

# **EWM-W192 series User Manual**

## Applicability Type

AIW PN	MPN	Description
EWM-W192K	Intel AC9260	IEEE 802.11ac (2.4GHz+5GHz) + BT 5.0, 2T2R, M.2 2230 Key A/E with antennas and cables

## Revision History

Version	Date	Description
V1.0	2023-06-09	1. Official version

# 1 Foreword

## 1.1 Introduction

The document describes how to install driver of EWM-W192K series product in Windows 10.

## 2 Overview

### Step 1 - Download Your Driver

Download the driver from below link. Please check with your sales team if you require drivers for other windows driver and Linux.

[Windows 10 driver for EWM-W192 series](#)

### Step 2 - Install Your Driver

Once you have downloaded your new driver, you'll need to install it. In Windows, use a built-in utility called Device Manager, which allows you to see all of the devices recognized by your system, and the drivers associated with them.

#### How to Open Device Manager

- In **Windows 11, Windows 10 & Windows 8.1**, right-click the Start menu and select Device Manager
- In **Windows 8**, swipe up from the bottom, or right-click anywhere on the desktop and choose "All Apps" -> swipe or scroll right and choose "Control Panel" (under Windows System section) -> Hardware and Sound -> Device Manager
- In **Windows 7**, click Start -> Control Panel -> Hardware and Sound -> Device Manager
- In **Windows Vista**, click Start -> Control Panel -> System and Maintenance -> Device Manager
- In **Windows XP**, click Start -> Control Panel -> Performance and Maintenance -> System -> Hardware tab -> Device Manager button

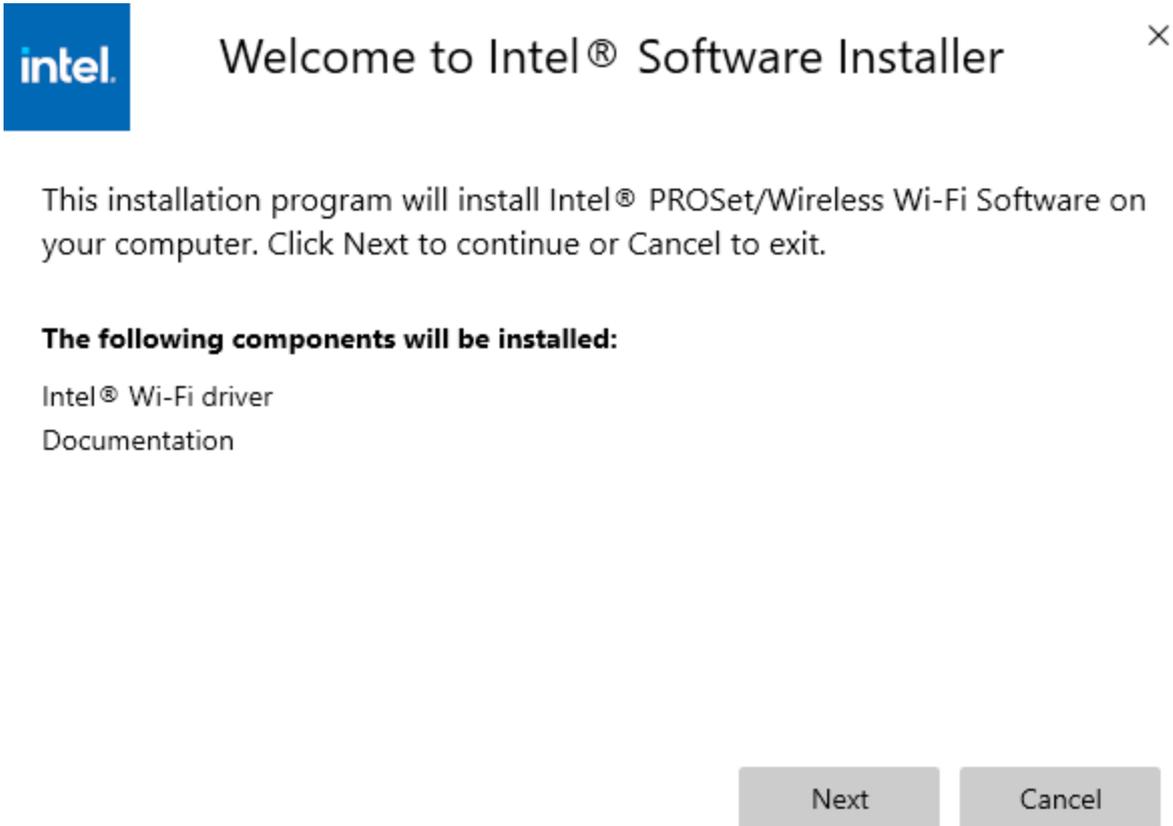
#### How to Install a driver from Device Manager

