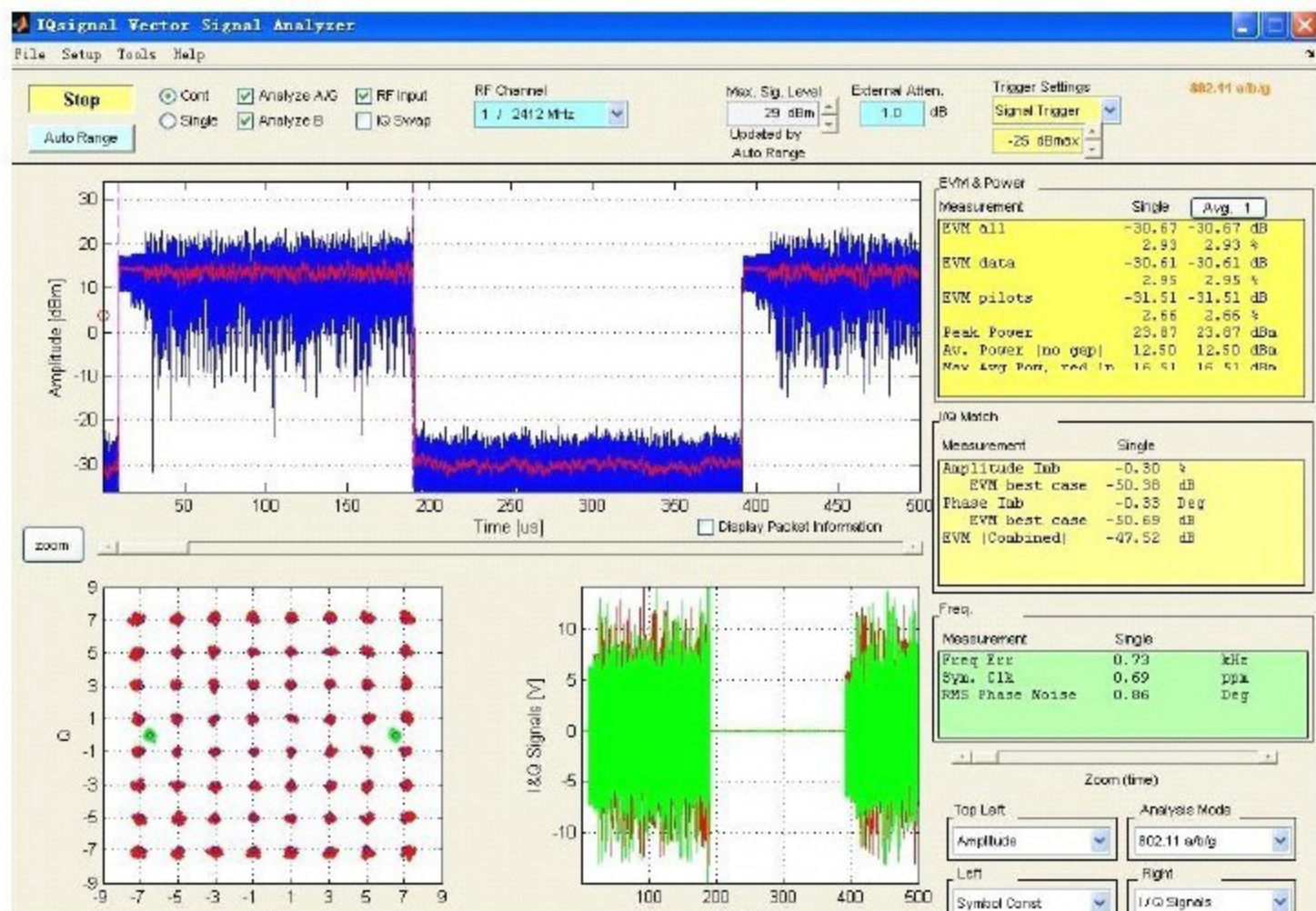


### 3. General Specifications

|                                  |                                                                           |
|----------------------------------|---------------------------------------------------------------------------|
| <b>Model Name</b>                | <b>RA-WN110212A</b>                                                       |
| <b>Product Description</b>       | <b>USB 2.0 Wireless Module</b>                                            |
| <b>WLAN Standard</b>             | <b>IEEE 802.11 b/g , Wi-Fi compliant</b>                                  |
| <b>Host Interface</b>            | <b>USB 2.0</b>                                                            |
| <b>Major Chipset</b>             | <b>Ralink RT3070</b>                                                      |
| <b>Dimension</b>                 | <b>L39mm X W15mm X H4.0mm</b>                                             |
| <b>Weight</b>                    | <b>5g</b>                                                                 |
| <b>Operating Conditions</b>      |                                                                           |
| <b>Voltage</b>                   | <b>3.3V</b>                                                               |
| <b>Temperature</b>               | <b>-10~70℃</b>                                                            |
| <b>Humidity Non-Operating</b>    | <b>90% RH non-condensing (12 months among 0~40℃ )</b>                     |
| <b>Electrical Specifications</b> |                                                                           |
| <b>Frequency Range</b>           | <b>2.4~2.4835GHZ</b>                                                      |
| <b>Spread Spectrum</b>           | <b>DSSS</b>                                                               |
| <b>Transmission Distance</b>     | <b>300m(The transmission speed may vary according to the environment)</b> |
| <b>Data Rate</b>                 |                                                                           |
