



## High Power 11a/b/g mini-PCI Card ETC-WL017A

The WLAN mini-PCI network card is compact, lightweight, high performance and high output power. Built on Atheros AR5414 chipset with Super AG feature (data rate 108Mbps), it can be used for all IEEE 802.11 a/b/g WLAN and is ideally suited for integration in a wide range of OEM device.

It offers a high output power of 20~24dBm on 802.11a, 23~28dBm on 802.11g and 28dBm on 802.11b. The WLAN mini-PCI also supports a variety of security features such as WEP, AES, receive and transmit filtering, error recovery, quality of service (QOS) as well as IEEE 801.1X standard, thus providing security to the wireless network and increase WLAN performance.

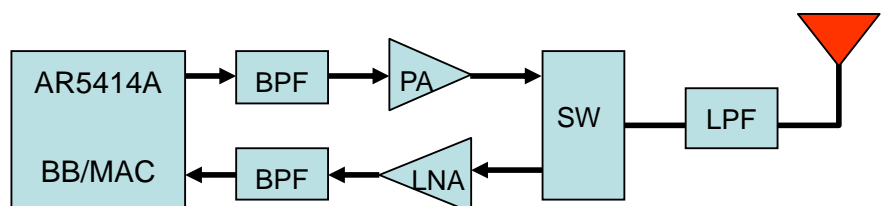
It is also available in different mode which delivers better performance at high throughput for your network connectivity.

- **IEEE 802.11a/b/g compliance**
- **600mW Max High Output Power**
- **Super AG mode includes dynamic 108 Mbps capability**
- **Affordable and ideal for a variety of applications**

### Features

- 2.4/5GHz IEEE 802.11a, 802.b, 802.11g standard
- High output Power of 802.11a/b/g
- WiFi Protected Access Client Support (WPA) and IEEE 802.11i security specifications, provides Advanced Encryption Standard(AES), Temporal Key Integrity Protocol (TKIP) and Wired Equivalent Privacy(WEP) without performance degradation
- Super AG mode includes dynamic 108 Mbps capability, real-time hardware data compression, Fast Frames and standard-compliant bursting
- PCI 2.3 and PC Card 7.1 host interface with DMA support
- Dynamic frequency selection/transmit power control (DFS/TPC) for international operation
- Support for draft IEEE 802.11e,h,i and j standards

### Diagram



### Applications

- Infrastructure Network
- Embedded system or OEM device

# ETC-WL017A High Power 11a/b/g mini-PCI Card Specification

## PRODUCT DESCRIPTION

IEEE 802.11a/b/g High Power Wireless LAN Mini-PCI Card

## OUTPUT POWER ( $\pm 2$ dB)

802.11a	24dBm@6~24Mbps	Super A	24dBm@6~24Mbps
	22dBm@36Mbps		22dBm@36Mbps
	21dBm@48Mbps		21dBm@48Mbps
	20dBm@54Mbps		20dBm@54Mbps
802.11b	28dBm@11Mbps		
802.11g	28dBm@6~24Mbps	Super G	28dBm@6~24Mbps (Peak)
	25dBm@36Mbps		25dBm@36Mbps
	24dBm@48Mbps		24dBm@48Mbps
	23dBm@54Mbps		23dBm@54Mbps

## OPERATING FREQUENCY (IEEE 802.11a/b/g)

USA(FCC)	11a:5.15GHz~5.35GHz;5.725GHz~5.850GHz	11b/g:2412MHz~2462MHz(CH1~CH11)
Europe(ETSI)	11a:5.15GHz~5.35GHz;5.47GHz~5.725GHz	11b/g:2412MHz~2472MHz(CH1~CH13)
Japan(TELEC)	11a:4.9GHz~5.0GHz;5.03GHz~5.091GHz;5.15GHz~5.25GHz	
	11b:2412MHz~2484MHz(CH1~CH14) 11g: 2412MHz~2472MHz(CH1~CH13)	

## MODULATION (OFDM and DSSS)

IEEE 802.11a	54/48 Mbps (QAM64), 36/24 Mbps (QAM16), 18/12 Mbps (QPSK), 9/6 Mbps (BPSK)
Super AG	108Mbps, 96Mbps, 72Mbps, 54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 6Mbps
IEEE 802.11g	54/48 Mbps (QAM64), 36/24 Mbps (QAM16), 18/12 Mbps (QPSK), 9/6 Mbps (BPSK)
Super G	108Mbps, 96Mbps, 72Mbps, 54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 6Mbps
IEEE 802.11b	11/5.5 Mbps (CCK), 2 Mbps (DQPSK), 1 Mbps (DBPSK)

## I/O INTERFACE

Host Interface	PCI interface v2.3
Radio	MMCX connector

## SECURITY

64/128 Bit WEP, WPA/WPA2, IEEE802.1X Authentication

## OPERATING VOLTAGE

DC 3.3 V $\pm$ 5%

## POWER CONSUMPTION ( $\pm 100$ mA)

TX : 1.3A, RX : 250mA

## SENSITIVITY (IEEE 802.11a/b/g @ Packet Error Rate<8%~10%)

802.11a -92dBm @ 6Mbps, -72dBm @ 54Mbps	Super AG -92dBm @ 6Mbps, -70dBm @ 108Mbps
802.11b -92dBm @ 1Mbps, -86dBm @ 11Mbps	
802.11g -86dBm @ 6Mbps, -72dBm @ 54Mbps	Super G -86dBm @ 6Mbps, -70dBm @ 108Mbps

## Environment

	Temperature (Ambient)	Humidity (non-condensing)
Operating	-20~70°C (option)	10~90%
Storage	-45~80°C	5~95%

## Physical Specification

Dimension	59.6mm*57.4mm*8.2mm
Weight	20 grams