1. Locate the device and model that is having the issue and double-click on it to open the Properties dialog box.
2. Select the Driver tab.

3. Click the Update Driver button and follow the instructions.

In most cases, you will need to reboot your computer for the driver update to take effect.

**Once you execute the exe. file from the driver folder, please just press the next button.**





## End User License Agreement (EULA) ×

**INTEL SOFTWARE LICENSE AGREEMENT**  
**(OEM / IHV / ISV Distribution & Single User)**

**IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.**

Do not use or load software (including drivers) from this site or any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement, which Intel may modify from time to time following reasonable notice to You. If you do not wish to so agree, do not install or use the Software.

I agree to the license terms and conditions

**Please agree the terms and conditions requested by Intel and press Install button.**



## Installation Progress



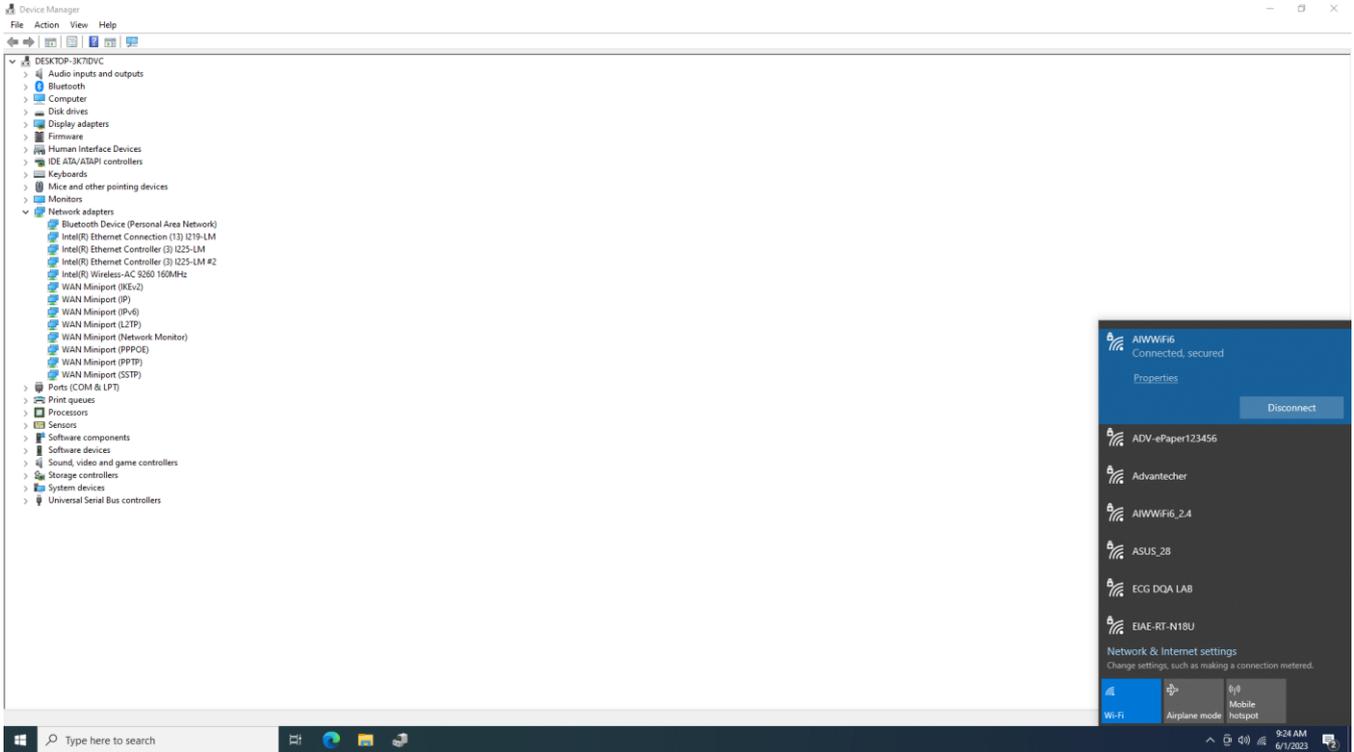
Please wait while installing Intel® PROSet/Wireless Wi-Fi Software...



