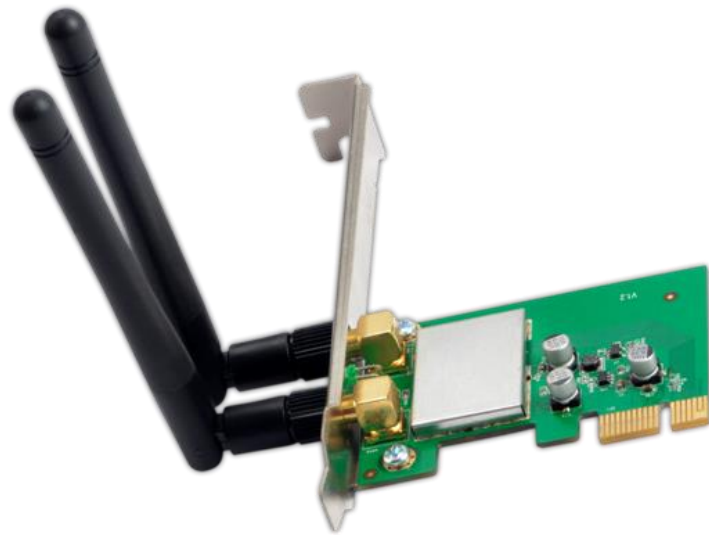


# 11AC Dual-band Wireless PCI-E Adapter



## User Manual

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## **Chapter 1 Product Introduction**

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Congratulations on your purchasing of the 11AC Dual-band Wireless PCI-E Adapter. Before you install and use this product, please read this manual carefully for full exploiting the functions of this product.

### **1.1 Product Overview**

The product is a highly integrated and cost-effective Wireless Adapter that provides PCI Express interface, and full compliance with IEEE 802.11ac and IEEE 802.11a/b/g/n standards. Wireless transmission rates can reach up to 867Mbps. Using the Wireless Desktop PCI-E Adapter not only can you connect your desktop computer to a high-speed Wi-Fi network and experience faster files transmission and high-speed Internet browsing from further distances across your home than that in previous-generation Wireless G technology, but also you can enjoy high performance wireless viewing HD multimedia and real-time online war game when the PCI-E Adapter work in 11AC 5G mode. This Desktop PCI-E Adapter is the best choice for the desktop computer users who want to enjoy a better wireless performance and high-speed Wi-Fi network.

### **1.2 Product Features**

- Complies with IEEE 802.11ac, IEEE 802.11n and IEEE 802.11a/b/g standards
- Supports PCI-E 1.1 X1 bus
- Supports 20MHz/40MHz/80MHz bandwidth
- Supports IEEE802.11e QoS Enhancement (WMM)
- Supports IEEE802.11h TPC
- Supports WAPI certified
- Supports Cisco CCS
- Supports multiple BSSID

### **1.3 Security Warning**

- Please install and use this product until you complete to read this user manual.
- In order to guarantee the product to work correctly, please pay attention to the waterproofing and damp proofing.
- Prevent some harmful substances (such as acid, alkali, etc).
- Please do not use this product placed directly in the sun or other sources of heat.
- If a failure occurs, please contact our customer service dept, do not open this product by yourself.

### **1.4 LED's Description**

In the front of the wireless card, there is a status indicator. It will flash while a normal data communication.

## **1.5 Package Contents**

- 11AC Dual-band Wireless PCI-E Adapter
- Use CD-ROM
- Warranty card

## Chapter 2 Installation Guide

This section will teach you the process of installing the network adapter software package with including software CD.

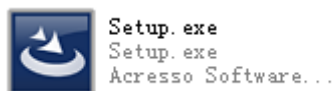
Take Windows XP Operating system as an example, installation steps for other operating systems are similar.

