

## WMIA-139AG IEEE 802.11a Mini-PCI User's Manual

### Specification

Product Name	54 Mbps/ 11Mbps Wireless LAN MINIPCI Card
Model Number	WMIA-139AG
Host Interface	MINIPCI
Dimensions	59.7x50.95x5 mm
Weight	20g
Frequency Band	<b>802.11a</b> Unlicensed National Information Infrastructure (U-NII) frequency band, 5.15GHz to 5.85GHz (subject to local regulations)
Number of Non-Overlapping Channels	<b>802.11a</b> USA and Canada-13 Europe – up to 19, subject to local regulations Japan – 4
Operating Voltage	3.3V ± 5%
Modulation	802.11a: OFDM;
Data Rate	<b>802.11a</b> 54, 48, 36,24,18,12, 9, 6 Mbps per channel, auto fallback for extended range; (option : Enhanced proprietary Turbo Mode up to 108 Mbps)
Security	<b>802.11a</b> 64/128/152-bit WEP Encryption, AES
Antenna Interface	UFL-CON
Transmitted power	<b>802.11a</b> please see the output power table for detail.
Receive Sensitivity	<b>802.11a</b> Nominal Temp Range: <ul style="list-style-type: none"> <li>- 6Mbps      10-5 BER @ -90dBm, typical</li> <li>- 9Mbps      10-5 BER @ -89dBm, typical</li> <li>- 12Mbps     10-5 BER @ -88dBm, typical</li> <li>- 18Mbps     10-5 BER @ -87dBm, typical</li> <li>- 24Mbps     10-5 BER @ -83dBm, typical</li> <li>- 36Mbps     10-5 BER @ -80dBm, typical</li> <li>- 48Mbps     10-5 BER @ -74dBm, typical</li> <li>- 54Mbps     10-5 BER @ -70dBm, typical</li> </ul>
	<b>802.11a</b> Max.2W Continue Tx : 560 mA @ 3.3V Continue RX : 350 mA @3.3V
Supplied Driver	Windows 98SE/ME/NT4.0/2000/XP

Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.11a, draft standard ,Wi-Fi compliant
Warranty	1 year
Temperature Range	0 ~ 50°C (Operating); -20 ~ 85°C (Storing)
	Operating Humidity 10% to 85% Non-Condensing Storage Humidity 5% to 90% Non-Condensing
Operating Range	Open Space: Up to 260 m: Indoor: 100 m The transmission speed varies in the surrounding environment
Network Protocol	TCP/IP, IPX, NDIS4, and NDIS5 ,NDIS 5.1
Management Utility	Monitor Internet Access Status via UI
EMC certification	TBD(FCC part 15C/15.247; ETS 300 328-2; UL; IEC60950; EN 301 489-1,17; prEN50371; CE Mark; TELEC)
System Requirements	Laptop PC containing → MINIPCI local bus slot → 64MB memory or greater → 300MHz processor or greater Microsoft Windows 98 Second Edition/Millennium Edition/2000/NT 4.0 with Service Pack 6,Windows XP

### **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### **Statement Needed to be Shown on End Product**

Since this module is installed inside the end product, the end product should be affixed a label on visible area showing that this product contain a RF module, and also its FCC ID.

### **IMPORTANT NOTE:**

#### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an

uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.  
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.  
The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the users manual of the end product which integrate this module.

This device is intended only for OEM integrators under the following conditions:

- 1) The antenna must be installed such that 20 cm is maintained between the antenna and users, and
- 2) The transmitter module may not be co-located with any other transmitter or antenna.

As long as the 2 conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed ( for example, LCD TV, AP, Router )

**IMPORTANT NOTE:** In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and Obtaining a separate FCC authorization.

#### **End Product Labelling**

This transmitter module is authorized only for use in devices where the antenna may be installed such that 20 cm may be maintained between the antenna and users ( for example: LCD TV, AP, Router )

The final end product must be labeled in a visible area with the following:

“ Contains TX FCC ID: RYK-WMIA139AG ”.

#### **Manual Information That Must be Included**

The users manual for end users must include the following information in a prominent location “  
IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.”

For operation within 5.15 ~ 5.25GHz frequency range, it is restricted to indoor environment.