



## FortiAP™-11C, 14C, 28C Secure Remote Access Points



### The need for Secure Remote Access Points

Enterprises are looking to increase productivity through uninterrupted access to applications and resources, without compromising security and agility. You want to also extend your network to your employees' home offices and increase productivity, yet you want to retain visibility and control of your wireless network traffic by enforcing the same policies. You also need a solution that is easy for the employees to self install and for you to provision quickly and troubleshoot remotely.

### Integrated Wireless Security and Access Solution

Fortinet's remote wireless access points deliver secure, identity-driven WiFi client access that creates a fortified WLAN network for the home user and tunnels traffic securely to the corporate network. Centrally managed by a supported FortiGate® or FortiWiFi™ platform with its integrated wireless controller, these remote APs allow you to deploy a comprehensive, integrated security solution for your wireless and wired networks. The centralized FortiGate controllers enable you to deploy comprehensive unified threat management (UTM) protection over your wireless network.

### Method of Operation

Upon powering up, this family of remote FAP automatically retrieves an IP address from the home WAN router and performs a DNS lookup of the preprovisioned domain name of your company to locate the wireless controller installed in your private cloud. Once connected to the wireless controller, it provides its device certificate to authenticate itself to the wireless controller and downloads its configuration along with the SSIDs it needs to broadcast throughout the home. You can configure the corporate controller to broadcast the same office SSID at the home office for seamless roaming and zero reconfiguration of employee laptops. Once the home user connects to the office SSID in their home, all their traffic will be forwarded through a secure SSL tunnel to the corporate network without the need for any VPN clients. The wired ports can also be bridged with one of the SSIDs so devices, such as VoIP phones, can also connect to corporate office without any need for complex configuration. We have designed this product to save IT administrators time and reduce helpdesk calls.

### High Performance Secure Thin Access Points

- Leverage existing FortiGate or FortiWiFi platforms as controllers for low TCO
- Full range of authentications and access for all use cases
- Integration with FortiManager™ and FortiAnalyzer™ for unified control and reporting
- Fast Roaming for uninterrupted data access
- Automatic Radio Resource Provisioning (ARRP) for optimized throughput
- Flexible deployment options with simple per device pricing
- Layer 7 application QoS for maximum business productivity
- Rogue AP control for PCI DSS compliance





### FAP-11C Plug-and-Play Access Point

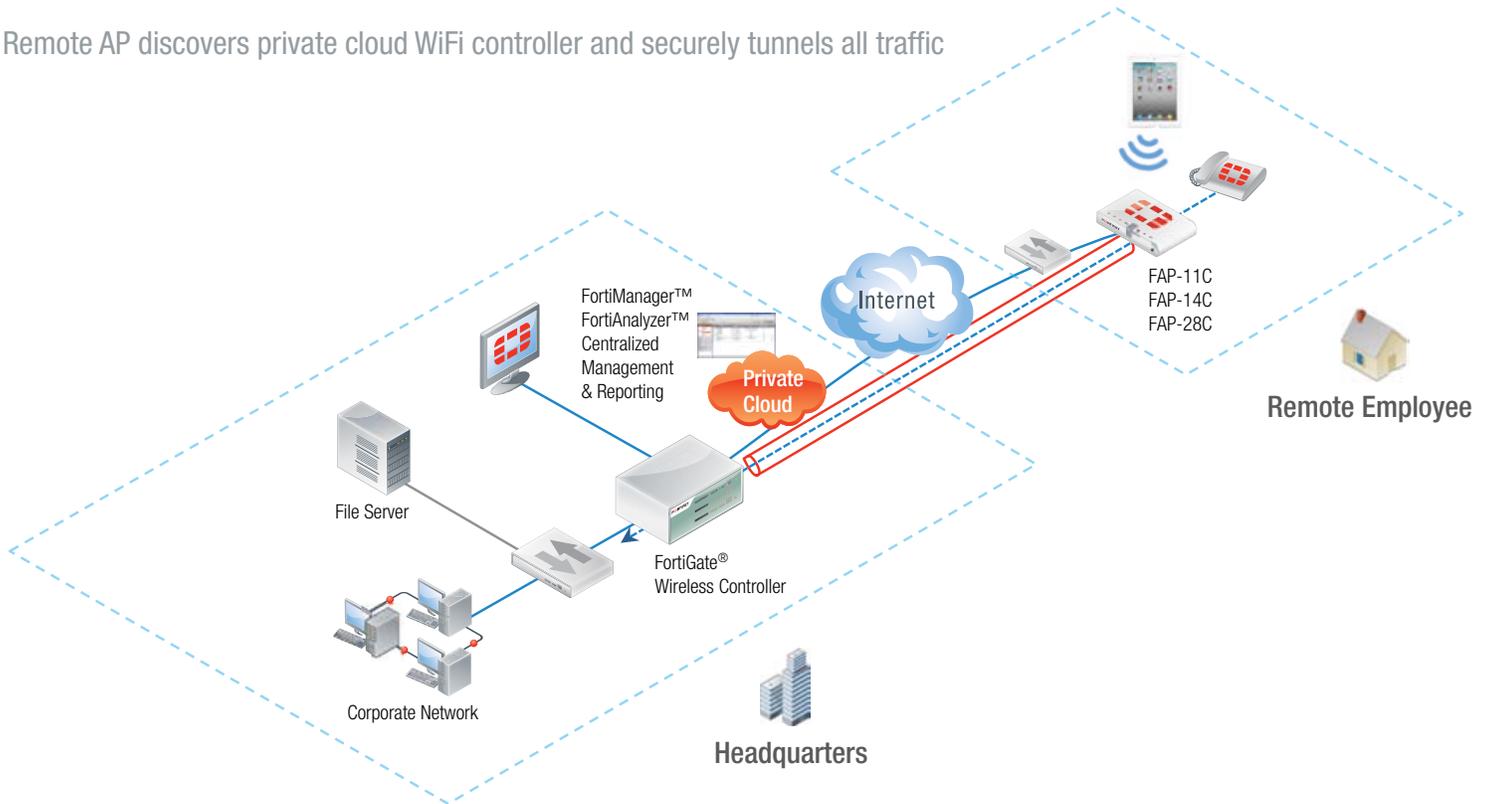
The FortiAP-11C is a small plug-and-play access point suitable for traveling road warriors or remote access. This access point has an integrated power plug for easy storage and installation. It uses standards-based IEEE 802.11b/g/n to provide access to laptops and tablet devices. It also provides two Ethernet

