Manual
UPWL6031H5

1.General Description

The UPWL6031H5 wireless module is a fully assembled and tested general-purpose module using the BCM4331wireless System-on-Chip(SoC). The module contains BCM4331 chip and all other necessary components to operate the UPWL6031H5.

For detailed information on the UPWL6031H5 component itself, refer to the UPWL6031H5 datasheet.

2. Features

Features	Description
Network Standard	IEEE 802.11 b/g/n (final n)
Chipset	BCM4331
Input Voltage	3.3V,5V
Data Rate	802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n-20 MHz: MCS0~MCS23 802.11n-40 MHz: MCS0~MCS23(450Mbps)
Modulation	**802.11a:**BPSK(6Mbps,9Mbps),QPSK(12Mbps,18Mbps), 16QAM(24Mbps,36Mbps),64QAM(48Mbps,54Mbps) **802.11n:**BPSK(MCS0,MCS8, MCS16), QPSK(MCS1,MCS2,MCS9,MCS10, MCS17, MCS18), 16QAM(MCS3,MCS4,MCS11,MCS12, MCS19, MCS20), 64QAM(MCS5,MCS6,MCS7,MCS13,MCS14,MCS15, MCS21, MCS22, MCS23)
Operating Frequency	802.11a/n (5.15~5.25GHz,5.725~5.825GHz)
Operating Channel	CH36~CH48,CH149~CH165 for North America,
Transceiver/Receiver Mode	3T3R Mode

Chain	Ant.	Brand	Part Number	Antenna Type	Gain (dBi)	Remark
1	1	WNC	81.EZY15.GJM	PCB	BAND1:2.7 BAND4:3.2	TX/RX
2	2	WNC	81.EZY15.GJN	PCB	BAND1:2.7 BAND4:3.2	TX/RX
3	3	WNC	81.EZY15.GJP	PCB	BAND1:2.7 BAND4:3.2	TX/RX

3. Benefits

- Small, self-contained SMT module.
- 3X3 MIMO function support
- High power solution support high speed transmittance

■ Federal Communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following

i. This device may not cause harmful interference, and
ii. 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 Federal Communications Commission (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:

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

IMPORTANT NOTE:

This module is intended for OEM integrator. The OEM integrator is responsible for the compliance to all the rules that apply to the product into which this certified RF module is integrated.

Additional testing and certification may be necessary when multiple modules are used.

20cm minimum distance has to be able to be maintained between the antenna and the users for

the host this module is integrated into. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

USERS MANUAL OF THE END PRODUCT:

In the users manual of the end product, the end user has to be informed to keep at least 20cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the FCC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied. The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment. If the size of the end product is smaller than 8x10cm, then additional FCC part 15.19 statement is required to be available in the users manual: This device complies with Part 15 of 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.

LABEL OF THE END PRODUCT:

The final end product must be labeled in a visible area with the following " Contains TX FCC ID: PY3UPWL6031H5 ". If the size of the end product is larger than 8x10cm, then the following FCC part 15.19 statement has to also be available on the label: This device complies with Part 15 of 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.

■ Safety statements

Regulatory Information/Disclaimers

Installation and use of this Bluetooth 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.

■ MPE Statement

Your device contains a low power transmitter. When device is transmitted it sends out Radio Frequency (RF) signal.

■ FCC Radio Frequency Exposure

This Bluetooth device has been evaluated under FCC Bulletin OET 65C and found compliant to the requirements as set forth in CFR 47 Sections 2.1091, 2.1093, and 15.247(b)(4) addressing RF Exposure from radio frequency devices. The radiation output power of this Bluetooth device is far below the FCC radio frequency exposure limits. Nevertheless, this device shall be used in such a manner that the potential for human contact during normal operation – as a mobile or portable device but use in a body-worn way is strictly prohibit. When using this device, a certain separation distance between antenna and nearby persons has to be kept to ensure RF exposure compliance. In order to comply with the RF exposure limits established in the ANSI C95.1 standards, the distance between the antennas and the user should not be less than [20cm].

■ RF Exposure

This device and its antenna(s) must not be co-located with any other transmitters except in accordance with FCC multi-transmitter product procedures.

