

ZN-7100-2DHO

Product Specification



IEEE 802.11 a/b/g/n Dual Band 2x2 Indoor
Wireless Access Point

2. Specifications

2.1 Hardware Specifications

Table 1 Hardware Specifications

Features	Additional Information
Chipset	CPU: AR9342 + AR9382 Ethernet PHY: AR8035
SPI Flash	16Mbyte
Memory (DDR II)	64Mbyte
Standard compliance	IEEE 802.3u MDI / MDIX 10/100 Base-T Ethernet IEEE 802.3ab 1000 Base-T Ethernet IEEE 802.11a/b/g/n wireless LAN standard
Interfaces	1 RJ45 support 10/100/1000Mbps 1 Reset button 1 DC Jack
Ethernet Interface	1 * 10/100/1000 BASE-T RJ-45 Ethernet connector
PoE support	IEEE 802.3at support (Class4)
Reset button	Resets the device to factory default
HW Watchdog	IC EM6324QYSP5B (Cycle detection time:25s)
LED definition	POWER Off: Power off On: Power on
	LAN Off: Ethernet disconnected On: Ethernet connected Blinking: Transmitting/receiving data
	WLAN1 Off: 2.4G Radio disabled On: 2.4G Radio enabled Blinking: Transmitting/receiving data
	WLAN2 Off: 5G Radio disabled On: 5G Radio enabled Blinking: Transmitting/receiving data
Power supply	- Support POE 802.3at - Support +48V PTE
Power requirement	Support POE 802.3at <ul style="list-style-type: none"> • Output: +48V DC@0.5A • Input: 100~240V AC, 50/60Hz Support +48V PTE <ul style="list-style-type: none"> • Output >+48V DC@0.5A • Input: 100~240V AC, 50/60Hz
Current Consumption (Input 48V)	≤25W
Anti-Static Grade	IEC61000-4-2(B) Contact discharge: 4KV Air discharge: 8KV
Data Rate	- <u>802.11a</u> : 6/9/12/18/24/36/48/54 Mbps & Auto Fallback - <u>802.11b</u> : 1/2/5.5/11 Mbps & Auto Fallback - <u>802.11g</u> : 6/9/12/18/24/36/48/54 Mbps & Auto Fallback - <u>802.11n</u> : 6/6.5/13/13.5/19.5/26/27/39/40.5/52/54/58.5/65/78/81/104/108 /117/121.5/130/135/162/216/243/270/300Mbps

Data Modulation Type	IEEE 802.11a/b/g <ul style="list-style-type: none"> • DSSS (DBPSK, DQPSK, CCK) • OFDM (BPSK, QPSK, 16-QAM, 64-QAM) IEEE 802.11n <ul style="list-style-type: none"> • OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 		
Operating Frequency & Channels	IEEE 802.11b/g/n 20MHz ISM Band <ul style="list-style-type: none"> • USA (FCC): 2.412GHz~2.462GHz • Europe (ETSI): 2.412GHz~2.472GHz • Japan (ARIB): 2.412GHz~2.472GHz IEEE 802.11gn 40MHz Band <ul style="list-style-type: none"> • USA (FCC): 2.422GHz~2.452GHz • Europe (ETSI): 2.422GHz~2.462GHz • Japan (ARIB): 2.422GHz~2.462GHz IEEE 802.11a/an 20MHz ISM Band <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 • Japan (ARIB): 5.15GHz~5.35GHz; 5.47GHz~5.725GHz 		
RF1 (2.4GHz)			
Output Power ¹	802.11b	20 dBm @ 1Mbps 20 dBm @ 2Mbps 20 dBm @ 5.5Mbps 20 dBm @ 11Mbps	
	802.11g	20 dBm @ 6Mbps 20 dBm @ 9Mbps 20 dBm @ 12Mbps 20 dBm @ 18Mbps 20 dBm @ 24Mbps 20 dBm @ 36Mbps 20 dBm @ 48Mbps 20 dBm @ 54Mbps	
	802.11gn	HT20 23 dBm @ MCS0/8 23 dBm @ MCS1/9 23 dBm @ MCS2/10 23 dBm @ MCS3/11 23 dBm @ MCS4/12 23 dBm @ MCS5/13 23 dBm @ MCS6/14 23 dBm @ MCS7/15	HT40 23 dBm @ MCS0/8 23 dBm @ MCS1/9 23 dBm @ MCS2/10 23 dBm @ MCS3/11 23 dBm @ MCS4/12 23 dBm @ MCS5/13 23 dBm @ MCS6/14 23 dBm @ MCS7/15
Sensitivity	802.11b	-90dBm @ 11Mbps	
	802.11g	-94dBm @ 6Mbps -93dBm @ 9Mbps -90dBm @ 12Mbps -88dBm @ 18Mbps -85dBm @ 24Mbps -81dBm @ 36Mbps -76dBm @ 48Mbps -75dBm @ 54Mbps	

