

# **802.11b Wireless miniPCI Module**

## User's Manual

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### **1. Introduction**

The MIWLRP is designed to provide Wireless LAN function on a MiniPCI Type IIIB form factor which is for built-in Notebook PCs. The function is based on Realtek RTL8180L chipset, which implements the full IEEE802.11b standard data rates up to 11 Mbps.

### **2. Features**

- Realtek RTL8180L MAC/BBP with Philips SA2400A transceiver and SA2411 power amplifier
- IEEE802.11 Direct Sequence Spread Spectrum (DSSS)
- IEEE802.11 Standard Data Rates: 1, 2, 5.5 and 11 Mbps.
- Full implementation of the MAC protocol specified in IEE Standard of 802.11-1999 and 802.11b.
- Internal encryption engine executes IEEE 802.11 WEP
- 128-bit WEP encryption, backward compatible with 64-bit solution
- Support BSS and IBSS operation under Distributed Coordination Function (DCF) and Point Coordination Function (PCF)
- Two antenna connectors

### **3. Specification**

#### **3.1 Interface:**

- IEEE 802.11b compliant
- PCI Bus interface specification 2.2
- MiniPCI specification 1.0

#### **3.2 Mechanical**

Dimension: 42.45 x 59.75 x 4.8 mm (L x W x H)

### **4. Environmental Operating Ranges**

- Operating Temperature : 0 ~70° C , Humidity 10 ~ 90%
- Storage Temperature : -20 ~90° C, Humidity 10 ~ 90%

### **5. Power Consumption**

285 m A

### **9. Drivers support**

Microsoft Windows 98SE, Windows ME/2000 /XP,

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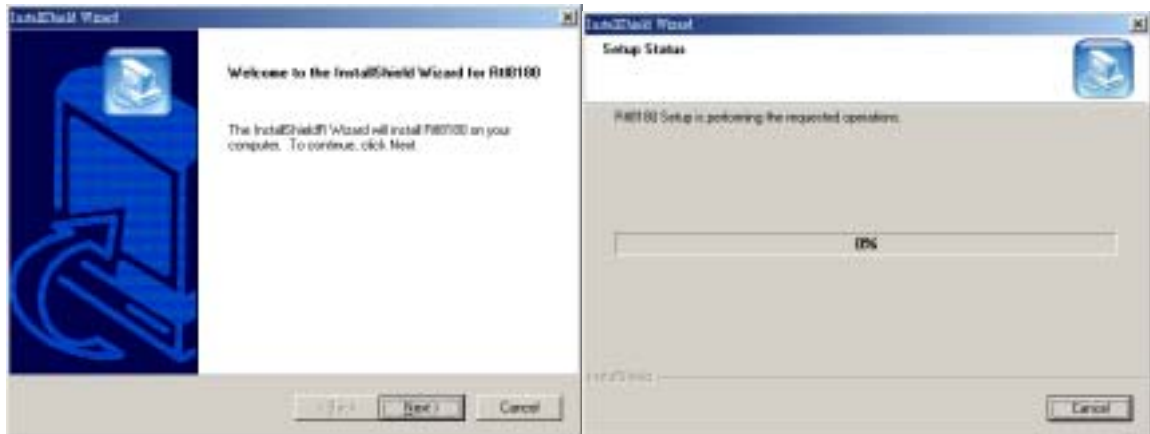
## 10. Drivers installation

### **\*Windows 98SE/Me/2000/XP:**

The following installation operates under Windows 2000. Procedures will be the same for Windows 98SE/Me/XP.

#### **I. Install the Driver and Utility**

- A. Insert the CD into the CD-ROM device and execute the " **setup.exe**" program. The InstallShield Wizard box will appear, click "Next" to continue.



- B. Follow the instruction of the installation program. The program will install the software for this device directly.  
C. Click "Finish" to complete the installation.



- D. After completing the Driver and Utility installation, a new icon will be displayed in the system tray at the bottom of the screen. Click the icon and start using the WLAN MiniPCI Adapter.



### **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.

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.

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

### **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.

**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 2 conditions above are met, further transmitter test 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, digital device emissions, PC peripheral requirements, etc.).

**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 Labeling**

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: “ Contains TX FCC ID: NLF-MIWLRP.

**Manual Information That Must be Included**

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.

The users manual for OEM integrators 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.