1. Please plug the wireless card into the computer's PCI-E Interface.
2. The “**Found New hardware Wizard**” dialog is coming here, we recommend you to select “**Cancel**” button, you can also click “**Next**”, Manual installation. (Figure 1)



**Figure 1**

3. Before device installation, please install the software from the CD, Click on the “**Setup**” link to begin the installation. (Figure 2)



**Figure 2**

4. The Setup Program will detect automatically the install drivers and correct software by itself. The customer is according to "drive to install a guide to carry on to gradually install". (Figure 3, 4, 5 and 6)

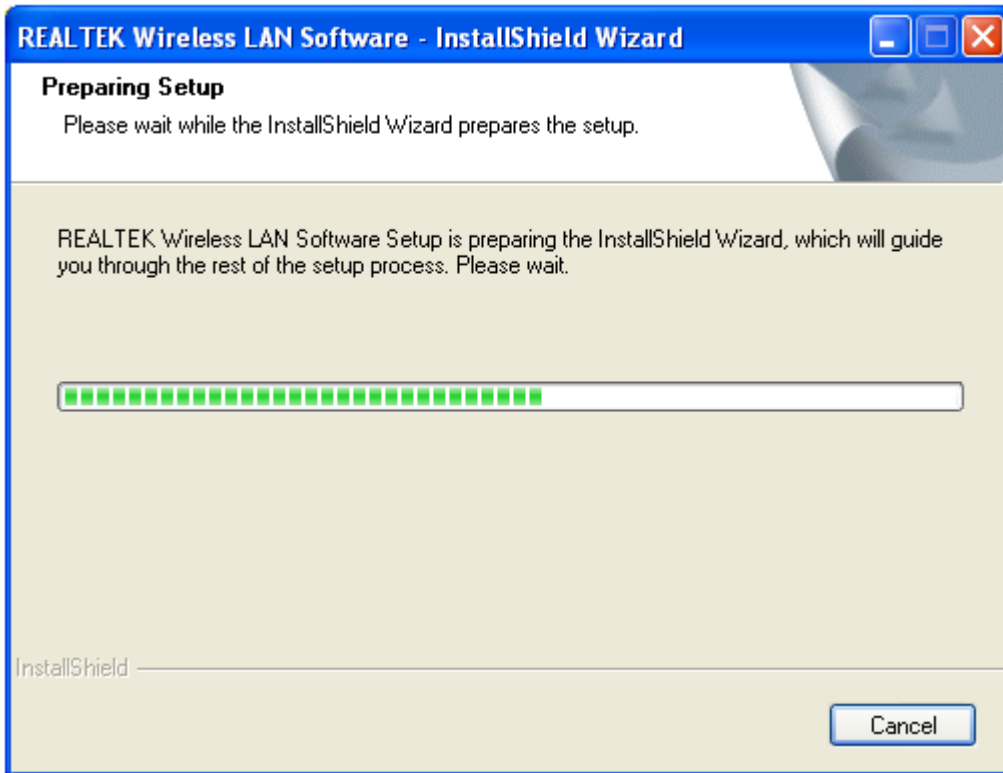


Figure 3

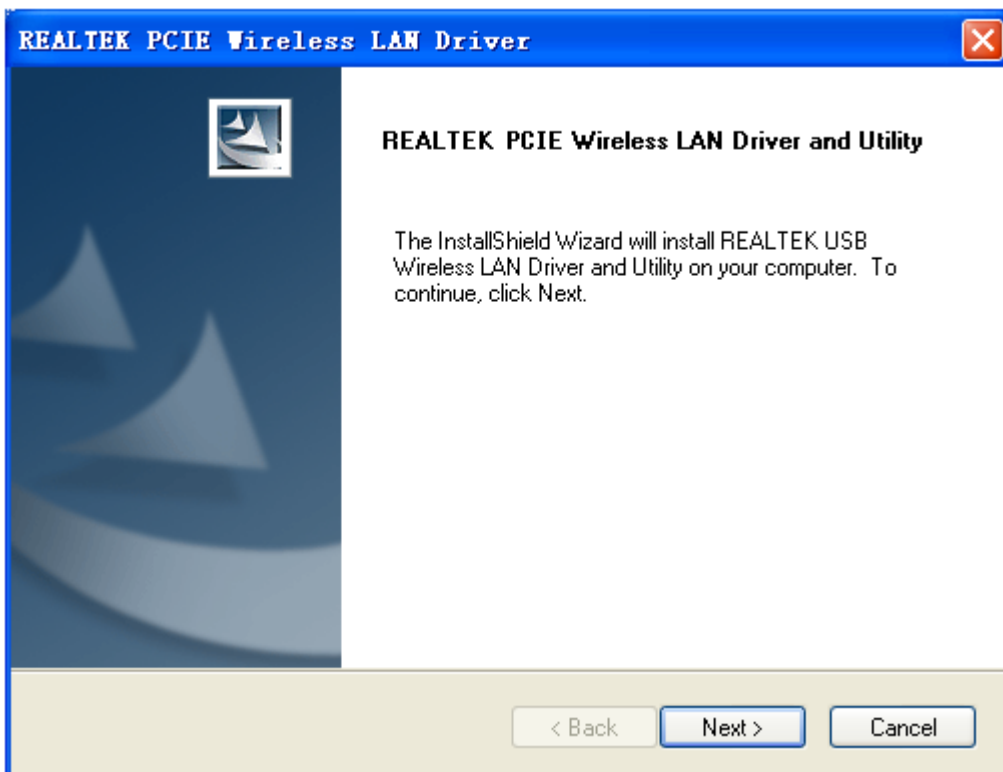


Figure 4

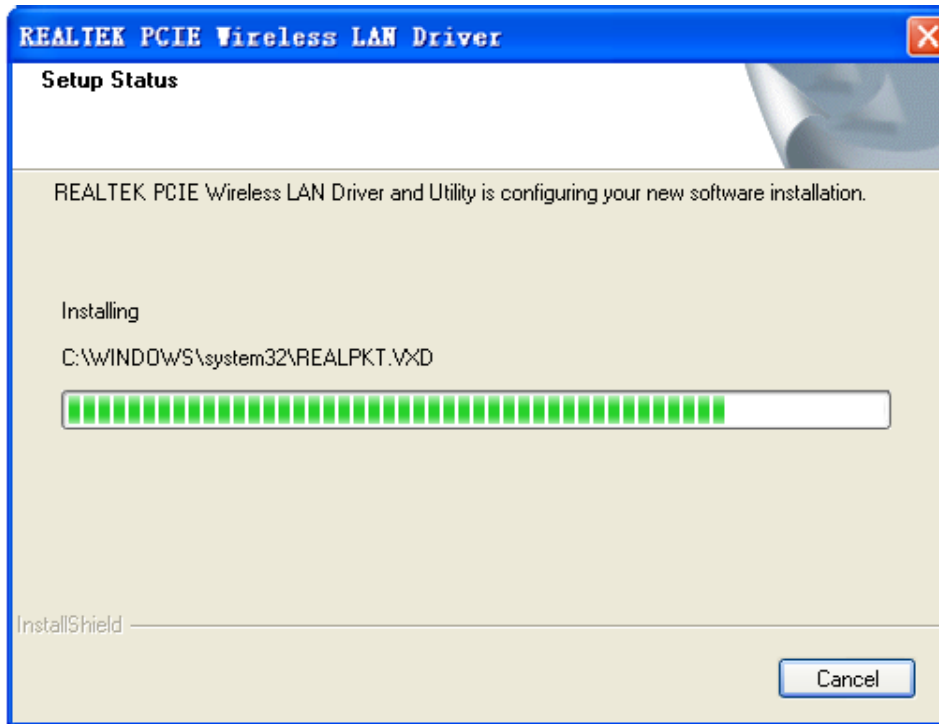


Figure 5

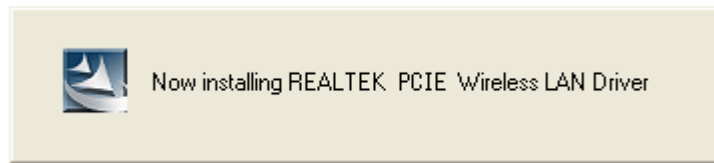


Figure 6

5. Click on **“Finish”**. The setup is already done. (Figure 7)

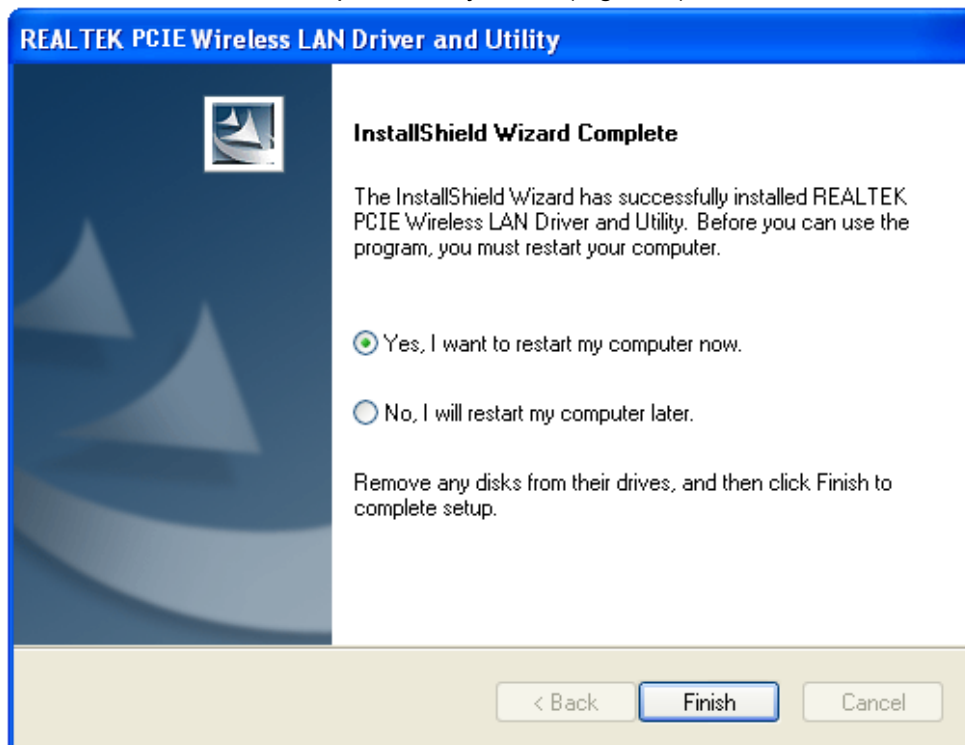


Figure 7

## Chapter 3 Connect Wireless Network

This section will teach you how to use Windows Built-in Wireless Configuration to connect to the wireless network.

### Please refer to the following steps:

1. Right click “Local Area Connect” icon in the Task bar, and select “View Available Wireless Networks”.(Figure 8)



Figure 8

2. The screen displayed, the currently scanned wireless networks. If the one you want to connect has not been scanned, click “Refresh Network List” to update the network list. Select the wireless network you want to connect, and click “Connect” or double click this wireless network then click “Connect”.(Figure 9)

