

XA-623AH-49 IEEE802.11a mPCI Card

AirRunner™ WiFi Series

Taking advantage of the 4.9GHz frequency allocation for the Public Safety Band, Zcomax has extended the capabilities of their high-powered 802.11a mini PCI card. The XA-623AH-49 offers excellent output power performance coupled with an equally robust receive circuit to handle today's bandwidth, speed and reliability requirements.

The XA-623AH-49 operates in the license exempt* WiFi bands from 5.2GHz to 5.8GHz and now in the 4.9GHz Public Safety Band. It also features the excellent reliability and wide support of an Atheros chipset. An extended temperature range also allows freedom for implementation in even the most demanding environments. With the rich features and 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-49 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-49 mPCI Module

Key Features

- 4.9GHz – 5-8GHz frequency range in the Public Safety Band
- 32-bit mPCI Interface Type III A
- High 25dBm (avg) Tx power
- Atheros AR5006XS family
- Atheros AR5414A chipset
- RoHS compliant
- Atheros “Super A” boosts connection speed to 108Mbps
- Robust temperature range between -20° and 75° C

XA-623AH-49 at a Glance

Chipset	Atheros AR5414A (single chip)
Transmit Power	25 dBm @ 6 Mbps data rate
Receive Sensitivity	-90 dBm @ 6 Mbps data rate
Antenna Connector	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	USA (FCC)	Europe (ETSI)	Japan (TELEC)	Available
	5.15GHz – 5.35GHz	5.15GHz – 5.35GHz	5.15GHz – 5.25GHz	4.92GHz – 5.825GHz
	5.47GHz ~ 5850GHz	5.47GHz – 5.725GHz	5.25GHz ~ 5.35GHz	
RF Output Power (± 1.5dB)	Data rate	U-NII 1	U-NII 2	UNII 3
	6 ~ 24Mbps	25dBm	25dBm	25dBm
	36Mbps	22dBm	22dBm	22dBm
	48Mbps	20dBm	20dBm	20dBm
	54Mbps	18dBm	19dBm	19dBm
Receiver Sensitivity	802.11a			
	≤ -90dBm @ 6 Mbps			
	≤ -88dBm @ 9 Mbps			
	≤ -86dBm @ 12 Mbps			
	≤ -84dBm @ 18 Mbps			
	≤ -82dBm @ 24 Mbps			
	≤ -78dBm @ 36 Mbps			
	≤ -75dBm @ 48 Mbps			
≤ -72dBm @ 54 Mbps				
Antenna Connector	Two MMCX connectors as primary and secondary			

Security	
WPA2/WPA/WEP	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	Transmit	Receive
	≤ 1.5A	≤ 600mA

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