

# Product Specification

**Model Name:** EW-7722MUN

**Product:** 300N Wireless LAN USB Module

**Date of Release :** 2011/9/5

**Version :** V1.0A

## 1. Introduction

### ● Scope

This document describes the EW-722MUN V1.0A 802.11 b/g/n 2T2R 300N Wireless LAN module with USB interface hardware and software specifications.

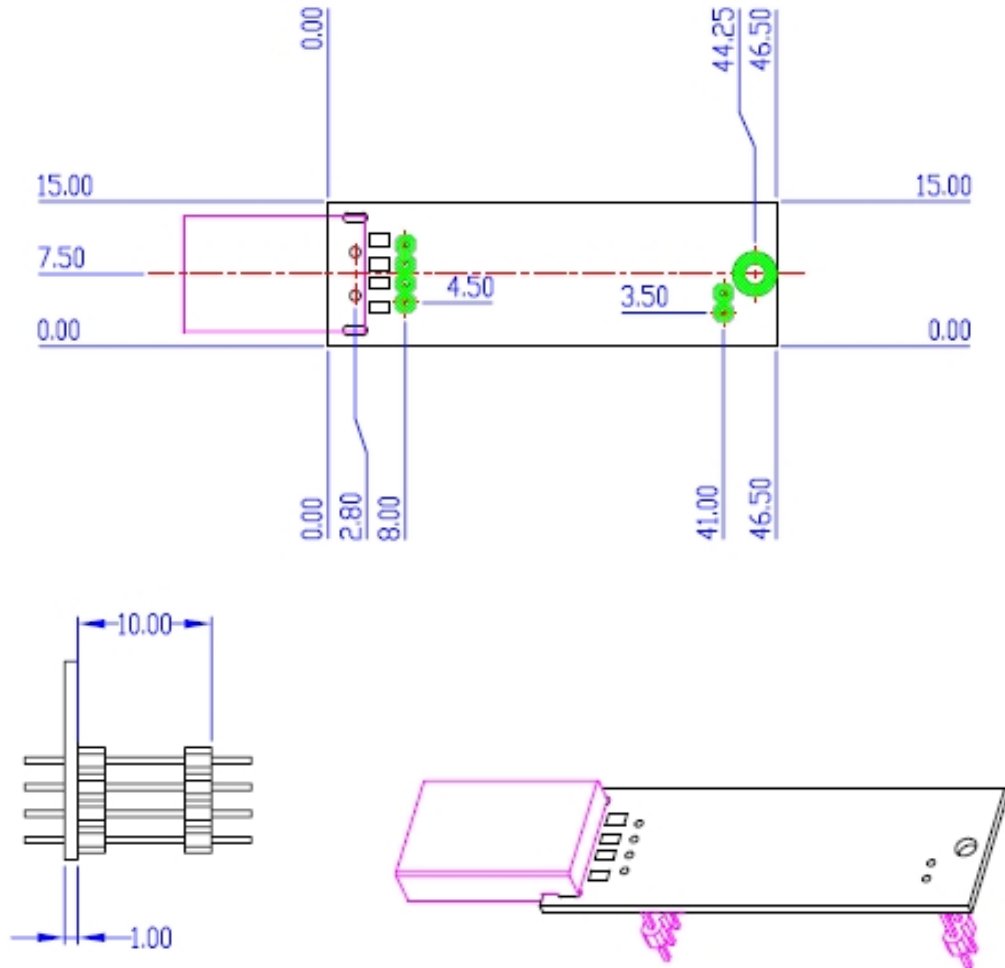
### ● Product Features

- Comply with IEEE 802.11 b/g/n standards.
- High transfer data rate - up to 300Mbps.
- Farther coverage, less dead spaces and higher throughput with MIMO technology.
- Enable xDSL router, Cable Modem, Set Top Box, or Multi-Media devices, etc. to have 11n Wi-Fi capability.
- Supports QoS - WMM, WMM Power saving.
- Supports USB 2.0/1.1 interface.
- 4-PIN Pin-header form factor design for USB interface.