ports (LAN and WAN) to allow devices such as Voice over IP telephones to easily connect to the corporate network, enabling an instant office environment for the distributed workforce.

### FAP-14C and FAP-28C

The FortiAP-14C is a low cost 1x1 MIMO access point with integrated 5 port 10/100 switch in small desktop form factor. This device enables home office connectivity to the corporate network. FortiAP-28C is for larger offices and integrates a higher performance 2x2 MIMO access point with a 10 port Gigabit switch.

Remote AP discovers private cloud WiFi controller and securely tunnels all traffic



### Differentiating Features & Benefits

Enterprise Unified Threat Management

Protects your network with the widest range of security and networking technologies seamlessly integrated into a single device: Firewall, IPS, Application Control, VPN, Web Filtering, and many others.

Application-Layer Quality of Service

Going above and beyond Wireless Multimedia Extensions (WME) by offering layer 7 traffic shaping and application use control.

'Single Pane of Glass' Management Console

Unmatched visibility and control of all wired and wireless network traffic that eliminates blind spots in your security infrastructure and ensures consistent and effective policy enforcement and compliance.

Remote AP

Allows simple and secure teleworker connection for wireless and wired devices alleviating the need for host VPN agents and complex configuration.



# SPECIFICATIONS

TECHNICAL	FortiAP-11C	FortiAP-14C	FortiAP-28C
<b>Hardware</b>			
Hardware Type	Remote AP	Remote AP	Remote AP
Indoor/Outdoor Deployment	Indoor – Travel	Indoor – Home office	Indoor – Small office
Number of Radios	1	1	1
Number of Antennas	1 internal	1 internal	2
Peak Antenna Gain	3 dBi for 2.4 GHz	3 dBi for 2.4 GHz	3 dBi for 2.4 GHz, 4 dBi for 5 GHz
Frequency Bands (GHz) *	2.400–2.4835	2.400–2.4835	2.400–2.4835
Frequency of Radio 1	2.4 GHz IEEE b/g/n	2.4 GHz IEEE b/g/n	2.4 GHz IEEE b/g/n, 5 GHz IEEE a/n
Tx/Rx Streams (802.11n mode)	1x1 MIMO with 1 spatial stream.	1x1 MIMO with 1 spatial stream.	2x2 MIMO with 2 spatial streams.
Ethernet Port	150 Mbps association rate.	150 Mbps association rate.	300 Mbps association rate.
Ethernet WAN Ports	1 x 10/100/1000	1 x 10/100	2 x 10/100/1000
Ethernet LAN Ports	1 x 10/100/1000	4 x 10/100	8 x 10/100/1000
Serial Console Port	No	No	No
USB Port	1 type A, 1 type B	No	2 type A, 1 type B
Power over Ethernet (PoE)	N/A	N/A	N/A
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)
Simultaneous SSIDs	8 (7 for client access, 1 for monitoring)	8 (7 for client access, 1 for monitoring)	8 (7 for client access, 1 for monitoring)
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
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
Maximum Tx Power	17 dBm (50mW) *	17 dBm (50mW) *	17 dBm (50mW) *
IEEE Specifications	802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1X	802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1X	802.11b, 802.11e, 802.11g, 802.11h, 802.11i, 802.11j, 802.11n, 802.1X
