

Product Highlights

- 802.11ac support
- 2.4GHz and 5GHz dual-band con-current
- 1300Mbps(5G) and 300Mbps(2.4G) of data rate
- Standard 802.3at Power over Ethernet (PoE)
- Multiple operating modes: TAP/FAP/Router
- Wall Mount and Ceiling Mount Design



AC-1027-I

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

AC-1027-I is a cost-effective IEEE 802.11 a/g/b/g/n/ac wireless cloud AP specially designed for industrial applications. With dual bands and internal antennas, it is applicable to user density scenarios. Working with zCloud platform, it can be centrally managed at anytime and anyplace. AC-1027-I can also be centrally managed by Z-Com wireless access controllers. Thanks to its ceiling design, AC-1027-I can be easily mounted to such places of wall and ceiling. With PoE remote power supply design, it is especially applicable for chain stores, large hotels, office buildings, super markets, hospitals and hotspots.



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Intelligent Management

Built in with cloud management module, AC-1027-I is able to be registered on Z-Cloud platform. Thus, network administrator can configure device and check device information through zCloud.

Comprehensive Security

AC-1027-I supports complete data security guarantee mechanism and multiple encryption technologies to thoroughly ensure WLAN data transmission security. It also supports up to 8 virtual APs. Each virtual AP can be set independent VLAN ID and users connected to each virtual AP are isolated from users in other virtual APs so as to ensure data security.

Industrial-grade Design

Specially designed for industrial applications, AC-1027-I guarantees WLAN operation for indoor applications. Z-Com's unique roaming and QoS utilization technology ensures the best service qualities of data, voice and video.

Simple Installation

Its design of fat-and-thin AP in one device makes remote and centralized configuration and management possible. The ceiling and internal antenna design makes AC-1027-I much easier to be installed to wall and ceiling. The standard 802.3af/at PoE enhance deployment flexibility and greatly reduces deployment difficulties and cost.



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Hardware Specifications

Features	Additional Information
Standard compliance	IEEE802.3u MDI / MDIX 10/100 Base-T Ethernet IEEE 802.ab 1000 Base-T Ethernet IEEE802.11b/g/n wireless LAN standard IEEE 802.11ac wireless LAN standard
Interfaces	2 * RJ45 support 10/100/1000Mbps 1 * DC Jack 1 * DIP switch (4-bit)
Ethernet Interface	2 * 10/100/1000 BASE-T RJ-45 Ethernet connector ● LAN1 for Power over Ethernet (802.3af/at) with Cat5/5e/6 cable
Antenna Gain	2 * 2G 5dBi PCB internal antenna 3 * 5G 5dBi PCB internal antenna
PoE support	IEEE 802.3af/at PoE support
LED definition	Power Error LAN1 LAN2 WLAN1 WLAN2
Power supply	Support POE 802.3af/at Support +5~30VDC
Current consumption	≤ 13W
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 - 802.11n: up to 300Mbps - 802.11ac: up to 1300Mbps
Data modulation type	- IEEE 802.11 a/b/g • DSSS (DBPSK, DQPSK, CCK) • OFDM (BPSK, QPSK, 16-QAM, 64-QAM) - IEEE 802.11gn • OFDM (BPSK, QPSK, 16-QAM, 64-QAM) - IEEE 802.11ac • OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)



