	8x5 Enhanced FortiCare
	FC-10-P0025-247-02-DD	24x7 Comprehensive FortiCare
FortiAP 28C	FAP-28C	Remote wireless AP — 10x FE RJ45 ports (including 2x WAN ports, 8x LAN ports), single radio (802.11 a/b/g/n, 2x2 MIMO), Integrated wall mount, AC power adapter included.
	FC-10-P0028-311-02-DD	8x5 FortiCare Contract
	FC-10-P0028-247-02-DD	24x7 FortiCare Contract
	SP-FG20C-PA	AC Power Adapter for FAP-28C

REGION/COUNTRY SKU SUFFIX							
Americas-FCC	China	India	Europe ETSI	Indonesia	International	Japan	Korea
-A	-C	-D	-E	-F	-I	-J	-K
Non-FFCA	Russia	Singapore	Taiwan	Ukraine	Vietnam, Thailand	World 2.4G	Egypt
-N	-P	-S	-T	-U	-V	-W	-Y

* Only available for '-S' suffix.



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