

# Skyport ZCN-1523H-2-8 2.4Ghz Outdoor CPE

IEEE 802.11b/g/n

Today's wireless market, more specifically the outdoor wireless market, continues to demand higher transmit power, greater dependability and advanced feature sets, all while keeping the client-side cost down. To that end, Zcomax has released it's latest line of customer premise equipment developed for the unlicensed 2.4GHz ISM band, the Skyport ZCN-1523H-2-8.

The ZCN-1523H-2-8 is an all-in-one cost-effective, weatherproof wireless device featuring high output power as well as all the essential features for both operating as an Access Point or a CPE Client. This dual approach offers greater flexibility and reduced inventory stock as this unit can perform all that is required for establishing reliable wireless networks. The Skyport ZCN-1523H-2-8 is unique in that it includes an 8dBi directional antenna for any point-to-point connection needs and when more power or coverage is required you can bypass the integrated antenna and connect a higher gain antenna to its N-male type RF connector\*.

Please contact a sales representative for more information on samples, promotional pricing and availability on the Skyport series or any other Zcomax wireless products.

\*for antenna limits please check with the regulations in your area

## ZCN-1523H-2-8 at a Glance

<b>Chipset</b>	Atheros AR9285/AR7240
<b>Transmit Power</b>	26 dBm
<b>Receive Sensitivity</b>	-90 dBm @ 6 Mbps data rate
<b>Antenna (Software selectable)</b>	8 dBi Panel antenna
	N-male type antenna connector

IEEE	Radio	RoHS	Interface
			



## ZCN-1523H-2-8 Highlights

### Key Features

- IEEE 802.11b/g/n compliant
- Up to 26dBm output power
- WPA / WPA2 wireless security
- RoHS compliant
- Adjustable output power
- Chipset: Atheros AR9002 Family
  - CPU: Atheros AR7240
  - RF: Atheros AR9285
- Atheros Align technology
- Software selectable RF output
  - Integrated 8dBi antenna
  - N type male connector

Radio Specification				
Chipset Solution	RF: Atheros AR9285   CPU: AR7240 (400MHz)			
Antenna – Default configuration	8dBi integrated directional antenna (vertical pol.)			
External RF connector	N type male connector – switchable by software			
Antenna Configuration	1 * 1 (1 Tx, 1 Rx)			
Memory	<b>Flash</b>		<b>DDR</b>	
	8MB		32MB	
Modulation	OFDM: BPSK, QPSK, 16-QAM, 64-QAM / DSSS: DBPSK, DQPSK, CCK			
Available Data Rates (Mbps)	IEEE 802.11b – 11, 5.5, 2, 1			
	IEEE 802.11g – 54, 48, 36, 24, 18, 12, 9, 6			
	IEEE 802.11n (draft) – 135, 130, 121.5, 117, 108, 104, 81, 78, 65, 58.5, 54, 53, 40.5, 39, 27, 26, 19.5, 13.5, 13, 6.5, 6			
RF Frequency	<b>USA (FCC)</b>		<b>Europe (ETSI)</b>	
	2.412GHz – 2.462GHz (Channels 1-11)		2.412GHz – 2.472GHz (Channels 1-13)	
	<b>IEEE 802.11gn HT40 ISM band</b>			
	2.422Ghz – 2.452GHz (Channels 3-9)		2.422Ghz – 2.462GHz (Channels 3-11)	
Average RF Output Power ( $\pm 1.5\text{dB}$ )* <i>*actual power may vary based on regulatory requirements</i>	802.11b	26 $\pm$ 1.5dBm		
	802.11g	6-24Mbps	26 $\pm$ 1.5dBm	
		36-48Mbps	25 $\pm$ 1.5dBm	
		54Mbps	24 $\pm$ 1.5dBm	
	802.11n	HT20	MCS 0-3	26 $\pm$ 1.5dBm
			MCS 4	25 $\pm$ 1.5dBm
			MCS 5	24 $\pm$ 1.5dBm
			MCS 6	23 $\pm$ 1.5dBm
			MCS 7	22 $\pm$ 1.5dBm
		HT40	MCS 0-3	26 $\pm$ 1.5dBm
			MCS 4	25 $\pm$ 1.5dBm
			MCS 5	23 $\pm$ 1.5dBm
			MCS 6	22 $\pm$ 1.5dBm
MCS 7			21 $\pm$ 1.5dBm	
Receiver Sensitivity	<b>802.11b</b>	<b>802.11g</b>	<b>802.11n</b>	
	1Mbps: $\leq -93\text{dBm}$	54Mbps: $\leq -73\text{dBm}$	HT20/MSC0 $\leq 88\text{dBm}$	
			HT40/MSC0 $\leq 84\text{dBm}$	
Regulatory Compliance	FCC Part 15, CE EN300 328, EN301 489-1/17, EN60950			
Standards Compliance	IEEE 802.11bgn, WiFi certificate			

