

WLU5200 H/W SPECIFICATIONS

Host Interfaces RGMII

Form factor L*W*H = 101.6mm*69.85mm*2.3mm

Chipset Atheros AR9342

Operation Voltage 3.0 VDC~3.6 VDC

Network Standards

IEEE 802.11 a/b/g/n Standard

Modulation Techniques

DBPSK, DQPSK, BPSK, QPSK, CCK, 16QAM, 64QAM, MIMO

Modulation Technology OFDM, DSSS

Data Rate

802.11b: 11, 5.5, 2, 1 Mbps

802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps

802.11n: MCS0-15 (HT20: 150Mbps / HT40:300 Mbps PHY rate)

Network Architectures Infrastructure and Ad Hoc

Operating Frequency

802.11 b/g/n: 2412 GHz ~ 2462 GHz

802.11 a/n: 5180 GHz ~ 5825 GHz

Operating Channel

802.11b/g: Ch1 to Ch11

IEEE 802.11n ,Mode: MCS0-15

RF Output Power

2.4G:

802.11b: 15~18 dBm, output power

802.11g: 18~24 dBm, output power

802.11n:(HT20/HT40) : 17~23dBm

5G:

802.11a: 27~28 dBm, output power

802.11n:(HT20/HT40) : 27~28dBm

UNII Band:

IEEE 802.11a CH36 - CH48 CH52 - CH64 CH100 - CH140

16~23dBm

IEEE802.11an HT20 CH36 - CH48 CH52 - CH64 CH100 - CH140

16~23dBm

IEEE802.11anHT40 CH38 - CH46 CH54 - CH62 CH102 - CH134

16~23dBm

Security

1.WPA™ (personal) and WPA2™ (personal) certified for powerful encryption and authentication

2.AES and TKIP in hardware for faster data encryption and IEEE 802.11i™ compatibility

Temperatures (AMBIENT)

Operates from 0 to 70 C;

Storage from -20 to 80 C

Humidity(non-condensing)

5 to 95%

SETUP WLAN MODULE CONNECTION

1) WLAN Card from PC set fixed IP:192.168.1.10 , Mask : 255.255.255.0

2) Use telnet and link to Mi124 board

```
telnet 192.168.1.2
```

```
user name: root
```

```
password : 5up
```

Prepare one ROUTER , ROUTER domain 192.168.1.xx, then you can PING ROUTER after setting command as below.

3) Set command as below:

```
//for 2.4G Mode:
```

```
cfg -x
```

```
cfg -a AP_STARTMODE=multi
```

```
cfg -a AP_MODE=sta
```

```
cfg -a AP_CHMODE=11NGHT40PLUS
```

```
cfg -a AP_SSID="dlink2g"
```

```
cfg -c
```

```
apup
```

```
iwpriv ath0 wds 1
```

```
iwpriv ath0 autoassoc 1
```

```
iwpriv ath0 vap_ind 1
```

```
iwpriv ath0 extap 1
```

```
//for 5G Mode:
```

```
cfg -x
```

```
cfg -a AP_STARTMODE=multi
cfg -a AP_MODE=sta
cfg -a AP_CHMODE=11NAHT40PLUS
cfg -a AP_SSID="dlink5g"
cfg -c
apup
iwpriv ath0 wds 1
iwpriv ath0 autoassoc 1
iwpriv ath0 vap_ind 1
iwpriv ath0 extap 1
```

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.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

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.

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

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

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 FCC ID: H8N-WLU5200". 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.