<b>Dimensions</b>			
Height x Width x Length (in)	4.3 x 3.5 x 1.5	1.06 x 4.92 x 3.86	1.38 x 8.43 x 7.09
Height x Width x Length (mm)	110 x 89 x 34	27 x 125 x 98	35 x 214 x 180
Weight	0.22 kg (0.5 lbs)	0.1 kg (0.2 lbs)	0.5 kg (1.1 lbs)
<b>Environment</b>			
Power Required	Integrated Power Plug	100–240 VAC, 50–60 Hz (external DC power adaptor)	100–240 VAC, 50–60 Hz (external DC power adaptor)
Power Consumption (AVG)	5 W	1.5 W	12 W
Power Consumption (MAX)	7 W	2 W	15 W
Heat Dissipation	17 BTU/h	4.5 BTU/h	45 BTU/h
Operating Temperature	-4–140°F (-20–60°C)	32–104°F (0–40°C)	32–104°F (0–40°C)
Storage Temperature	-4–158°F (-20–70°C)	-13–158°F (-25–70°C)	-13–158°F (-25–70°C)
Humidity	10 to 90% non-condensing	20 to 90% non-condensing	20 to 90% non-condensing

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

DECLARATION OF CONFORMITY	
Organization	Compliance Identifier
CB	IEC 60950-1:2005
UL	UL 60950-1, CSA C22.2 No. 60950-1-07
FCC	FCC Part 15, Class B and Subpart C & E ICES-003
CE	RR&TTE Directive 1999/5/EC EN 300 328 / EN 301 489 / EN 301 893 / EN 50385 EU Directive 2004/108/EC EMC EU Directive 2006/95/EC LVD EN 55022/EN 55024/EN 61000
IC	Canada RSS-210 Issue 7 / Canada RSS-Gen Issue 2 RSS102, Issue 4

# RF RX/TX PERFORMANCE TABLE

	Radio 1	
	5 GHz	
802.11 b	Tx Power (dBm)	Rx Sensitivity
1 Mbps	17	-86
11 Mbps	16	-83
802.11 g		
6 Mbps	16	-85
9 Mbps	16	-83
12 Mbps	16	-81
18 Mbps	16	-79
24 Mbps	16	-77
36 Mbps	15	-73
48 Mbps	14	-71
54 Mbps	13	-69
802.11n HT20		
MCS 0	15	-83
MCS 1	14	-80
MCS 2	14	-77
MCS 3	14	-74
MCS 4	14	-72
MCS 5	13	-70
MCS 6	12	-68
MCS 7	12	-66

## ORDER INFORMATION

Product	SKU	Description
FortiAP-11C	FAP-11C	Single radio controller-based remote AP — supports 802.11 b/g/n.
	FC-10-P0223-311-02-DD	8x5 Enhanced FortiCare.
	FC-10-P0223-247-02-DD	24x7 Comprehensive FortiCare.
	SP-ADAPTORPLUG-FAP11C	Regional power plug pack for FAP-11C.
FortiAP-14C	FAP-14C	Wireless (802.11 b/g/n, single-band 2.4G), 1 x 10/100 WAN port, 4 x 10/100 LAN ports.
	FC-10-P0014-311-02-DD	8x5 FortiCare contract.
	FC-10-P0014-247-02-DD	24x7 FortiCare contract.
FortiAP-28C	FAP-28C	Wireless (802.11a/b/g/n, dual-band, dual-stream, 2x2 MIMO), 2 x 10/100/1000 WAN port, 8 x 10/100/1000 switch ports.
	FC-10-P0028-311-02-DD	8x5 FortiCare contract.
	FC-10-P0028-247-02-DD	24x7 FortiCare contract.
FortiPlanner	N/A	Access point deployment planning software. Visit <a href="http://wireless.fortinet.com/">http://wireless.fortinet.com/</a> for download and further information.
	FAP-FPL-PRO	Unlimited AP placement.

Region/Country SKU Suffix*									
Americas-FCC	China	Europe ETSI	International	Japan	Korea	Non-FFCA	Singapore	Taiwan	World 2.4G
-A	-C	-E	-I	-J	-K	-N	-S	-T	-W

\*For the complete list of countries and regions, refer to <http://www.fortinet.com/wireless>.

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