Refering to the multi-transmitter policy, multiple-transmitter(s) and module(s) can be operated simultaneously without C2P.

■ Frequency Statement

This device is going to be operated in 5.15~5.25GHz,5.725~5.825GHz frequency range, it is restricted in indoor environment only.

■ About this guide

This user guide contains the information your PEGATRON WIFI Module.

■ System requirements

Before installing the PEGATRON WIFI module, make sure that your system meets the following requirements:

- Intel® Pentium® 4 or AMD K7/K8 system
- Minimum 64MB system memory
- Windows® XP/VISTA operating system

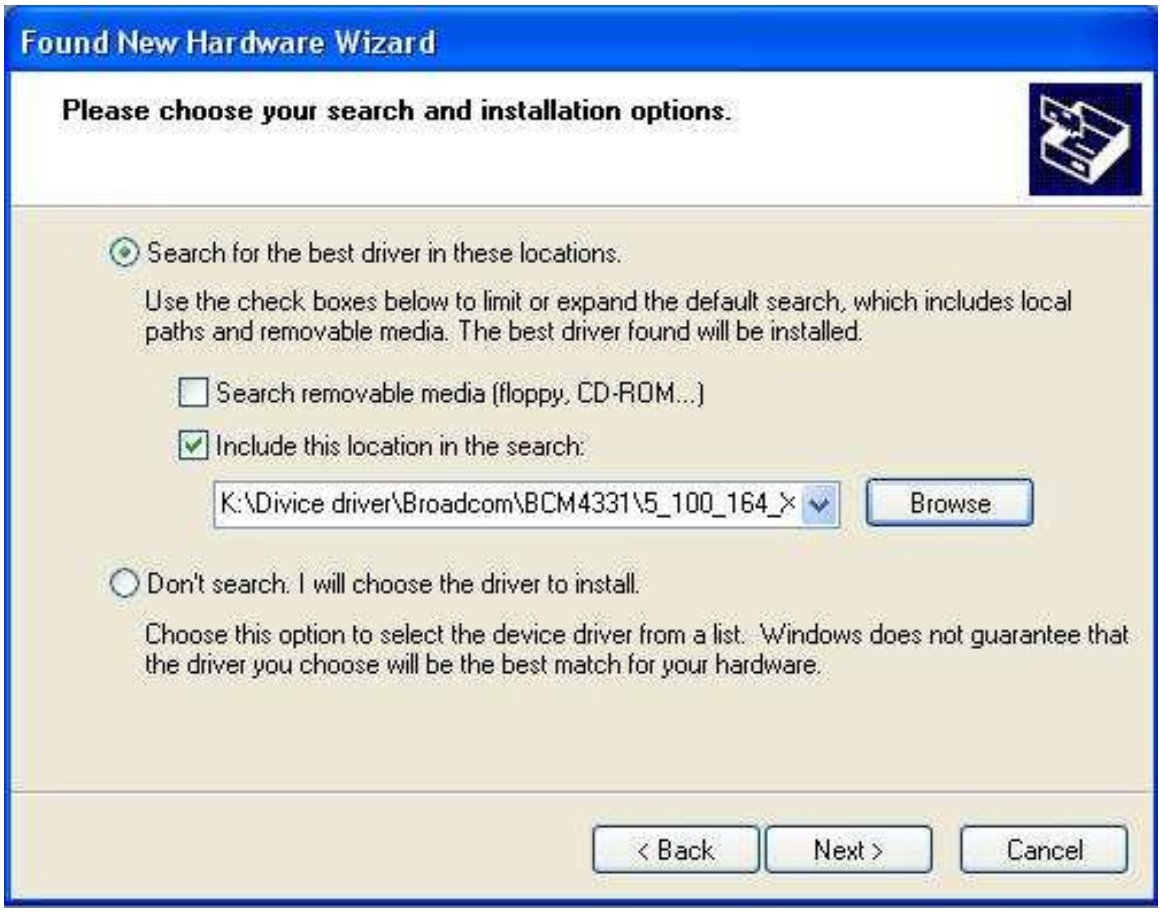
■ Installing the device drivers

To install the device driver in your computer:

Insert the support CD to the optical drive and follow the following procedure.