|                                  | <b>11b:1/2/5.5/11Mbps</b>                                                 |
|                                  | <b>11g:6/9/12/24/36/48/54Mbps</b>                                         |
| <b>Transmit power</b>            | <b>12.5 dbm</b>                                                           |
| <b>Data security</b>             | <b>64/128/152bitWEP,WPA/WPA2,WPA-PSK/WPA2-PSK(TKIP/AES)</b>               |
| <b>Receiver Sensitivity</b>      |                                                                           |
|                                  |                                                                           |
|                                  | <b>54M:-68dbm@10%PER</b>                                                  |
|                                  | <b>11M:-82dbm@10%PER</b>                                                  |

|                         |                                                                          |
|-------------------------|--------------------------------------------------------------------------|
| <b>Environment</b>      | <b>Storage Temperature:-40~70°C (-40°F~158°F)</b>                        |
|                         | <b>Relative humidity:10%-90%</b>                                         |
|                         | <b>Non-condensing</b>                                                    |
|                         | <b>Storage Humidity:5%~95%</b>                                           |
|                         | <b>Non-condensing</b>                                                    |
| <b>Modulation Type</b>  | <b>OFDM/CCK/16-QAM/64-QAM</b>                                            |
| <b>Operating System</b> | <b>Window98,ME,SE,XP,XP-64<br/>Windows7, 32/64, 2000,Vista,linux,mac</b> |

## 4. TEST PARAMETER



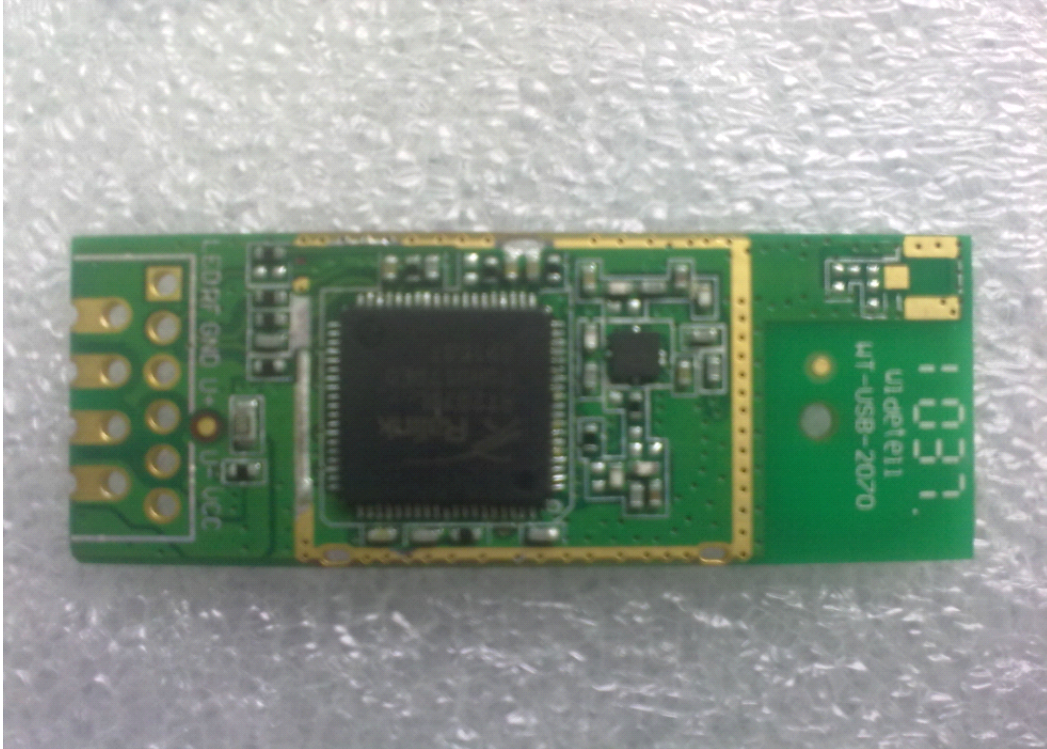
| Test item         | TX POWER | EVM       | Freq ERR | RX SENS |
|-------------------|----------|-----------|----------|---------|
| Test result (54M) | 12.5 dbm | -30.67dbm | 0.73 khz | -70 dbm |

