

MMI

**802.11 a/b/g
Radio Card**

802.11 b/g WLAN MiniPCI Card_Normal Power

MODEL NAME WM2100



Introduction

The 802.11b/g Wireless LAN MiniPCI Card is a device that lets you install inside the Access Point.

The 802.11b/g Wireless LAN MiniPCI Card allows you to take full advantage of your AP's. Plus, with the network installation simplicity and flexibility, you can eliminate the need to pull cable through walls and ceilings and allow the network to go where wires cannot go. Exploring WWW and augmenting networks can never be done more easily.

The 802.11b/g Wireless LAN MiniPCI Card it enables a high performance, cost effective, low power, compact solution that easily fits onto on side of a miniPCI card.

Features

- Complies with IEEE 802.11b/g standard for 2.4GHz Wireless LAN
- Single chip solution for dual-mode
- Works with all existing network infrastructure
- Complies with specific wireless products and services
- Freedom to roam while staying connected
- Wi-Fi and WHQL compliant
- 54 Mbps provided in 802.11b/g mode of operation
- Lower power consumption
- Easy to install and configure

Specifications

Standard	IEEE 802.11 b/g WLAN standard
Chipset	Atheros_AR2417
Antenna Connector	Two antenna connector (TX;RX)
Host Interface	Mini PCI
Operating Voltage	3.3V \pm 5%
Power Requirement	Power consumption at 802.11g TX: 3.3V/350mA; RX: 3.3V/220mA Power consumption at 802.11b TX: 3.3V/350mA; RX: 3.3V/220mA
Ferquency Range	2.412GHz~2.4835GHz
Support Data Rate	Support for 54, 48, 36, 24, 18, 12, 9 and 6Mbps OFDM, 11 and 5.5Mbps
Data Rate	CCK and legacy 2 and 1 Mbps data rates
Channels	North America: CH1~CH11 Europe: CH1~CH13 Japan: 11b: CH1~CH14, 11g/11b: CH1~CH13
Modulation Technique	802.11g: Orthogonal Frequency Division Multiplexing 802.11b: Direct Sequence Spread Spectrum (PBCC, CCK, DQPSK, DBPSK)
Output Power	802.11g: 14dBm; 802.11b: 17dBm
Receiver Sensitivity	-65dBm at 54Mbps, 2.4GHz; 11g -72dBm at 11Mbps, 2.4GHz; 11b
Physical Specifications	Weight: 10g; Dimension: Mini Size 59.6(W) x 29.2(L)mm
Support OS	Windows/Linux
EMC Certification	FCC Part 15 in US

NOTE: SOME SIZES, STYLES AND OPTIONS ARE NON-STANDARD, NON-CANCELLABLE AND NON-RETURNABLE.

802.11 n/b/g Compliant 2.4GHz Mini-PCI Module

MODEL NAME WM5100



Introduction

The WM5100 is an IEEE802.11 n/b/g mini-PCI card that connects your laptop to a wireless local area. The WM5100 3*3 MIMO Technology improves effective throughput and range over existing 802.11 b/g products better expands the receiving distance and efficiently eliminates wireless connection dead spots compared with normal 11g products.

The WM5100 is a very small card that can fit into any laptop, handheld or desktop computer equipped with a mini-PCI (Type III B slot) interface for wireless network applications. It allows you to take full advantage of your laptop's mobility with access to real-time information and online services anytime and anywhere. It slides easily into the mini-PCI expansion slot to enable a wireless connection to your network.

Features

- Processor for 2.4GHz WLANs.
- BPSK, QPSK, 16QAM, 64QAM, DBPSK, DQPSK, and CCK modulation.
- Data rates up to 130Mbps for 20MHz channels and 300Mbps for 40MHz.
- Security: WEP, WPA, WPA2 Enterprise.
- Encryption: TKIP, PSK and AES.
- 3 X 3 MIMO Technology improves effective throughput and range over existing 802.11 b/g products.
- 32-bit and 0-33MHz PCI 2.3 interface.

Specifications

Standard	IEEE 802.11 n/b/g standards compliant
Chipset	Atheros
Antenna	Detachable antenna
Frequency Range	802.11 n/b/g USA(FCC): 2.412 ~ 2.462 GHz Europe(ETSI): 2.412 ~ 2.472GHz Japan(TELEC): 2.412 ~ 2.483GHz 802.11 n 20MHz / 40MHz; 802.11 b/g
Channels	USA(FCC): 11 channels; EU(ETSI): 13 channels; Japan(TELEC): 14 channels
Data Rate	802.11n: up to 300Mbps 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps
Coverage Area	Up to 12 times faster than existing 802.11 b/g products
Transmit Power	11n HT40: +13dBm 11b CCK: +17dBm 11g OFDM: +17dBm
Receiver Sensitivity	-71dBm at 300Mbps -80dBm at 54Mbps, 10% PER -91dBm at 11Mbps, 8% PER
Power Requirement	3.3 Vdc
Physical Specification	59.6(L) x 51.0(W) x 4.2(H) mm
Certifications	FCC, CE

NOTE: SOME SIZES, STYLES AND OPTIONS ARE NON-STANDARD, NON-CANCELLABLE AND NON-RETURNABLE.