Physical Specification	
Dimension	165mm(l)x60mm(w)x34mm(h)
Weight	$\leq 400\text{g}$
Enclosure	IP55 Plastic

Electrical Specification	
Reset Button	Reset to factory default
Power Requirements	12VDC @ 1 A (switching)
PoE	Passive 12V PoE
Power Consumption	≤ 900mA @ 12VDC
LED Definition	Power: Green on = system on, Green off = system off, Amber blinking = Initializing
	LAN: Off = no Ethernet, On = connection established, Blinking = sending, receiving
	WLAN (AP Mode) Off = disabled, On = WLAN enabled, Blinking = WLAN activity
	WLAN (Client Mode) All Off = WLAN disabled, Green blinking = good connection Yellow blinking = Acceptable quality, Red blinking = poor connection quality

Environmental Specification	
Operating Temperature	-20°C ~ 70°C
Storage Temperature	-30°C ~ 80°C
Operating Humidity (non-condensing)	10 to 95 % RH
Green	RoHs Compliant

Firmware Specification			
Function		Detail	Default setting
Web Language		English	English
Firmware Upgrade Method		Web upgrade via Ethernet or Wireless port / TFTP upgrade via Ethernet port	
Status		Information	
		Statistics for Wireless and Ethernet	
		Connection status	
System	Basic Settings	Device Name	APXXXXXX
		Country/Domain	USA FCC
		Time NTP	Disable
	IP Settings	IP Address assignment (DHCP/Manual)	DHCP / 192.168.1.1, DHCP is the default, however when server is not present the unit reverts to 192.168.1.1
	RADIUS	Accounting and Authentication	Disable
Wireless	Basic Wireless Settings	Operation mode (AP / CPE)	AP
		AP mode functions	
		1. SSID	Wireless
		2. Hide SSID (enable/disable)	Disable
		3. Channel select (1-11)	1
		4. Client limitations (0~32)	32
		5. Wireless client isolation (enable/disable)	Disable
		6. Tx flow control (1~2400*64Kbps)	1687
		Client mode functions	
1. SSID	Any		

		2. CPE with Multi-Client support	Enable
		3. Tx Flow control by AP (enable/disable)	Disable
		Wireless mode	802.11b/g/n
		Data Rate Selection 1-54Mbps & MCS0-7	Best
	Security Settings	<ul style="list-style-type: none"> <li>• Open system</li> <li>• Shared Key (64/128/152-bits WEP)</li> <li>• 802.1X only</li> <li>• WPA</li> <li>• WPA2</li> <li>• WPA-PSK(TKIP)</li> <li>• WPA2-PSK(AES)</li> </ul>	Open System
Access Control	Allow / Deny STA list STA Flow control for allowed stations	Disable	

Firmware Specification			
Function		Detail	Default setting
System	Advanced Settings	Radio on / off	On
		<ul style="list-style-type: none"> <li>• Allow / Deny Station list</li> <li>• Station Flow control for allowed stations</li> </ul> Supports up to 32 stations	Disable
		WMM Regatta Mode (enable/disable)	Disable
		Output power control: Options (full, 50%, 25%, 12.5%, min)	Full
		Fragmentation Length (256~2346)	2346
		Beacon Interval (20 ~ 10000ms)	100
		RTS/CTS threshold (0~2346)	2346
		DTIM Interval (1-255)	255
Management	Password	Change Password	Password
	Remote Management	Embedded Web configuration management	Enable
		Telnet support (password-protected telnet access to internal configuration manager)	Enable
		SNMP management	Enable
	Configuration	<ul style="list-style-type: none"> <li>• Web backup and restore configuration</li> <li>• Reset to factory default</li> <li>• Reboot</li> </ul>	
Tools	Event Log		
	Site Survey		

Warranty Information	
Time covered	1 Year from time of purchase
Terms	Repair or replacement