

# XA-623AH IEEE802.11a mPCI Card

AirRunner™ WiFi Series

In the mPCI marketplace there is strong direction towards high output power products. To that end Zcomax offers the XA-623AH as an 802.11a mPCI card, offering excellent output power performance coupled with an equally robust receive circuit to handle today's bandwidth, speed and reliability requirements. Performance and quality cannot be understated in this segment of the wireless market and so we invite you to look at this exciting wireless module.



The XA-623AH operates in the license exempt\* WiFi bands from 5.2GHz to 5.8GHz and features the excellent reliability and wide support of an Atheros chipset. An industrial temperature range also allows freedom for implementation in even the most demanding environments. Added to the exceptional performance of this radio, we're certain it will meet and exceed your expectations.

For more details such as availability, samples and pricing in regards to the XA-623AH or any other of our wireless products, please contact a sales representative today.

\* based on FCC regulations, Please check your local regulations to determine the channel allocation for your area.

## XA-623AH mPCI Module

### Key Features

- 32-bit mPCI Interface Type III A
- High 25dBm (average) Tx power
- Uses the popular Atheros AR5414A chipset
- RoHS compliant
- Atheros "Super A" features boost connection speed to 108Mbps
- Robust temperature range between -20° and 75° C

### XA-623AH at a Glance

<b>Chipset</b>	Atheros AR5414A (single chip)
<b>Transmit Power</b>	25 dBm @ 6 Mbps data rate
<b>Receive Sensitivity</b>	-90 dBm @ 6 Mbps data rate
<b>Antenna Connector</b>	2 MMCX-RP antenna connectors

IEEE	Radio	RoHS	Interface
			

Radio Specification			
Standard	IEEE 802.11a compliant		
Modulation	OFDM: BPSK, QPSK, 16-QAM, 64-QAM		
RF Frequency	<b>USA (FCC)</b>	<b>Europe (ETSI)</b>	<b>Japan (TELEC)</b>
	5.15GHz – 5.35GHz	5.15GHz – 5.35GHz	5.15GHz – 5.25GHz
	5.47GHz ~ 5850GHz	5.47GHz – 5.725GHz	5.25GHz ~ 5.35GHz
RF Output Power (± 1.5dB)	<b>Data rate</b>	<b>U-NII 1</b>	<b>U-NII 2</b>
	6 ~ 24Mbps	20dBm	23dBm
	36Mbps	19dBm	22dBm
	48Mbps	18dBm	21dBm
	54Mbps	17dBm	18dBm
Receiver Sensitivity	<b>802.11a</b>		
	≤ -90dBm @ 6Mbps		
	≤ -88dBm @ 9Mbps		
	≤ -86dBm @ 12Mbps		
	≤ -84dBm @ 18Mbps		
	≤ -82dBm @ 24Mbps		
	≤ -78dBm @36/bps		
	≤ -75dBm @486mbps		
≤ -72dBm @54mbps			
Antenna Connector	Two MMCX-RP connectors as primary and secondary		

Security	
WPA2/WPA/WEK	Supports all the latest Atheros security features

Physical Specification	
Interface	32-bit Mini PCI, Type III A
Dimensions	59.6mm x 46.2mm x 4.15mm
Weight	≤ 50g
Operating voltage	DC 3.3V ± 5%
Working Temperature	-20°C to 75°C, 90% relative humidity (non-condensing)
Storage Temperature	-40°C to 85°C, 95% relative humidity (non-condensing)
Lead Free	RoHS Compliant
Power Consumption	<b>Transmit</b>
	≤ 1.5A
	<b>Receive</b>
	≤ 600mA

Warranty	
Warranty Period	1 Year limited warranty from the date of purchase