## 5. Power Consumption

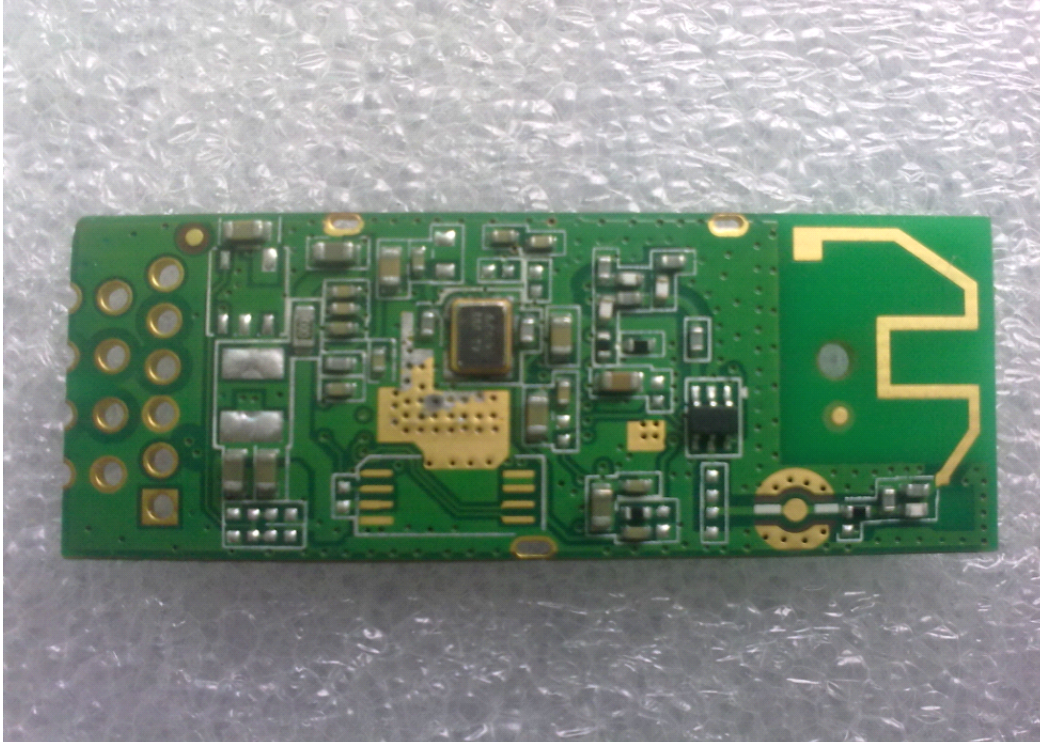
| Mode | Status          | Current (mA)<br>@5V | Note                       |
|------|-----------------|---------------------|----------------------------|
| QA   | Idle            | 89                  |                            |
|      | RX              | 117                 | 54Mbps, CH1                |
|      |                 | 173                 | 11Mbps @ 12.5dBm, CH1      |
|      | TX              | 155                 | 54Mbps @ 12.5dBm, 11g, CH1 |
| OS   | SUSPEND         | 2                   |                            |
|      | UNCONFIGURED    | 59                  |                            |
|      | POWER SAVE MODE | 52                  | DTIM=100ms                 |
|      |                 | 47                  | DTIM=300ms                 |
|      | RADIO OFF       | 52                  |                            |

## 6. Mechanical Information

Positive



Negative



---

## 7. Pin Description

|    |     |  |  |
|----|-----|--|--|
| J1 | VCC |  |  |
| J2 | DM  |  |  |
| J3 | DP  |  |  |
| J4 | GND |  |  |

## 8. Antenna And Interface Connection Information

**Interface and the antenna have the option of**

## 9. Product ordering information

**RA-WN110212A only support 802.11b/g , 5V voltage support**

**And pls mark clearly your need about antenna and voltage support information.**

#### **10. How the host system do the labeling**

The Host system using this radio module , should have label indicated "contains FCC ID: AQF-RA-WN110212A"

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.

#### **15.21 Information to user.**

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

This EUT (FCCID: AQF-RA-WN110212A) doesn't have Ad Hoc Mode function on " non-US/Canada frequencies". In addition, the frequency selection feature is disabled by channels 1~11 will be used in North America. Country code selection is disabled.