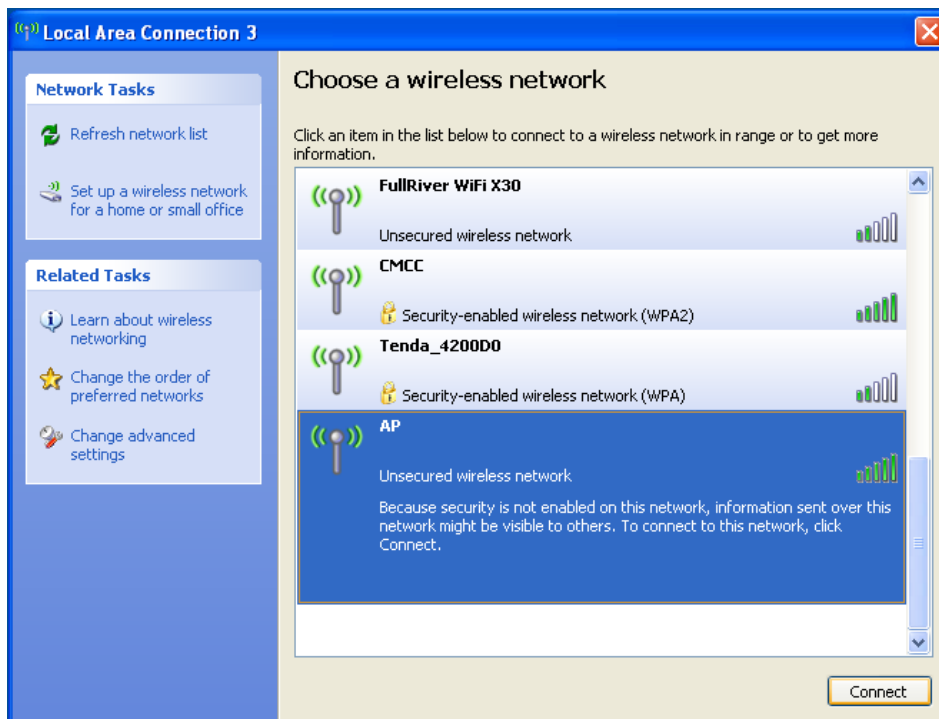


Figure 9



3. The Wireless Network Connection box will appear. Enter the Network Key and click Connect.(Figure 10)

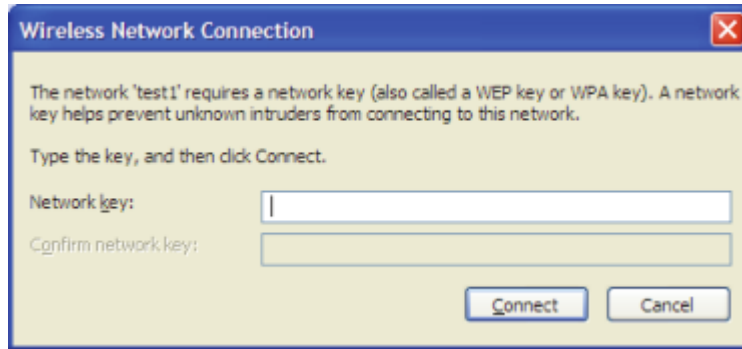


Figure 10

4. When it shows “Connected” as the picture below, then you can enjoy wireless access to Internet now.(Figure 11)

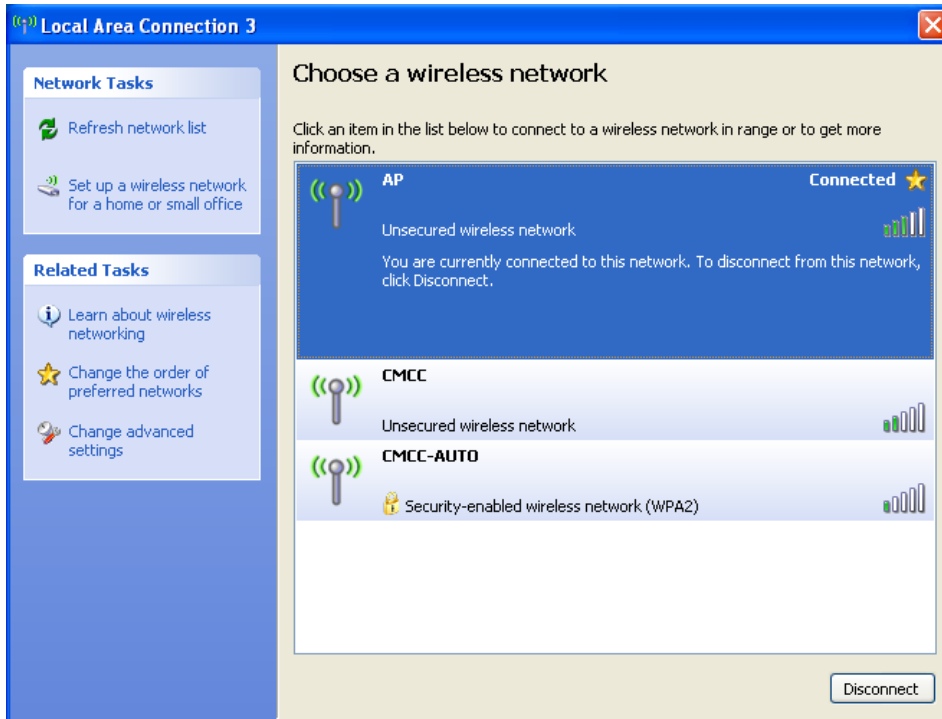


Figure 11

## Appendix: Technical Specifications

Standards and Protocols	IEEE 802.11AC, IEEE 802.11n, IEEE 802.11b, IEEE 802.11g, IEEE 802.11a
PCI Bus	PCI EXPRESS X1
Sensitivity @PER	5G_11ac HT80M_MCS9: -51dBm @10% PER HT40M_MCS7: -62dBm @10% PER HT20M_MCS7: -65dBm @10% PER 11N_2.4G HT40M_MCS7: -62dBm @10% PER HT20M_MCS7: -65dBm @10% PER OFDM_54M: -68dBm@10% PER 11b_11M: -81dBm@10% PER
Transmit Power	20dBm (max)
Antenna	2*5dBi removable omnidirectional antennas
Transmission Rate	802.11n: 2.4G 300Mbps Max 802.11ac: 5G 867Mbps Max
Operating System	Microsoft Windows XP 32/64, Vista 32/64, Windows 7 32/64, Windows 8 32/64, Window 8.1 32/64
Environment	Operating Temperature: 0°C~40°C Storage Temperature: -20°C~70°C Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~95% non-condensing

### **FCC 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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 important announcement

Important Note:

### **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 and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Country Code selection feature to be disabled for products marketed to the US/Canada.

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,
3. For all products market in US, OEM has to limit the operation channels in CH1 to CH11 for 2.4G band by supplied firmware programming tool. OEM shall not supply any tool or info to the end-user regarding to Regulatory Domain change. (if modular only test Channel 1-11)

As long as the three conditions above are met, further transmitter testing 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 cannot 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 cannot 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**

