

## AN-621 IEEE 802.11a/b/g/n 2.4GHz and 5GHz Mini PCI Module AirRunner™ WiFi Series

The AN-621 is Zcomax latest 802.11a/b/g/n wireless mini PCI adapter that delivers incomparable wireless performance no matter what the host platform is. The IEEE 802.11a/b/g/n draft 2.0 compliant mini PCI adapter supports a throughput rate of up to 300Mbps, providing Ethernet equivalent speeds to your applications. Once connected, your device can share a high-speed Internet connection, photos, files, music, videos, printers, and storage just like a wired connection.



The AN-621 operates in the license exempt WiFi bands from 5.2GHz to 5.8GHz in IEEE 802.11a networks and 2.4GHz while operating in IEEE 802.11b/g networks. Utilizing the MIMO (Multiple-input multiple-output) design implementation, the AN-621 provides 3 U.FL-R SMT Compliant antenna connectors which ensure quick and easy implementation into your existing setup or developing product.

The AN-621 offers the flexibility of the mini PCI design, the reliability and performance of an Atheros based chipset and the quality you expect from a Zcomax product. We're sure you'll be pleased with this product. For more information on this or any other Zcomax product please contact your sales representative today.

### AN-621 mPCI Module

#### Key Features

- High-speed networking (802.11n) , data rates up to 300Mbps @ 40MHz bandwidth
- Multiple-Input-Multiple-Output (MIMO) technology using 3\*3 architecture
- IEEE 802.11a/b/g/n
- RoHS compliant
- Chipset: Based on Atheros AR9001
- MAC / Baseband: Atheros AR9160
- Radio: Atheros AR9106

#### AN-621 at a Glance

<b>Chipset</b>	Atheros AR9160/AR9106
<b>Transmit Power</b>	18 dBm (11a); 17dBm (11g)
<b>Receive Sensitivity</b>	≤ -80 dBm @ 11 Mbps data rate
<b>Antenna Configuration</b>	3 Tx, 3 Rx Architecture

IEEE	Radio	RoHS	Interface

Radio Specification				
Standard	IEEE 802.11a/b/g/n (draft 2.0) compliant			
Chipset	Atheros AR9160/AR9106 3 TX , 3 RX Architecture			
Modulation	DSS: CCK, DQPSK, DBPSK			
	OFDM: BPSK, QPSK, 16-QAM, 64-QAM			
	11n: BPSK, QPSK, 16-QAM, 64-QAM			
RF Frequency	<b>USA (FCC)</b>	<b>Europe (ETSI)</b>	<b>Japan (TELEC)</b>	
IEEE 802.11a ISM Band	5.15GHz – 5.35GHz	5.15GHz – 5.35GHz	5.15GHz – 5.25GHz	
	5.47GHz ~ 5850GHz	5.47GHz – 5.725GHz	5.25GHz ~ 5.35GHz	
IEEE 802.11b/g ISM Band	2.412GHz ~ 2.462GHz	2.412GHz ~ 2.472GHz	2.412GHz ~ 2.472GHz	
IEEE 802.11gn 20MHz band	2.412GHz ~ 2.462GHz	2.412GHz ~ 2.472GHz	2.412GHz ~ 2.472GHz	
IEEE 802.11gn 40MHz band	2.422GHz ~ 2.452GHz	2.422GHz ~ 2.462GHz	2.422GHz ~ 2.462GHz	
RF Output Power (± 2dB)	<b>IEEE 802.11b</b>	17dBm (1 antenna)		
	<b>IEEE 802.11g</b>	14dBm (1 antenna)		
	<b>IEEE 802.11gn</b>	HT20	17dBm (3 antennas)	
		HT40	13dBm (3 antennas)	
	<b>IEEE 802.11a</b>	5150~5250MHz	12dBm (1 antenna)	
		5250~5850MHz	18dBm (1 antenna)	
	<b>IEEE 802.11an HT20</b>	5150~5250MHz	12dBm (3 antennas)	
		5250~5850MHz	18dBm (3 antennas)	
<b>IEEE 802.11an HT40</b>	5150~5250MHz	12dBm (3 antennas)		
	5250~5850MHz	18dBm (3 antennas)		
Receiver Sensitivity	<b>IEEE 802.11a/g</b>	<b>IEEE 802.11b</b>	<b>IEEE 802.11an/gn</b>	
	-72dBm @ 54Mbps	-80dBm @ 11Mbps	-67dBm @ HT20 (MCS15)	
Antenna Design	3Tx 3Rx – 3 U.FL-R SMT Compliant Connectors			
Power Consumption	IEEE 802.11a/b/g/n Tx ≤ 600mA, Rx ≤ 600mA			

Physical Specification	
Interface	32-bit Mini PCI
Dimensions	59.75mm x 51.1mm x 5.125mm
Weight	≤ 50g
Operating voltage	DC 3.3V ± 5%
Working Temperature	0°C to 55°C, < 80% relative humidity (non-condensing)
Storage Temperature	-20°C to 80°C, 5-90% relative humidity (non-condensing)
Green Information	RoHS Compliant

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