

## HIGHLIGHTS

### FortiAP 320C

The FortiAP 320C is a dual-radio 802.11ac AP for high density environments. Designed with dual redundant PoE Ethernet ports to provide maximum resiliency, this AP is ideal for mission-critical environments such as hospitals and manufacturing facilities. The plenum-rated enclosure and extended temperature range also allows deployment in non-temperature controlled warehouses.



 **802.11ac Wave 1 | Dual Radio 2.4 and 5 GHz | 6 Internal Antennas**

 **3x3 MIMO | Up to 450 + 1,300 Mbps**

## SPECIFICATIONS

FORTIAP 320C	
<b>Hardware</b>	
Hardware Type	Indoor Plenum Rated
Number of Radios	2
Number of Antennas	6 Internal
Peak Antenna Gain	5 dBi for 2.4 GHz, 6 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
Frequency of Radio 2	5 GHz a/n/ac
Maximum Data Rate	Radio 1: Up to 450 Mbps, Radio 2: Up to 1300 Mbps
Tx/Rx Streams	3x3 MIMO with 3 spatial streams
Ethernet Ports	2x GE RJ45
USB Port	1x Type A
Serial Console Port	Yes
Power over Ethernet (PoE)	Dual redundant PoE power ports with support for IEEE 802.3af (12.9 W)
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	21 dBm (126 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, 802.3af, 802.11ac
802.11ac 80MHz Channel	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

FORTIAP 320C	
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
Mounting Options	Ceiling, T-Rail and wall
Included Accessories	Ceiling, T-Rail and wall mount kit
FortiPresence Capable	Yes
<b>Wireless Monitoring Capabilities</b>	
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
Full-time scan with client access on 5G GHz	Yes
<b>Dimensions</b>	
Length x Width x Height	6.5 x 6.5 x 1.4 inches (16.5 x 16.5 x 3.5 cm)
Weight	1.33 lb (0.6 kg)
Package (shipping) Weight	1.79 lb (0.81 kg)
<b>Environment</b>	
Power Supply	Adapter Input: 100–240V, 50/60Hz, 0.4A Output: 12V DC, 2A
Power Consumption (Average)	10.5 W
Power Consumption (Maximum)	12.08 W
Humidity	5–90% non condensing
Operating Temperature	–4–122°F (–20–50°C)
Storage Temperature	–40–158°F (–40–70°C)
Directives	Low Voltage Directive • RoHS
<b>Certifications</b>	
WiFi Alliance Certified	Yes
<b>Warranty</b>	
Limited Lifetime Warranty	Yes

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

## RF RX/TX PERFORMANCE TABLE

FORTIAP 320C				
	RADIO 1		RADIO 2	
	2.4 GHz Tx Power (dBm)	Rx Sensitivity (dBm)	5 GHz Tx Power (dBm)	Rx Sensitivity (dBm)
<b>802.11 a/g</b>				
6 Mbps	19	-85	21	-89
9 Mbps	19	-84	21	-88
12 Mbps	19	-83	21	-87
18 Mbps	19	-81	21	-85
24 Mbps	19	-78	20	-84
36 Mbps	16	-74	19	-83
48 Mbps	16	-70	18	-79
54 Mbps	16	-69	17	-76
<b>802.11n HT20</b>				
MCS 0/8	18	-85	20	-89
MCS 1/9	18	-83	20	-88
MCS 2/10	18	-81	20	-87
MCS 3/11	18	-78	19	-85
MCS 4/12	16	-74	19	-84
MCS 5/13	16	-70	18	-83
MCS 6/14	15	-69	17	-79
MCS 7/15	15	-68	16	-73
<b>802.11n HT40</b>				
MCS 0/8	17	-82	18	-91
MCS 1/9	17	-80	18	-85
MCS 2/10	17	-78	18	-85
MCS 3/11	17	-75	18	-80
MCS 4/12	15	-71	18	-78
MCS 5/13	15	-67	17	-76
MCS 6/14	14	-66	16	-74
MCS 7/15	14	-65	15	-71

FORTIAP 320C				
	RADIO 1		RADIO 2	
	2.4 GHz Tx Power (dBm)	Rx Sensitivity (dBm)	5 GHz Tx Power (dBm)	Rx Sensitivity (dBm)
<b>802.11ac VHT20</b>				
MCS 0	—	—	20	-85
MCS 1	—	—	20	-84
MCS 2	—	—	20	-83
MCS 3	—	—	19	-82
MCS 4	—	—	19	-81
MCS 5	—	—	18	-78
MCS 6	—	—	17	-74
MCS 7	—	—	16	-70
MCS 8	—	—	15	-69
<b>802.11ac VHT40</b>				
MCS 0	—	—	18	-85
MCS 1	—	—	18	-84
MCS 2	—	—	18	-83
MCS 3	—	—	18	-82
MCS 4	—	—	18	-81
MCS 5	—	—	17	-78
MCS 6	—	—	16	-74
MCS 7	—	—	15	-70
MCS 8	—	—	14	-69
MCS 9	—	—	14	-68
<b>802.11ac VHT80</b>				
MCS 0	—	—	18	-78
MCS 1	—	—	18	-75
MCS 2	—	—	18	-73
MCS 3	—	—	18	-70
MCS 4	—	—	18	-67
MCS 5	—	—	17	-65
MCS 6	—	—	16	-62
MCS 7	—	—	15	-60
MCS 8	—	—	14	-58
MCS 9	—	—	14	-56

## ANTENNA RADIATION PATTERNS

### FAP-320C