Step 1

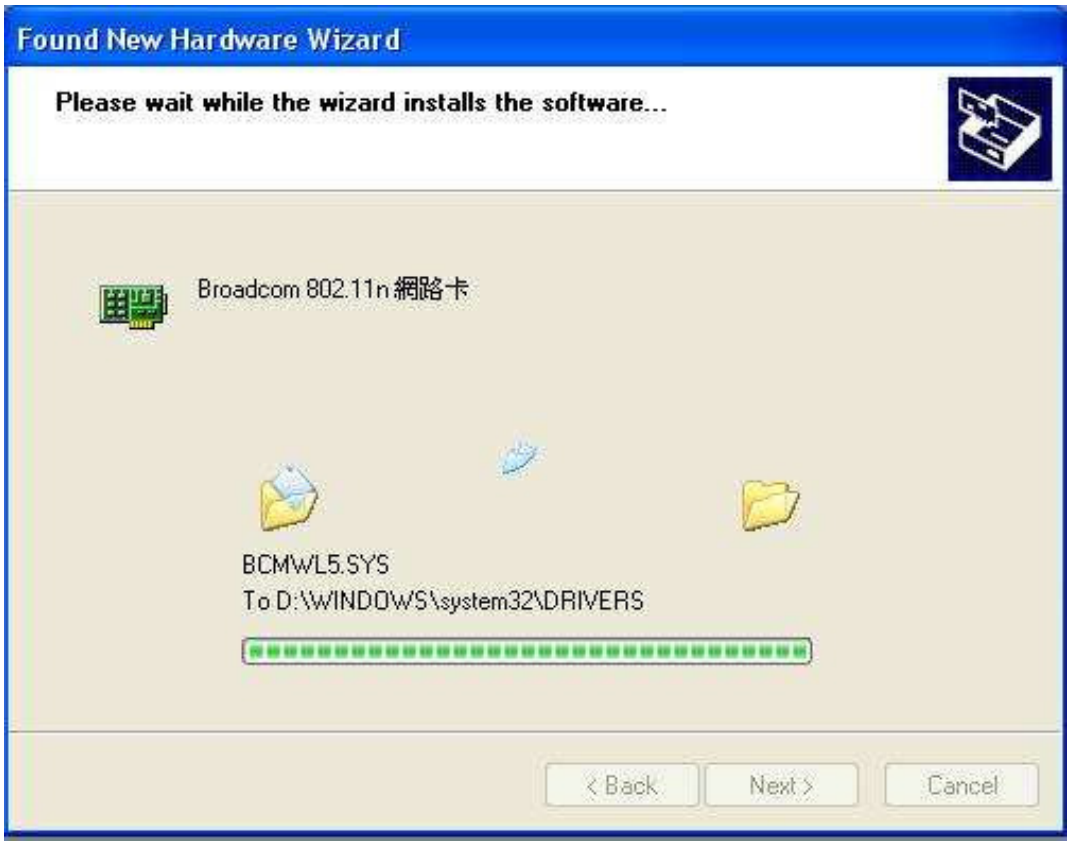
Step 2


Found New Hardware Wizard
Please choose your search and installation options.
Search for the best driver in these locations.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM...)
Include this location in the search:
K:\Divice driver\Broadcom\BCM4331\5_100_164_X
Browse
Don't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< Back
Next >
Cancel

Step 3


Hardware Installation
The software you are installing for this hardware:
Broadcom 802.11n 網路卡
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

Step 4


Found New Hardware Wizard
Please wait while the wizard installs the software...
Broadcom 802.11n 網路卡
BCMWL5.SYS
To D:\WINDOWS\system32\DRIVERS
< Back
Next >
Cancel

Step 5


Found New Hardware Wizard
Completing the Found New Hardware Wizard
The wizard has finished installing the software for:
Broadcom 802.11n 網路卡
Click Finish to close the wizard.
< Back
Finish
Cancel


Found New Hardware Wizard
Completing the Found New Hardware Wizard
The wizard has finished installing the software for:
Broadcom 802.11n 網路卡
Click Finish to close the wizard.
< Back
Finish
Cancel