

Product Specifications

AC-1031

IEEE 802.11a/b/g/n/ac 4*4 Wireless AP



Version: 0.5



Z-COM, Inc.

5F, No. 8 Hsin-Ann Road

Hsinchu Science Park

Hsinchu 300, TAIWAN

Tel : 886-3-5777364

Fax: 886-3-5773359

1. Revision History

Date	Version	Author	Description
2016/8/5	V0.1	Nancy	1 st draft version
2016/9/2	V0.2	Abby	Spec update
2016/12/7	V0.3	Nancy	Modify outlook
2017/2/20	V0.4	Nancy	Add antenna gain spec
2017/5/8	V0.5	Nancy	Remove 2G power and sensitivity 11ac item. Modify final dimension.



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2. Specification

2.1 Hardware Specification

The Hardware specifications of the product are as below:

Table 2-1 Hardware Specification

Features	Additional Information																							
Chipset Solution	CPU : IPQ8065 RF: QCA9984 PHY : QCA8337																							
CPU Frequency	1.7GHz																							
DDRIII	256MByte x2																							
NOR FLASH	32MByte																							
Interface	ETH port: 10/100/1000Mbpsx2 Consolex1 Reset buttonx1																							
LED definition	System LED Light Behavior Definition <table border="1"><thead><tr><th></th><th>Activity</th><th>Description</th></tr></thead><tbody><tr><td rowspan="2">PWR</td><td>Green ON</td><td>Power / system on</td></tr><tr><td>Green OFF</td><td>Power / system off</td></tr><tr><td rowspan="2">LAN1</td><td>Green ON</td><td>Ethernet connection detected</td></tr><tr><td>Green Blinking</td><td>Sending / receiving data</td></tr><tr><td rowspan="2">LAN2</td><td>Green ON</td><td>Ethernet connection detected</td></tr><tr><td>Green Blinking</td><td>Sending / receiving data</td></tr><tr><td rowspan="2">WLAN</td><td>Green ON</td><td>WLAN enable</td></tr><tr><td>Green OFF</td><td>WLAN disable</td></tr></tbody></table>		Activity	Description	PWR	Green ON	Power / system on	Green OFF	Power / system off	LAN1	Green ON	Ethernet connection detected	Green Blinking	Sending / receiving data	LAN2	Green ON	Ethernet connection detected	Green Blinking	Sending / receiving data	WLAN	Green ON	WLAN enable	Green OFF	WLAN disable
	Activity	Description																						
PWR	Green ON	Power / system on																						
	Green OFF	Power / system off																						
LAN1	Green ON	Ethernet connection detected																						
	Green Blinking	Sending / receiving data																						
LAN2	Green ON	Ethernet connection detected																						
	Green Blinking	Sending / receiving data																						
WLAN	Green ON	WLAN enable																						
	Green OFF	WLAN disable																						
System Update Capability	- Support Web-UI upgrade via Ethernet port or wireless network - Support TFTP upgrade via Ethernet port																							
Power supply	- Support POE 802.3 at - Support +48V PTE																							
Data rate	- 802.11a: 6/9/12/18/24/36/48/54 Mbps & Auto fallback - 802.11b: 1/2/5.5/11 Mbps & Auto fallback - 802.11g: 6/9/12/18/24/36/48/54 Mbps & Auto fallback																							



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	<ul style="list-style-type: none"> - 802.11an/gn(GI=400ns):7.2Mbps – 288.9Mbps(20MHz), 15Mbps – 600Mbps (40MHz) & Auto fallback - 802.11ac(GI=400ns): 7.2Mbps – 346.7Mbps(20MHz), 15Mbps – 800Mbps (40MHz),32.5Mbps-1733.3Mbps(80MHz/160MHz) & Auto fallback <p>Note:160MHz only support 2streams</p>			
Data modulation type	<ul style="list-style-type: none"> - IEEE 802.11 a/b/g DSSS (DBPSK, DQPSK, CCK) OFDM (BPSK, QPSK, 16-QAM, 64-QAM) - IEEE 802.11an/gn OFDM (BPSK, QPSK, 16-QAM, 64-QAM) - IEEE 802.11ac OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM) 			
Bandwidth	11n: HT20/40 11ac: VHT20/VHT40/VHT80/VHT160			
Current consumption (Input 48V)	< 25.5W			
ANT	Internal 2.4G *4, 5G*4 4.0dBi@2400MHz~2500MHz 5.0dBi@5150MHz~5850MHz			
RF Frequency	2.4G: 2412~2472 MHz (CH1~Ch13) 5G: Band1~Band4			
Output Power (Single chain) Tolerance ±2dB	2.4G	11b	1M	22 dBm
			11M	22 dBm
		11g	6M	22 dBm
			54M	19 dBm
		11n HT20	MCS0	22 dBm
			MCS7	19 dBm
	11n HT40	MCS0	22 dBm	
		MCS7	19 dBm	
	5G	11a	6M	22 dBm
			54M	20 dBm
11an HT20		MCS0	22 dBm	
		MCS7	20 dBm	