<p>Operating Frequency & Channels</p>	<p>IEEE 802.11b/g/gn 20MHz ISM Band</p> <ul style="list-style-type: none"> USA (FCC): 2.412GHz~2.462GHz Europe (ETSI): 2.412GHz~2.472GHz <p>IEEE 802.11gn 40MHz Band</p> <ul style="list-style-type: none"> USA (FCC): 2.422GHz~2.452GHz Europe (ETSI): 2.422GHz~2.462GHz <p>IEEE 802.11a/an 20MHz/40MHz ISM Band</p> <ul style="list-style-type: none"> USA (FCC): 5.15GHz~5.25GHz; 5.725GHz~5.85GHz Europe (ETSI): 5.15GHz~5.35GHz; 5.47GHz~5.725GHz 			
<p>Target Power @ 25°C±2 dBm per chain</p>	<p>IEEE 802.11b</p>	<p>1~11Mbps (CH1-13) CH14</p>	<p>15 15</p>	
	<p>IEEE 802.11g</p>	<p>6~24Mbps 36Mbps 48Mbps 54Mbps</p>	<p>17 17 16 15</p>	
	<p>IEEE 802.11gn</p>	<p>HT20 HT40</p>	<p>MCS 0~6 MCS7 MCS 0~6 MCS7 14 12 14 12</p>	
<p>Target Power @ 25°C±2 dBm per chain</p>	<p>IEEE 802.11a</p>	<p>6~48Mbps 54Mbps</p>	<p>5240MHz 5260~5850MHz 17 20 5240MHz 5260~5850MHz 15 18</p>	
	<p>IEEE 802.11an</p>	<p>HT20 HT40</p>	<p>MCS 0~6 MCS7 MCS 0~6 MCS7 5240MHz 5260~5850MHz 17 20 5240MHz 5260~5850MHz 15 18 5240MHz 5260~5850MHz 17 20 5240MHz 5260~5850MHz 15 18</p>	
	<p>802.11ac</p>	<p>VHT20 VHT40 VHT80</p>	<p>MCS 0~6 MCS 7 MCS 8 MCS 0~6 MCS 7 MCS 8 MCS 9 MCS 0~6 MCS 7 5240MHz 5260~5850MHz 20 17 5240MHz 5260~5850MHz 15 18 5240MHz 5260~5850MHz 14 16 5240MHz 5260~5850MHz 13 17 5240MHz 5260~5850MHz 20 15</p>	



			5260~5850MHz	18	
		MCS 8	5240MHz	14	
			5260~5850MHz	16	
		MCS 9	5240~5850MHz	13	
Sensitivity (PER <10%, per chain>=Spec; dBm)	IEEE 802.11b	11Mbps		-89	
	IEEE 802.11g	6Mbps		-89	
		54Mbps		-75	
	IEEE 802.11gn	HT20	MCS0/8	-85	
			MCS7/15	-67	
		HT40	MCS0/8	-82	
MCS7/15			-64		
Sensitivity (PER <10%, per chain>=Spec; dBm)	IEEE 802.11a	6Mbps		-92	
		54Mbps		-75	
	IEEE 802.11an	HT20	MCS0	-92	
			MCS7	-74	
		HT40	MCS0	-89	
			MCS7	-69	
	IEEE 802.11ac	VHT20	MCS0	-90	
			MCS7	-70	
			MCS8	-66	
			MCS9	-64	
			VHT40	MCS0	-87
				MCS7	-67
		MCS8		-63	
		MCS9		-61	
		VHT80	MCS0	-84	
			MCS7	-64	
			MCS8	-60	
			MCS9	-58	

**Firmware Specification**

Features	Additional Information
Standard Compliance	<ul style="list-style-type: none">- IEEE 802.3 and 802.3u 10Base-T and 100Base-TX physical layer specification- IEEE 802.11g specification compliance for wireless LAN- IEEE 802.11b specification compliance for wireless LAN- IEEE 802.1x security standard support- Power over Ethernet, IEEE 802.3at compliant
Operating Mode	<ul style="list-style-type: none">- Thin AP mode- Fat AP mode- Router mode
Thin AP	<ul style="list-style-type: none">- FIT AP zero configuration- DHCP option43- DHCP detection- Static IP detection- N backup
Router Features	<ul style="list-style-type: none">- WAN port / LAN port networking setting- WAN port PPPoE function- NAT support- Firewall protection support MAC address filtering and IP address Filtering
Multiple BSSID	<ul style="list-style-type: none">- Support up to 16 SSID Profile setting- Support up to 4 Strict Priority Queue at least and configuration of certain SSID corresponding to Strict Priority Queue so as to distinguish link service priority- Limitation of client connections (# is configurable, default: unlimited)- Bandwidth control
Spanning Tree Protocol	802.1d support
DHCP Client	<ul style="list-style-type: none">- Ability to act as a DHCP client to get IP address from DHCP server from LAN port.- In DHCP client mode, if DHCP server is not available, then use default IP address.
DHCP Server	<ul style="list-style-type: none">- Allow DHCP servers to assign, or lease, IP addresses to computers and other devices that are enabled as DHCP clients.
VLAN	<ul style="list-style-type: none">- Support per SSID VLAN tagging- Support system VLAN tagging
VPN pass through	<ul style="list-style-type: none">- IPSec, PPTP and L2TP pass through support
Transmit Power Adjustment	<ul style="list-style-type: none">- Manually adjustable