802.11 n/b/g Compliant 2.4GHz Mini-PCI Module

MODEL NAME WM5200



Introduction

The WM5200 is an IEEE802.11n/b/g mini-PCI module that connects your laptop to a wireless local area. The WM5200 2*3 MIMO Technology improves effective throughput and range over existing 802.11 b/g products better expands the receiving distance and efficiently eliminates wireless connection dead spots compared with normal 11g products.

The WM5200 is a very small module that can fit into any laptop, handheld or desktop computer equipped with a mini-PCI(Type III B slot) interface for wireless network applications. It allows you to take full advantage of your laptop's mobility with access to real-time information and online services anytime and anywhere. It slides easily into the mini-PCI expansion slot to enable a wireless connection to your network.

Features

- 300 Mbps PHY Rate Support
- 2 X 3 MIMO Technology improves effective throughput and range over existing 802.11 b/g products
- Qos WMM, WMM-PS
- Support 802.11n/b/g standard
- Low power consumption
- Operating Systems Support: Windows 2000, Windows XP, Windows Vista, Linux

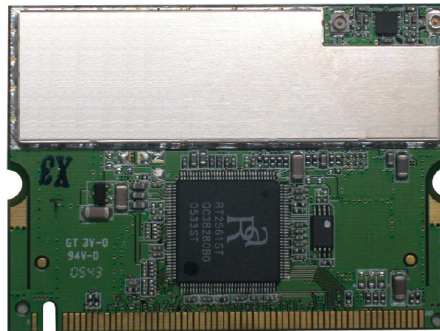
Specifications

Standards	IEEE 802.11 n/b/g standards compliant
Chipset	Ralink
Antenna	Detachable antenna
Frequency Range	802.11 n/b/g USA (FCC): 2.412 ~ 2.462 GHz Europe (ETSI): 2.412 ~ 2.472GHz Japan (TELEC): 2.412 ~ 2.483GHz 802.11 n 20MHz / 40MHz; 802.11 b/g
Channels	USA(FCC): 11 channels; EU(ETSI): 13 channels; Japan(TELEC): 14 channels
Data Rate	802.11n: up to 300Mbps 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps
Coverage Area	Up to 12 times faster then existing 802.11 b/g products
Transmit Power	11n HT40: +16dBm; 11b CCK: +18dBm; 11g OFDM: +18dBm
Receiver Sensitivity	-67dBm at 300Mbps -79dBm at 54Mbps, 10% PER -92dBm at 11Mbps, 8% PER
Power Requirement	3.3 Vdc
Dimension	44.6(L) x 59.9(W) x 3.1(H) mm
Certifications	FCC, CE

NOTE: SOME SIZES, STYLES AND OPTIONS ARE NON-STANDARD, NON-CANCELLABLE AND NON-RETURNABLE.

802.11 a/b/g Wireless MiniPCI Card

MODEL NAME **WCM6002**



Introduction

The WCM6002 is an IEEE802.11a/b/g standard miniPCI card that connects your laptop to a local wireless network. With 802.11a technique, The WCM6002 can better expand the wireless connection efficiently compared with normal 802.11b/g products.

The WCM6002 is a very small card that can fit into any laptop, handheld or desktop computer equipped with a Mini PCI (Type III B slot) interface for wireless network applications. It allows you to take full advantage of your laptop's mobility with access to real-time information and online services anytime and anywhere. It slides easily into the MINI PCI expansion slot to enable a wireless connection to your network.

Features

- III-b MiniPCI form factor
- Support 802.11 a/b/g
- Complete Security Feature - WEP 64/128, WPA, WPA2, 802.1x and 802.11i
- Cisco CCX V1.0, V2.0 & V3.0 Compliance
- Advanced Quality of Service (QoS) - 802.11e, WMM
- Comprehensive OS support: Win98/SE/ME, Win2000, WinXP, WinCE 5.0, Linux 2.4x/2.6x, MAC OSX
- Support Linux AP Driver
- WiFi and WHQL Certification

