



# **HT2000W Wi-Fi Module User Manual**

H57555  
Revision A  
November 4, 2016

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## Overview

Ethernet Switch: Qualcomm QCA8337

2.4GHz Module: QCA9563

5GHz Module: QCA9882

Antenna Interface: 3 x U.FL PCB Antenna for 2.4GHz, 2 x U.FL PCB Antenna for 5GHz

I/O Interface: MDI

## Features

Dual Band Wi-Fi Access Point

2.4GHz: IEEE 802.11 N, B, G

- 50 Mbps minimum at an unobstructed distance of 20 feet

- 20 Mbps minimum at a range of 50 meters horizontal and 15 meters vertical

- Max power of 23dBm

5GHz: IEEE 802.11 A, N, AC

- 200 Mbps minimum at an unobstructed distance of 20 feet

- 50 Mbps minimum at a range of 50 meters horizontal and 15 meters vertical

- Max power of 20dBm

## Compliance information

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.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device is restricted for indoor use.

### **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 **20 cm** between the radiator & your body.

### **IMPORTANT NOTE:**

This module is intended for OEM integrator only and limited to host with brand: **HUGHES** and model: **HT2000W**. The OEM integrator is still responsible for the FCC compliance requirement of the end product, which integrates this module.

### **USERS MANUAL OF THE END PRODUCT:**

In the user's manual of the end product, the end user has to be informed to keep at least **20 cm** 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.

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

The final end product must be labeled in a visible area with the following: "Contains TX FCC ID: **RAXHT2000W**".

The FCC part 15.19 statement below 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.

| Set | Ant | Brand   | Model Number             | Antenna Type | Connector | Gain (dBi) |      |
|-----|-----|---------|--------------------------|--------------|-----------|------------|------|
|     |     |         |                          |              |           | 2.4GHz     | 5GHz |
| 1   | 1   | Yageo   | ANTA0ZZ10511WLAN1        | PCB          | I-PEX     | 3.2        |      |
|     | 2   | Yageo   | ANTA0ZZ10511WLAN2        | PCB          | I-PEX     | 3.69       |      |
|     | 3   | Yageo   | ANTA0ZZ10511WLAN3        | PCB          | I-PEX     | 3.6        |      |
|     | 4   | Yageo   | ANTA0ZZ10511WLAN4        | PCB          | I-PEX     |            | 3.9  |
|     | 5   | Yageo   | ANTA0ZZ10511WLAN5        | PCB          | I-PEX     |            | 3.1  |
| 2   | 6   | Airgain | N24011HU-T6L-PK1-G165U   | PCB          | I-PEX     | 3.2        |      |
|     | 7   | Airgain | N24011HU1-T6L-PK1-B90U   | PCB          | I-PEX     | 1.8        |      |
|     | 8   | Airgain | N24011HUN1-T6L-PK1-W125U | PCB          | I-PEX     | 1.6        |      |
|     | 9   | Airgain | N5X011HU2-T6L-PK1-A45U   | PCB          | I-PEX     |            | 4.4  |
|     | 10  | Airgain | N5X011HU1-T6L-PK1-R120U  | PCB          | I-PEX     |            | 4.0  |

Figure 1: Antenna list