Installing: Intel® Wi-Fi driver

Cancel

**Please wait few seconds for the driver installation.**



**After driver installation, you should see the Intel AC9260 device in the device manager and be able to connect with AP in your space.**

**Notice: To avoid any trouble, please follow the instructions provided by Advantech and do not use EWM-W192 series in other ways without discussion with Advantech's team.**

## **INFORMATION FOR THE USER Safety Notices**

(Based on Intel's Safety regulation & limitation)

### **USA FCC Radio Frequency Exposure**

The FCC with its action in ET Docket 96-8 has adopted a safety standard for human exposure to radio frequency (RF) electromagnetic energy emitted by FCC certified equipment. The wireless adapter meets the Human Exposure requirements found in FCC Part 2, 15C, 15E along with guidance from KDB 447498, KDB 248227 and KDB 616217. Proper operation of this radio according to the instructions found in this manual will result in exposure substantially below the FCC's recommended limits.

The following safety precautions should be observed:

- Do not touch or move antenna while the unit is transmitting or receiving.
- Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- Do not operate the radio or attempt to transmit data unless the antenna is connected; this behavior may cause damage to the radio.

Use in specific environments:

- The use of wireless adapters in hazardous locations is limited by the constraints posed by the safety directors of such environments.
- The use of wireless adapters on airplanes is governed by the Federal Aviation Administration (FAA). The use of wireless adapters in hospitals is restricted to the limits set forth by each hospital.

### **Explosive Device Proximity Warning**

**Warning:** Do not operate a portable transmitter (including this wireless adapter) near unshielded blasting caps

or in an explosive environment unless the transmitter has been modified to be qualified for such use.

## **Antenna Warnings:**

**Warning:** The wireless adapter is not designed for use with high-gain directional antennas. Use On Aircraft Caution

**Caution:** Regulations of commercial airline operators may prohibit airborne operation of certain electronic devices equipped with radio-frequency wireless devices (wireless adapters) because their signals could interfere with critical aircraft instruments.

**Caution:** 60 GHz/802.11ad equipment is not permitted on aircraft per FCC §15.255. OEM and host integrators should consider this FCC rule in host devices.

## **Other Wireless Devices**

Safety Notices for Other Devices in the Wireless Network: See the documentation supplied with wireless adapters or other devices in the wireless network.

Local Restrictions on 802.11a, 802.11b, 802.11d, 802.11g, 802.11n, and 802.11ac Radio Usage

Caution: Due to the fact that the frequencies used by 802.11a, 802.11b, 802.11d, 802.11g, 802.11n, and 802.11ac wireless LAN devices may not yet be harmonized in all countries, 802.11a, 802.11b, 802.11d, 802.11g, 802.11n, and 802.11ac products are designed for use only in specific countries, and are not allowed to be operated in countries other than those of designated use. As a user of these products, you are responsible for ensuring that the products are used only in the countries for which they were intended and for verifying that they are configured with the correct selection of frequency and channel for the country of use. The device transmit power control (TPC) interface is part of the Intel® PROSet/Wireless WiFi Connection Utility Software. Operational restrictions for Equivalent Isotropic Radiated Power (EIRP) are provided by the system manufacturer. Any deviation from the permissible power and frequency settings for the country of use is an infringement of national law and may be punished as such.