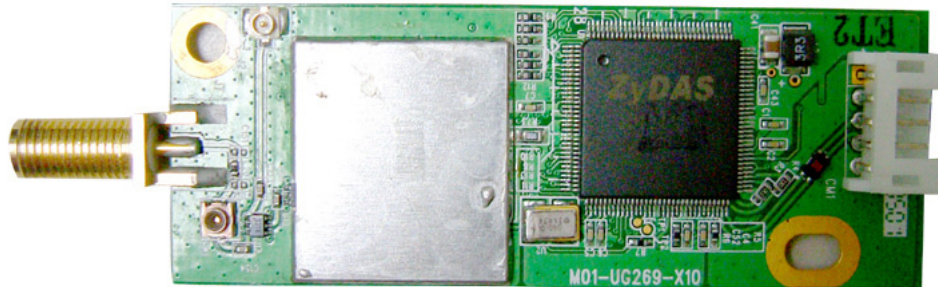
Specifications

Standards	IEEE 802.11 a/b/g standard
Chipset	Ralink
Host Interface	MiniPCI Interface 1.0
Operating Voltage	3.3V ± 5%
RF Connector Type	Diversity Coaxial Connector
Frequency Range	2.412 ~ 2.4835 GHz; 5.15 ~ 5.724GHz; 5.725 ~ 5.825GHz
Channels	USA, Canada(FCC): 23 channels; Europe(CE): 32 channels (by region); Japan(TELEC): 14 channels
Modulation Technique	802.11b: Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK) 802.11a/g: Orthogonal Frequency Division Multiplexing (QAM64, QAM16, QPSK, BPSK)
Data Rate	802.11b: 11, 5.5, 2, 1Mbps; 802.11a/g: 54, 48, 36, 24, 18, 12, 9, 6Mbps
Security	Hardware-Based Encryption/Decryption Using WEP 64/128, WPA, WPA2, 802.1X and 802.11i
Output Power	OFDM: 11 ~ 13dBm (54Mbps/802.11a) (average) OFDM: 13 ~ 15dBm (54Mbps/802.11g) (average) CCK: 16 ~ 18dBm (11Mbps/802.11b) (average)
Receiver Sensitivity	-65dBm (54Mbps/802.11a); -80dBm (11Mbps/802.11b); -65dBm (54Mbps/802.11g)
Power Requirement	11a: TX, 389mA; 11b: TX, 375mA; 11g: TX, 325mA; Idle, 128mA
Physical Specification	Weight: 12g; Dimension: 59.6(L) x 44.6(W) mm
EMC Certifications	FCC Part 15.247 in US EN300328 and EN300826 (EN301489-17) in Europe

NOTE: SOME SIZES, STYLES AND OPTIONS ARE NON-STANDARD, NON-CANCELLABLE AND NON-RETURNABLE.

802.11 b/g Wireless LAN USB 2.0 Adapter

MODEL NAME **WUG2690**



Introduction

The *WUG2690* wireless LAN links network users to LAN services without the hassle of cabling or wiring, which significantly brings mobile workers the freedom of staying connected to the network while roaming around a building or multiple buildings maintaining access to the Internet, e-mail, networked applications, and print services.

The *WUG2690* is the perfect solution for your wireless network applications based on the IEEE 802.11g standard that offers a data rate up to 54Mbps in a wireless LAN environment. It is a high-speed wireless network card that plugs into your system and accesses to the LAN or peer-to-peer networking easily without wires or cables. No matter where it allows you to share printers, files, and other network resources.

Features

- Compliant with IEEE802.11g standard for 2.4GHz Wireless LAN
- USB 2.0 compliant
- USB Plug & Play
- Interoperable with existing network infrastructure
- Secure information transmission
- Freedom to roam while staying connected
- Compatible with specialty wireless products and services
- Up to 54 Mbps data rate
- Low power consumption
- Free inside the soft Access Point

Specifications

Standards	IEEE 802.11 g
Host Interface	USB 2.0
Chipset	Atheros
Antenna Connector	One SMA connector and I-PEX connector
Frequency Range	2.412 ~ 2.4835GHz
Modulation Technique	Orthogonal Frequency Division Multiplexing (OFDM) Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK)
Channels	USA, Canada: 11 channels Europe: 13 channels Japan: 14 channels
Security	64/128/255-bit WEP Encryption and Wi-Fi Protected Access
Throughput	20.5Mbps @ 54Mbps 5.7Mbps @ 11Mbps
Sensitivity	-68dBm @ 54Mbps -80dBm @ 11Mbps
Power Requirement	Operating Voltage: 5V DC TX consumption: 290mA (Max) RX consumption: 240mA (Max)
LED Indicator	Green
Physical Specification	Weight: 5g Dimension: 67.67(L) x 25.02(W) x 5.4(H) mm
Supported OS	Windows 2000, XP, 98SE, ME

NOTE: SOME SIZES, STYLES AND OPTIONS ARE NON-STANDARD, NON-CANCELLABLE AND NON-RETURNABLE.

