

# 802.11a module Manual

## DGT Warning Statement:

根據交通部低功率管理辦法規定：

### 第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。


### 第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信規定作業之無線電信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

射頻模組必須標示自己的審驗合格標籤(ID)，如果該模組被安裝在平台內部而無法看見審驗合格標籤時，則在該平台的外部也必須有明顯說明內含射頻模組的標示。這個外部標示可採用下列文字：

“內含射頻模組， CCXXxxYYyyyZzW” 或

“含 CCXXxxYYyyyZzW” 。或任何類似含意的文字。

## 1. Product Overview

This MA3100 mini PCI adapter contains a Atheros AR5414 chip for IEEE 802.11a Wireless LAN. Based on the latest industry standard Wi-Fi Certified IEEE 802.11a or b/g specifications, the mini PCI adapter supports key security features like Wi-Fi Protected Access (WPA), WPA2, WEP and 802.1x.

You can find this miniPCI module that is seated inside the wireless products such as the notebook computers or any other devices containing Mini PCI socket.

## 2. Packaging Contents

The mini PCI module package contains the following item(s): 1 x Wireless Mini PCI adapter

## 3. Installation guide

- Shut down the power of the device.
- Align the PCI adapter to the Mini PCI socket.
- Adjust and push down the PCI adapter gently until the metallocking levers aside from the Mini PCI socket is fastened. **(Please take note that the PCI adapter can only fit in one direction due to the keyed notch. Wrong orientation will cause improper installation and may damage the Mini PCI socket ! ).**
- Connect the antenna(s) on the mini PCI module.
- Turn on the device could work properly.

## **Product spec**

Operating Frequency: 5745 ~ 5825 MHz

Frequency Range: 5725 ~ 5850 MHz

Channels : 5 Channels

Operation channel : 5745 / 5765 / 5785 / 5805 / 5825 MHz

Channel spacing : 20 MHz

Output power : 25.94 dBm

Data rate : 54, 48, 36, 24, 18, 12 , 9, 6 Mbps

Modulation type : DSSS / OFDM

Power supply : Powered from host device

**Remark:** The module is only operating frequency from 5745 ~ 5825 MHz by firmware control.

## **FCC Warning Statement :**

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.

This device must accept any interference received, including interference that may cause undesired operation.

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 or more 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.

**Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment. The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.**

FCC RF Radiation Exposure Statement: This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

### **Modular Approval**

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

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

**IMPORTANT NOTE: In the event that these conditions cannot 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 cannot 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 Labeling**

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

access points, routers, wireless ADSL modems, and similar equipment). The final end product must be labeled in visible area with the following:

“Contains TX FCC ID: XXXYYYYYYYYYY”

**End Product Manual Information**

The user 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 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.”

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.