	<ul style="list-style-type: none"> • Transmit power adjustable unit should be 1dBm • Transmit power adjustable range should be at least 8dB
Device Remote Management	<ul style="list-style-type: none"> - Support remote management via SSH, FTP, WWW, and SNMP - Administrator can specify the following method to allow for device management: <ul style="list-style-type: none"> • Interface (WLAN or Ethernet) • MAC address • IP address
System monitoring	<ul style="list-style-type: none"> - System status
Management	<ul style="list-style-type: none"> - Embedded Web Configuration management - Command-line interface: SSH support - FTP/Web for firmware downloading and configuration backup and restore. - Built-in Diagnostic Tool - SNMP Management (v1, v2C, C3)
Security	<ul style="list-style-type: none"> - MAC address filtering through WLAN (support 128 account) - IEEE 802.1x security (EAP-TLS, EAP-TTLS, PEAP, EAP-SIM, -FAST, -AKA) - 64/128-bits WEP - Both WPA/WPA2 PSK & Enterprise support - Mixed WPA& WPA2 mode (support both WPA and WPA2 clients)
Quality of Service	WMM support
Diagnostics Capabilities	<ul style="list-style-type: none"> - The access point can perform self-diagnostic tests. These tests check the integrity of the following circuits: <ul style="list-style-type: none"> • FLASH memory • DRAM • Ethernet port • Wireless port - Sys log <ul style="list-style-type: none"> • Error log • Trace log • Packet Log
Association Management	- 5G Priority: In a dual-band AP, 5GHz band has a higher STA association priority than 2.4GHz band.
	- 11n Priority: 802.11n standard gets a higher association priority than 802.11a/b/g standards
	- Support Air Time Fairness for clients compliant to different standards of 802.11a/b/g/n.
	- Support the setting of automatic Disassociation with low-level



	MCS users.
Integrated Spectrum Analyzer	<ul style="list-style-type: none">- Ability to detect interference source and avoid interference by automatically selecting the best channel .<ul style="list-style-type: none">• Ability to detect WLAN Devices Interference• Ability to detect Non WLAN Devices Interference
Newly-added MIB Nodes	<ul style="list-style-type: none">- wlanStationTable<ul style="list-style-type: none">• SNR (Signal-to-Noise Ratio) of STAs associated to AP should be measured in dB.• Physical layer Transmit Rate of STAs associated to AP• Packet Error Ratio of STAs associated to AP
	<ul style="list-style-type: none">- wlanStatisticTable<ul style="list-style-type: none">• Co-Channel Interference, CCI• Adjacent Channel Interference, ACI• WLAN Devices Interference• Non WLAN Devices Interference



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Physical Specification

Items	Description
Dimension	215 (L) mm x 215 (D) mm x 50 (H) mm
Weight	500g
Mounting type	Ceiling mount

Environment Specification

Items	Description	Power Adapter Spec
Operating Temperature	0 to 45°C	0 ~ 40°C
Storage Temperature	-10 to 55°C	-10 ~ 75°C
Operating Humidity	10 to 90% RH	10 to 90% RH
Storage Humidity	10 to 90% RH	10 to 90% RH
Green	RoHS & Reach compliant	
Warranty	2 years	

Safety/Country Approval

Items	Description
FCC	Part15 sub B Part15 sub C Part15 sub E
CE	EN301893 V1.7.1 EN300328 V1.8.1 EN301489 -1/-17 EN55022/24 EN60950-1

Packaging Specifications

Item	Comments
Carton	Suitable size and material to protect product
Brown Box	Suitable size and material to protect product
Cushion	Suitable size and material to protect product
PE Bag	Suitable size and material to protect product
Mounting Kit	Suitable size and material to protect product