## **Wireless Interoperability**

The wireless adapter is designed to be interoperable with other wireless LAN products that are based on direct sequence spread spectrum (DSSS) radio technology and to comply with the following standards:

IEEE Std. 802.11b compliant Standard on Wireless LAN  
IEEE Std. 802.11g compliant Standard on Wireless LAN  
IEEE Std. 802.11a compliant Standard on Wireless LAN  
IEEE Std. 802.11n compliant Standard on Wireless LAN

IEEE Std. 802.11ac draft compliant on Wireless LAN

Wireless Fidelity certification, as defined by the Wi-Fi Alliance

## The Wireless Adapter and Your Health

The wireless adapter, like other radio devices, emits radio frequency electromagnetic energy. The level of energy emitted by the wireless adapter, however, is less than the electromagnetic energy emitted by other wireless devices such as mobile phones. The wireless adapter operates within the guidelines found in radio frequency safety standards and recommendations. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature. In some situation or environments, the use of the wireless adapter may be restricted by the proprietor of the building or responsible representatives of the applicable organization. Examples of such situations may include:

Using the wireless adapter on board airplanes, or  
Using the wireless adapter in any other environment where the risk of interference with other devices or services is perceived or identified as being harmful.

If you are uncertain of the policy that applies to the use of wireless adapters in a specific organization or environment (an airport, for example), you are encouraged to ask for authorization to use the adapter before you turn it on.

## REGULATORY INFORMATION

### USA - Federal Communications Commission (FCC)

This wireless adapter is restricted to indoor use due to its operation in the 5.15 to 5.25 and 5.470 to 5.75GHz frequency ranges. No configuration controls are provided for Intel® wireless adapters allowing any change in the frequency of operations outside the FCC grant of authorization for U.S. operation according to Part 15.407 of the FCC rules.

Intel® wireless adapters are intended for OEM integrators only.  
Intel® wireless adapters cannot be co-located with any other transmitter unless approved by the FCC.

This wireless adapter complies with Part 15 of the FCC Rules. Operation of the device is subject to the following two conditions:

This device may not cause harmful interference.  
This device must accept any interference that may cause undesired operation.

NOTE: The radiated output power of the adapter is far below the FCC radio frequency exposure limits. Nevertheless, the adapter should be used in such a manner that the potential for human contact during normal operation is minimized. To avoid the possibility of exceeding the FCC radio frequency exposure limits, you should keep a distance of at least 20cm between you (or any other person in the vicinity), or the minimum separation distance as specified by the FCC grant conditions, and the

antenna that is built into the computer. Details of the authorized configurations can be found at <http://www.fcc.gov/oet/ea/> by entering the FCC ID number on the device.

## **Class B Device Interference Statement**

This wireless adapter 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 wireless adapter generates, uses, and can radiate radio frequency energy. If the wireless adapter is not installed and used in accordance with the instructions, the wireless adapter may cause harmful interference to radio communications. There is no guarantee, however, that such interference will not occur in a particular installation. If this wireless adapter 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 taking one or more of the following measures:

- Reorient or relocate the receiving antenna of the equipment experiencing the interference.
- Increase the distance between the wireless adapter and the equipment experiencing the interference.
- Connect the computer with the wireless adapter to an outlet on a circuit different from that to which the equipment experiencing the interference is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**NOTE:** The adapter must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product. Any other installation or use will violate FCC Part 15 regulations.

**CAUTION:** Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

This device is slave equipment, the device is not radar detection and not ad-hoc operation in the DFS band.

This module is intended for OEM integrator. The OEM integrator is responsible for the compliance to all the rules that apply to the product into which this certified RF module is integrated. Additional testing and certification may be necessary when multiple modules are used.