802.11 b/g Wireless LAN USB 2.0 Adapter

MODEL NAME **WUG2700**



Introduction

Without the hassle of cabling or wiring, the *WUG2700* USB adapter significantly brings mobile workers the freedom of connection to the network. While roaming around, the users can access the Internet, e-mail, networked applications, and print services. The *WUG2700* device is the perfect solution for your wireless network applications based on the IEEE 802.11b/g standard that offers a data rate up to 54Mbps in a wireless LAN environment. It is a high-speed wireless network card that plugs into your system and accesses to the LAN or peer-to-peer networking easily without wires or cables. No matter where it allows you to access printers, files, and other network resources.

Features

- Compliant with IEEE802.11 b/g standard
- Up to 54Mbps wireless data transfer rate
- Support USB 2.0
- Ad-Hoc or Infrastructure mode
- Soft AP feature creates AP function
- Compact pocket-sized design, lightweight

Specifications

Standard	IEEE 802.11 b/g
Host Interface	USB 2.0
USB Connector Type	A Type USB 2.0 connector
Chipset	Ralink
Antenna Connector	Chip antenna
Frequency Range	2.400 ~ 2.4835GHz
Modulation Technique	Orthogonal Frequency Division Multiplexing (OFDM) Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK)
Channels	2.412 ~ 2.462GHz (Canada, FCC) / 11 channels 2.412 ~ 2.484GHz (Japan, TELEC) / 14 channels 2.412 ~ 2.472GHz (Euro, ETSI) / 13 channels
Security	64/128bit WEP, WPA, WPA2, 802.1X and 802.11i
Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK
Output Power	11g: 14dBm (Typical); 11b: 17dBm (Typical)
Data Rate	802.11g: 54, 48, 36, 24, 18, 12, 9, and 6Mbps with auto-rate fall back 802.11b: 11, 5.5, 2, and 1Mbps with auto-rate fall back
Sensitivity	-68 dBm @ 54Mbps / -80dBm @ 11Mbps
Power Consumption	Continuous transmission mode: 290mA at 5VDC(Max) Continuous reception mode: 290mA at 5VDC(Max)
LED Indicator	Link: Blue; Active: Orange
Dimensions	71.5(L) x 19(W) x 7.9(H) mm
OS Support	Windows 2000, XP, 98, SE, ME

NOTE: SOME SIZES, STYLES AND OPTIONS ARE NON-STANDARD, NON-CANCELLABLE AND NON-RETURNABLE.

802.11 b/g SDIO Wireless LAN Card

MODEL NAME **SDW2500**



Introduction

The SDW2500 is a compact size wireless card for the PDA and other mobile computing device. The card is designed in the concept to got friendly with battery. When connected to a WLAN, the card is typically in listening mode almost the time except the short period of packet being transmitted and received. That means your battery life will be maximized.

The card works with a lot of wireless LAN security protocols. Open, 64-bit and 128 bit WEP encryptions are supported.

Features

- IEEE 802.11b/g compatible
- Support infrastructure and Ad Hoc peer-to-peer connectivity
- Internal antenna reduces the card size
- Security supported WEP, WPA, WPA-TKIP, WPA2
- LED indicates link and activity status
- SDIO interface compatible
- Support Pocket PC 2003, Mobile 4.2/5.0, Win CE 5.0

Specifications

Standards	IEEE 802.11 b, IEEE 802.11 g
Chipset	RealTek RTL8711S
RF Chip	FM2427
Host Interface	SDIO 1.0
Operating Voltage	3.3V±5%
Power Consumption	Power consumption 3.3V/275mA max.
Antenna Type	PCB Antenna
Frequency Range	2.412 ~ 2.4835GHz
Modulation	11g: Orthogonal Frequency Division Multiplexing (OFDM) 54Mbps/48Mbps: QAM-64; 36Mbps/24Mbps: QAM-16; 18Mbps/12Mbps: QPSK; 9Mbps/6Mbps: BPSK 11b: Direct Sequence Spread Spectrum (DSSS) 11Mbps/5.5Mbps: CCK; 2Mbps: DQPSK; 1Mbps: DBPSK
Channels	USA, Canada(FCC): 11 channels(2.412~2.462GHz) Europe(CE): 13 channels(2.412~2.472GHz) Japan(TELEC): 14 channels(2.412~2.4835GHz)
Support Data Rate	802.11b(11Mbps, 5.5Mbps, 2Mbps, 1Mbps) 802.11g(54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 9Mbps, 6Mbps)
Preamble	802.11b: Both Short and Long Preamble 802.11g: Both Short and Long Preamble
Output Power	54Mbps OFDM: 10dBm 11Mbps CCK: 14dBm
Receiver Sensitivity	802.11g(in 10% PER) -73dBm at 54Mbps 802.11b(in 8% PER) -86dBm at 11Mbps
Dimensions	37.83 (L) x 20.9(W) x 2.1(H) mm

NOTE: SOME SIZES, STYLES AND OPTIONS ARE NON-STANDARD, NON-CANCELLABLE AND NON-RETURNABLE.