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		11an HT40	MCS0	22 dBm		
			MCS7	20 dBm		
		11ac VHT20	MCS0	22 dBm		
			MCS8	18 dBm		
		11ac VHT40	MCS0	22 dBm		
			MCS9	16 dBm		
		11ac VHT80	MCS0	21 dBm		
			MCS9	15 dBm		
		Sensitivity (Single chain)	2.4G	11g	6M	-91
					54M	-74
				11n HT20	MCS0	-90
					MCS7	-71
11n HT40	MCS0			-87		
	MCS7			-68		
5G	11a		6M	-90		
			54M	-74		
	11an HT20		MCS0	-90		
			MCS7	-70		
	11an HT40		MCS0	-88		
			MCS7	-68		
11ac VHT20	MCS0	-90				
	MCS8	-67				
11ac VHT40	MCS0	-88				
	MCS9	-61				
11ac VHT80	MCS0	-85				
	MCS9	-58				

2.2 Software Specification

The Software Specifications as below:

Table 2-2 Software Specification

Product Features	
Standard Compliance	- IEEE802.3u MDI / MDIX 10/100/1000Base-T Ethernet
	- IEEE802.11b/g/n wireless LAN standard



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	- IEEE 802.11a/an/ac wireless LAN standard
Standard Protocol	- TCP/IP , IPv4
	- IPX
	- NetBEUI
	- CAPWAP
Operating Mode	-Thin AP mode
	- Fat AP mode
TAP Mode	
AC Detection	- DHCP option43 , 60
	- DNS detection
	-Static IP detection
FIT AP Zero Configure	support
FAP Mode	
Forwarding Mode	Local forwarding
PPPoE	Support
DHCP Server	Support
Limitation of Client Connections	Support
IP and MAC Address Filtering	Support
DMZ Host	Support
Firewall	Support
System Log	Support
Traffic Statistics	Support
WLAN	
SSIDs	- 2.4GHz 8 SSID
	- 5.8GHz 8 SSID
VAP	- 2.4GHz 8 VAP
	- 5.8GHz 8 VAP
VLAN	Support
Flow Control	Support
Load Balance	Support
WMM	Support
Transmit Power Adjustment	Support



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Data Rate Selection	Support
Time Sever	Support
VPN Pass Through	Support
11n Functions	
HT Protection	Support
A-MPDU Aggregation	Support
A-MSDU Aggregation	Support
Short GI	Support
Extended Channel Mode	Support
Channel Mode	Support
WLAN Security	
Encryption	- 64/128-bits WEP
	- TKIP
	- AES
Authentication	- Open System
	- WPA-PSK/WPA2-PSK
	- 802.1X
	- WPA(2)
Wireless Isolation	Support
Hidden SSID	Support
MAC Access Control (ACL)	Support(1-256)
Web Portal Authentication	Provided by AC
Management	
CAPWAP	Support
SNMP MIB	Support (FAP Mode)
SNMP Trap	Support (FAP Mode)
CLI	Support SSH, Telnet
Web UI Management	Support
Fault Detection and Alarm	Support
Diagnosis Capabilities	
User List	Support



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Adjacent AP Scan	Support
IP Ping Test	Support
Port Statistics	Support

2.3 Physical Specification

The Physical specifications of the product are as below:

Table 2-3 Physical Specification

Items	Description
Dimension	215.83mm*215.85mm*43mm
Weight	≤ 800g

2.4 Environment specification

The Environment specifications of the product are as below:

Table 2-4 Environment Specification

Items	Device Description
Operating Temperature(Max)	-10° ~ +50°C
Operating Humidity (non-condensing)	10 to 90% RH
Storage Temperature	-20 ~ +70°C
Storage Humidity (non-condensing)	10 to 90% RH
Warranty	24 Months
Green	RoHs/REACH Compliant



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2.5 Safety/Country Approval

We will do EMI/EMC pre-test according to the following items:

Table 2-5 Safety/Country Approval

Category	Description	Remark
CE	-	Pre-test
FCC	-	Pre-test

2.6 Packaging Specification

The following items will be required for the complete packaging of the AC-1031:

Table 2-6 Package

Item	Comments
Carton	Suitable size and material to protect product
Gift Box / Cushion	Suitable size and material to protect product