The final end product must be labeled in a visible area with the following" Contains FCC ID: **2AVKK-TXA069** "

### **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.

# Integration instructions for host product manufacturers according to KDB 996369 D03 OEM Manual v01

## 2.2 List of applicable FCC rules

CFR 47 FCC PART 15 SUBPART C has been investigated. It is applicable to the modular transmitter

## 2.3 Specific operational use conditions

This modular is a limited single modular as without his own power supply regulation on the module, If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system, it is powered by PCI-E interface; This modular only install host with PCI-E interface.

## 2.4 Limited module procedures

This modular is a limited single modular as without his own power supply regulation on the module, it is powered by PCI-E interface; This modular only install host with PCI-E interface; host manufacturer have to consult with module manufacturer for the module limiting conditions when integrate the module in the host. module manufacturer should reviews detailed test data or host designs prior to giving the host manufacturer approval.

## 2.5 Trace antenna designs

Not applicable

## 2.6 RF exposure considerations

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.

## 2.7 Antennas

This radio transmitter **2AVKK-TXA069** has been approved by Federal Communications Commission to operate with the

Model	Type	Connector	Peak gain ( dBi )				
			2400-2483.5 MHz	5150-5250 MHz	5250-5350 MHz	5470-5725 MHz	5800 MHz
LJWG24ASA	External antenna	/	5.0 dBi	5.0 dBi	/	/	5.0 dBi

## 2.8 Label and compliance information

The final end product must be labeled in a visible area with the following" Contains FCC ID:2AVKK-TXA069".

## 2.9 Information on test modes and additional testing requirements

Host manufacturer is strongly recommended to confirm compliance with FCC requirements for the transmitter when the module is installed in the host.

## 2.10 Additional testing, Part 15 Subpart B disclaimer

Host manufacturer is responsible for compliance of the host system with module installed with all other applicable requirements for the system such as Part 15 B.