

HIGHLIGHTS

FortiAP S311C and S313C

The FAP-S311C and FAP-S313C are 802.11ac Wave 1 access points. These access points have security built in and offer flexible management options by FortiCloud or FortiGate. They have a single dual-band radio meant for low density environments; ideal for small remote sites.



802.11ac Wave 1 | Single Radio 2.4/5 GHz | 3 Internal/External Antennas



Up to 1,300 Mbps



SPECIFICATIONS

	FORTIAP S311C	FORTIAP S313C
Hardware		
Hardware Type	Indoor	Indoor
Number of Radios	1	1
Number of Antennas	3 internal	3 RP-SMA External
Peak Antenna Gain	3.5 dBi for 2.4 GHz, 6 dBi for 5 GHz	3 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	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/ac	2.4 GHz b/g/n or 5 GHz a/n/ac
Frequency of Radio 2	—	—
Throughput	Up to 1300 Mbps	Up to 1300 Mbps
Tx/Rx Streams	3x3 MIMO with 3 spatial streams	3x3 MIMO with 3 spatial streams
Ethernet Ports	1x GE RJ45	1x GE RJ45
USB Port	1x Type A	1x Type A
Serial Console Port	1x RJ45	1x RJ45
Power over Ethernet (PoE)	IEEE 802.3af (12.9 W), 802.3at (for USB)	
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	19 dBm (80 mW)*	19 dBm (80 mW)*
Physical Security	Kensington Lock	Kensington Lock
Mean Time Between Failures	>20 Years	>20 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	
802.11ac 80MHz Channel	Yes	Yes
802.11n Features	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • Low-density parity check (LDPC) encoding • Maximum likelihood demodulation • Maximum Ratio Combining (MRC) for improved receiver performance 	
Mounting Options	Ceiling, T-Rail and wall	Ceiling, T-Rail and wall

	FORTIAP S311C	FORTIAP S313C
Included Accessories	Ceiling, T-Rail and wall mount kit	Ceiling, T-Rail and wall mount kit
FortiPresence Capable	Yes	Yes
Wireless Monitoring Capabilities		
Frequencies scanned	2.4 and 5 GHz	2.4 and 5 GHz
Background scan with client access on 2.4 and 5 GHz	Yes	Yes
Full-time scan as dedicated monitor	Yes	Yes
Full-time scan with client access on 5G GHz	No	No
Dimensions		
Length x Width x Height	8.5 x 8.5 x 1.38 inches (21.6 x 21.6 x 3.5 cm)	8.5 x 8.5 x 1.38 inches (21.6 x 21.6 x 3.5 cm)
Weight	1.02 lb (0.46 kg)	1.02 lb (0.46 kg)
Package (shipping) Weight	1.94 lb (0.88 kg)	1.94 lb (0.88 kg)
Environment		
Power Supply	Adapter input: 100–240 V, 50/60Hz, 0.9A, Max output: 12V DC, 3A	Adapter input: 100–240V, 50/60Hz, 0.9A, Max output: 12V DC, 3A
Power Consumption (Average / Maximum)	3.72 W / 18 W	3.72 / 18 W
Humidity	5–90% non condensing	5–90% non condensing
Operating Temperature	32–104°F (0–40°C)	32–104°F (0–40°C)
Storage Temperature	–4–158°F (–20–70°C)	–4–158°F (–20–70°C)
Directives	Low Voltage Directive • RoHS	Low Voltage Directive • RoHS
Warranty		
Limited Lifetime Warranty	Yes	Yes

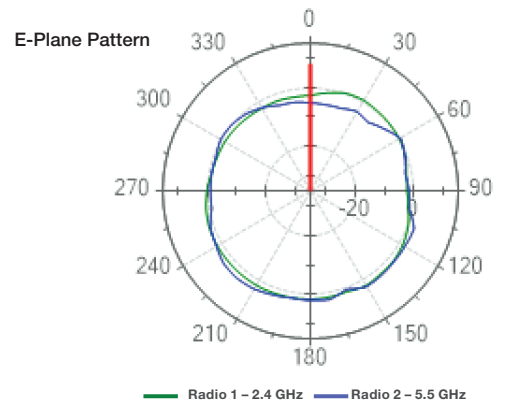
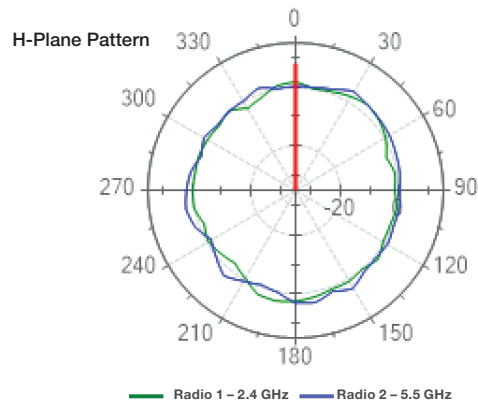
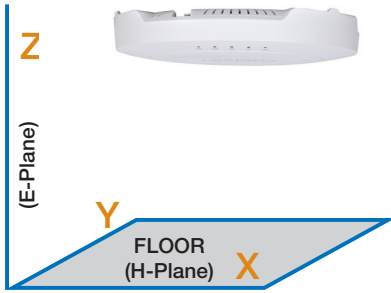
* Frequency selection and power may be restricted to abide by regional regulatory compliance laws.