## 2. Product Specification

<b>Product</b>	2T2R 300N Wireless LAN USB Module Model Name: EW-7722MUN V1.0A
<b>Main Chipset</b>	Ralink RT3072 Single Chip
<b>Standard</b>	IEEE 802.11 b/g/n
<b>Interface Type</b>	USB2.0/4 PIN-header design with USB interface
<b>Frequency Band</b>	2.4000~2.4835GHz (subject to local regulations)
<b>Modulation</b>	OFDM with BPSK, QPSK, 16QAM, 64QAM (11n) OFDM with BPSK, QPSK, 16QAM, 64QAM (11g) BPSK, QPSK, CCK (11b)
<b>Data Rate</b>	11b: 1/2/5.5/11Mbps 11g: 6/9/12/24/36/48/54Mbps 11n (20MHz): MCS0-15, up to 144Mbps 11n (40MHz): MCS0-15, up to 300Mbps auto fallback.
<b>Antenna</b>	I-PEX Connector x 2 (2T2R MIMO Technology)
<b>Power Consumption</b>	Voltage: 5V Idle: 110mA 11b/g: Max. 1.6W 11n: Max. 1.3W
<b>Transmit Power</b>	11b: 18±1.5dBm 11g: 23±1.5dBm 11n (20MHz): 24±1.5dBm 11n (40MHz): 24±1.5dBm
<b>Receive Sensitivity</b>	11b@11Mbps: -86±2dBm 11g@54Mbps: -70±2dBm 11n (20MHz, MCS7): -66±2dBm 11n (40MHz, MCS7): -64±2dBm
<b>Dimension</b>	46.5 (W) x 15 (D) x 1.0 (H)mm (4 Layers PCB)
<b>Temperature</b>	Operating: -4~131°F (-20~55°C) Storage: -13~140°F (-25~60°C)
<b>Humidity</b>	Operating: 10~90% (NonCondensing) Storage: Max.95% (NonCondensing)

- Mechanical Diagram



- Module photography



- Main Chipset Information

Item	Model Number	Vendor
MAC/BBP/RF	RT3072 Ralink	

- Main Chipset Specification

*MAC/Baseband/RF Processor*

The RT3072 is a highly integrated MAC/BBP and 2.4GHz RF single chip with 300Mbps PHY rate supporting. It fully complies with IEEE802.11n and IEEE 802.11b/g standards, delivers reliable, cost-effective, feature rich wireless connectivity at high throughput from an extended distance. Optimized RF architecture and baseband algorithms provide superb performance and lowpower consumption. Intelligent MAC design deploys a high efficient USB engine and hardware data processing accelerators without overloading the host processor. The RT3072 is designed to support standard based features in the areas of security, quality of service and

international regulation, giving end users the greatest performance anytime in any circumstance.

**RT3072 MAC/BBP/RF Features**

- 802.11n MAC/BBP/RF Interface
  - 2T2R 802.11n MAC/BBP/RF integrated.
  - 300Mbps PHY data rate for both transmit and receiving.
  - 20MHz/40MHz channel bandwidth.
  - Reverse direction data flow and frame aggregation.
  - WEP 64/128, WPA, WPA2
  - Bluetooth Co-existence
  - Multiple BSSID Support
  - QOS - WMM, WMM Power Saving
  - Cisco CCX Support up to v5.0
  - Low power with advanced power management
  - Operating systems - WindowsXP, 2000, Vista, Linux, MAC
- Packaging
  - 9mm x 9mm QFN-76LD Package
  - I/O : 5V(USB)

# 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 or more 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 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 device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

## **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.

### **LABEL OF THE END PRODUCT:**

The final end product must be labeled in a visible area with the following " Contains TX FCC ID: VJS-MN5000 ". 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.