	802.11gn	HT20 -94dBm @MCS0/8 -89dBm @MCS1/9 -87dBm @MCS2/10 -84dBm @MCS3/11 -80dBm @MCS4/12 -76dBm @MCS5/13 -75dBm @MCS6/14 -74dBm @MCS7/15	HT40 -91dBm @MCS0/8 -86dBm @MCS1/9 -84dBm @MCS2/10 -81dBm @MCS3/11 -77dBm @MCS4/12 -73dBm @MCS5/13 -72dBm @MCS6/14 -71dBm @MCS7/15
RF2 (5GHz)			
Output Power ¹	802.11a	20 dBm @6Mbps 20 dBm @9Mbps 20 dBm @12Mbps 20 dBm @18Mbps 20 dBm @24Mbps 20 dBm @36Mbps 20 dBm @48Mbps 20 dBm @54Mbps	
	802.11an	HT20 23 dBm @MCS0/8 23 dBm @MCS1/9 23 dBm @MCS2/10 23 dBm @MCS3/11 23 dBm @MCS4/12 23 dBm @MCS5/13 23 dBm @MCS6/14 23 dBm @MCS7/15	HT40 23 dBm @MCS0/8 23 dBm @MCS1/9 23 dBm @MCS2/10 23 dBm @MCS3/11 23 dBm @MCS4/12 23 dBm @MCS5/13 23 dBm @MCS6/14 23 dBm @MCS7/15
Sensitivity	802.11a	-94dBm @6Mbps -93dBm @9Mbps -90dBm @12Mbps -88dBm @18Mbps -85dBm @24Mbps -81dBm @36Mbps -76dBm @48Mbps -75dBm @54Mbps	
	802.11an	HT20 -94dBm @MCS0/8 -89dBm @MCS1/9 -87dBm @MCS2/10 -84dBm @MCS3/11 -80dBm @MCS4/12 -76dBm @MCS5/13 -75dBm @MCS6/14 -74dBm @MCS7/15	HT40 -91dBm @MCS0/8 -86dBm @MCS1/9 -84dBm @MCS2/10 -81dBm @MCS3/11 -77dBm @MCS4/12 -73dBm @MCS5/13 -72dBm @MCS6/14 -71dBm @MCS7/15

1. We just list the Target Power here, the exact EMI Conducted Power will be set in the CTL Table of the Radio (base on EMC regulation), and the driver will limit the output power according to the CTL Table, therefore at times the actual output power will be lower than the target power. For the detailed CTL Table Settings, please contact our support engineers.

2.2 Software Specifications

Table 2 Software Specifications

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
Thin AP	<ul style="list-style-type: none"> - FIT AP zero configuration - DHCP option43, 82 - DHCP detection - DNS detection - Static IP detection
Multiple BSSID	<ul style="list-style-type: none"> - Supports up to 16 SSID Profile settings - Supports up to 4 Strict Priority Queue 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"> - Client will get IP address from DHCP server from LAN port. - In DHCP client mode, if DHCP server is not available, CPE client will use default IP address.
VLAN	<ul style="list-style-type: none"> - Supports per SSID VLAN tagging - Supports system VLAN tagging
VPN Passthrough	<ul style="list-style-type: none"> - PPTP Passthrough support - Support in AP and WDS modes, but not in client mode.
Captive Portal	<ul style="list-style-type: none"> - Directs users to authenticate on a designated web page
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 6dB
Device Remote Management	<ul style="list-style-type: none"> - Supports remote management via SSH, FTP, HTTP, and SNMP - Administrator can specify the following methods 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 HTTP configuration management - Command-line interface: SSH support - TFTP/HTTP for firmware downloading, configuration backup and restore. - Built-in Diagnostic Tool - SNMP Management v1, v2C

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)
QoS	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
	- Supports Air Time Fairness for clients compliant to different standards of 802.11a/b/g/n.
Integrated Spectrum Analyzer	<ul style="list-style-type: none"> - Detects and avoids interference by automatically selecting a clear 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"> - WLAN Statistic Table <ul style="list-style-type: none"> • Co-Channel Interference, CCI • Adjacent Channel Interference, ACI • WLAN Devices Interference

2.3 Physical Specifications

Table 3 Physical Specifications

Items	Description
Dimension	213 (L) mm x 170(D) mm x39 (H) mm
Weight	500g
Housing Color	White

2.4 Environmental Specifications

Table 4 Environmental Specifications

Items	Description	Power Adapter Spec
Operating Temperature	0 to 50°C	0 ~ 40°C
Storage Temperature	-10 to 55°C	-20 ~ 85°C
Operating Humidity	15 to 90% RH (non-condensing)	20 to 90% RH
Storage Humidity	15 to 90% RH (non-condensing)	20 to 95% RH
Green	RoHS compliant	
Warranty	2 years	