RF RX/TX PERFORMANCE TABLE

	FORTIAP S311C				FORTIAP S313C			
	RADIO 1		RADIO 2		RADIO 1		RADIO 2	
802.11 a/g	2.4 GHz Tx Power (dBm)	Rx Sensitivity (dBm)	5 GHz Tx Power (dBm)	Rx Sensitivity (dBm)	2.4 GHz Tx Power (dBm)	Rx Sensitivity (dBm)	5 GHz Tx Power (dBm)	Rx Sensitivity (dBm)
6 Mbps	19	-88	15	-88	19	-88	15	-88
9 Mbps	19	-85	15	-85	19	-85	15	-85
12 Mbps	19	-83	15	-83	19	-83	15	-83
18 Mbps	19	-81	15	-81	19	-81	15	-81
24 Mbps	19	-79	15	-79	19	-79	15	-79
36 Mbps	17.5	-77	15	-77	17.5	-77	15	-77
48 Mbps	16.5	-75	15	-75	16.5	-75	15	-75
54 Mbps	14	-73	14	-73	14	-73	14	-73
802.11n HT20								
MCS 0/8/16	19	-89	15	-89	19	-90	15	-89
MCS 1/9/17	19	-89	15	-89	19	-87	15	-89
MCS 2/10/18	19	-86	15	-86	19	-85	15	-86
MCS 3/11/19	18	-83	15	-83	18	-83	15	-83
MCS 4/12/20	18	-80	15	-80	18	-79	15	-80
MCS 5/13/21	18	-77	14	-77	18	-74	14	-77
MCS 6/14/22	15	-74	13	-74	15	-73	13	-74
MCS 7/15/23	13	-71	13	-71	13	-72	13	-71
802.11n HT40								
MCS 0/8/16	15	-85	14.5	-85	12	-85	16.5	-85
MCS 1/9/17	15	-83	14.5	-83	12	-83	16.5	-83
MCS 2/10/18	15	-81	14.5	-81	12	-81	16.5	-81
MCS 3/11/19	15	-79	14.5	-79	12	-79	16	-79
MCS 4/12/20	15	-76	14.5	-76	12	-76	16	-76
MCS 5/13/21	15	-74	13	-74	12	-74	13	-74
MCS 6/14/22	15	-71	12	-71	12	-71	12	-71
MCS 7/15/23	13	-69	12	-69	12	-69	12	-69
802.11 ac VHT20								
MCS 0			15	-90			15	-90
MCS 1			15	-87			15	-87
MCS 2			15	-87			15	-87
MCS 3			15	-84			15	-84
MCS 4			15	-81			15	-81
MCS 5			14	-77			14	-77
MCS 6			13	-74			13	-74
MCS 7			13	-71			13	-71
MCS 8			12	-67			12	-67
802.11 ac VHT40								
MCS 0			14.5	-85			16.5	-85
MCS 1			14.5	-83			16.5	-83
MCS 2			14.5	-80			16.5	-80
MCS 3			14.5	-77			16	-77
MCS 4			14.5	-75			16	-75
MCS 5			13	-72			13	-72
MCS 6			12	-70			12	-70
MCS 7			12	-68			12	-68
MCS 8			11	-65			11	-65
MCS 9			11	-63			11	-63
802.11 ac VHT80								
MCS 0			14.5	-83			16	-83
MCS 1			14.5	-80			16	-80
MCS 2			14.5	-78			16	-78
MCS 3			14.5	-76			15	-76
MCS 4			14.5	-73			15	-73
MCS 5			12	-70			12	-70
MCS 6			11	-68			11	-68
MCS 7			11	-66			11	-66
MCS 8			10	-63			10	-63
MCS 9			10	-61			10	-61

ANTENNA RADIATION PATTERNS

FAP-S311C



FAP-S313C

