

Model: DGW101 Product Name: RF MODULE

User's Manual



#### **Federal Communication Commission Interference 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, and (2) 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 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: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### **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 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 <u>transmitter</u> 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

**IMPORTANT NOTE:** In the event that these conditions <u>can not be met</u> (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID <u>can not</u> 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 FCC ID: RD2DW101001". The grantee's FCC ID can be used only when all FCC compliance requirements are met.

#### **Manual Information To the End User**

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 user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.



### INTRODUCTION

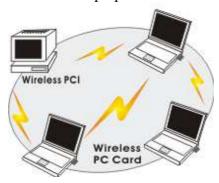
The **802.11b/g/n 1T1R USB WLAN Module** is a device that allows you connect your computer to a wireless local area network (LAN). A wireless LAN allows your system to use wireless Radio Frequency (RF) technology to transmit and receive data without physically attaching to the network. The Wireless protocols that come with this product ensure data security and isolation from interference generated by other radio frequencies.

This card also allows you to take full advantage of your computer's mobility with access to real-time information and online services anytime and anywhere. In addition, this device eliminates the bother of pulling cable through walls and under furniture. It even allows you to place your system in locations where cabling is impossible. Modifying and augmenting networks has never been so easy.

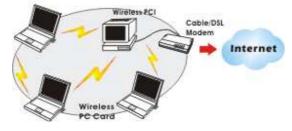
### **Wireless Network Options**

#### The Peer-to-Peer Network

This network installation lets you set a small wireless workgroup easily and quickly. Equipped with wireless PC Cards or wireless PCI, you can share files and printers between each PC and laptop.



You can also use one computer as an Internet Server to connect to a wired global network and share files and information with other computers via a wireless LAN.

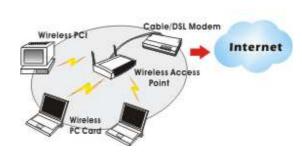


#### **The Access Point Network**

The network installation allows you to share files, printers, and Internet access much more conveniently. With Wireless LAN Cards, you can connect wireless



LAN to a wired global network via an Access Point.



### **SOFTWARE INSTALLATION**

Must install Ubuntu Linux 10.04 version (32-bit) in first, and then place "ar6k\_3.1.0.815" folder to the path as "home\user"!!!!!!

Update system package:

Executed instruction is as below

#sudo apt-get install libglib2.0-dev libglib2.0-0 libgtk2.0-dev glib libperl-dev build-essential libssl-dev

#cd ar6k\_3.1.0.815

#tar zxvf AR6KSDK.build\_3.1\_RC.815.tgz

#cd \*.sh AR6KSDK.build\_3.1\_RC.815

#chmod 755 .

#./complie.sh

@It will show usage method



1 = make (linux\_sdio)

2 = make (clean)

3 = (linux\_athsdio)

#./complie.sh 2

#./complie.sh 1

Insert WN3601A card into your PC's SDIO interface through extension card or others.

## #dmesg -c

@You will see the last line show as below

'mmc1: new high speed SDIO card at address 0001'

# #./load.sh

@It will show usage method as below

## ./load.sh <mode>

1 = Load driver in NORMAL mode

2 = UNLOAD driver

3 = Load driver in ART mode

4 = Load driver in TCMD mode

5 = Load driver in AP mode

6 = Load driver with specific MAC and skip OTP

7 = Load driver in P2P mode

8 = Load driver in WiFi + BT mode



# #./load.sh 1

@you will see the return value as below

BMI Write Memory (address .....)

BMI Write Memory (address ......)

BMI Write Register ( Address :0x5406a4 param:0x16)

BMI Write Register (Address : 0x540680 param:0x8)

BMI Done

# iwlist scanning

# ifconfig eth1 essid xxxx

# dhclient

Select the AP then click the **Connect** 

@get the ip(xxx.xxx.xxx.xxx)

- Surfing the Internet after completing connection.