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

In the users 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.

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.

**LABEL OF THE END PRODUCT**

The final end product must be labeled in a visible area with the following " Contains FCC ID: M82-EWM-W192K ".

This radio transmitter FCC ID: M82-EWM-W192K has been approved by FCC to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

**Antenna Type and Gains**

Only antennas of the same type and with equal or less gains as shown below may be used with the Intel® wireless adapters. Other types of antennas and/or higher gain antennas may require additional authorization for operation.

Antenna Type	Antenna Location (Main/Aux)	2.4GHz	2.6GHz	5.2GHz	5.5GHz	5.7GHz
		Peak Gain in dBi*				
PIFA	Main					
	Aux	3.24	3.47	3.73	4.77	4.77
	MIMO					

\*All antenna gains include cable loss.

**Antenna List - 2.4G**

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	INPAQ	RFPCA351746EMLB901 (Main)	PCB	2.41 dBi for 2400 MHz
		RFPCA351455EMLB901 (Aux)		2.60 dBi for 2400 MHz

**Antenna List - 5G**

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	INPAQ	RFPCA351746EMLB901 (Main)	PCB	3.77 dBi for 5150~5250 MHz 3.77 dBi for 5250~5350 MHz 2.52 dBi for 5470~5725 MHz

			3.04 dBi for 5725~5850 MHz
			2.57 dBi for 5150~5250 MHz
			2.57 dBi for 5250~5350 MHz
			2.37 dBi for 5470~5725 MHz
			3.40 dBi for 5725~5850 MHz
		RFPCA351455EMLB901 (Aux)	

Note: The antenna connector is Reverse IPEX4 type.

## Innovation, Science and Economic Development Canada (ISED) Notices

This device complies with Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable

### Caution:

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;

(iii) for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate;

(iv) where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

**Avertissement:**

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis pour les dispositifs utilisant les bandes de 5 250 à 5 350 MHz et de 5 470 à 5 725 MHz doit être conforme à la limite de la e.i.r.p;

(iii) pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5 725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée, selon le cas;

(iv) lorsqu'il y a lieu, les types d'antennes (s'il y en a plusieurs), les numéros de modèle de l'antenne et les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, énoncée à la section 6.2.2.3, doivent être clairement indiqués

**This device is intended only for OEM integrators under the following conditions:**

1) The antenna must be installed and operated with greater than 20cm 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

Cet appareil est conçu uniquement pour les integrateurs OEM dans les conditions suivantes:

1) L'antenne doit être installée et exploitée avec plus de 20 cm entre l'antenne et les utilisateurs, et 2) Le module émetteur peut ne pas être coimplanté avec un autre émetteur ou antenne.

Tant que les 2 conditions ci-dessus sont remplies, des essais supplémentaires sur l'émetteur ne seront pas nécessaires. Toutefois, l'intégrateur OEM est toujours responsable des essais sur son produit final pour toutes exigences de conformité supplémentaires requis pour ce module installé.

**IMPORTANT NOTE:**

In the event that these conditions can not be met (for example certain laptop configurations or colocation with another transmitter), then the Canada authorization is no longer considered valid and the IC 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 Canada authorization.

**IMPORTANTE NOTE**

Dans le cas où ces conditions ne peuvent être satisfaites (par exemple pour certaines configurations d'ordinateur portable ou de certaines co-localisation avec un autre émetteur), l'autorisation du Canada n'est plus considérée comme valide et l'ID IC ne peut pas être utilisé sur le produit final. Dans ces circonstances, l'intégrateur OEM sera chargé de réévaluer le produit final (y compris l'émetteur) et l'obtention d'une autorisation distincte au Canada

**LABEL OF THE END PRODUCT**

This transmitter module is authorized only for use in device where the antenna may be installed and operated with greater than 20cm between the antenna and users. The final end product must be labeled in a visible area with the following " Contains IC: 9404A-EWMW192K".

**Plaque signalétique du produit final**

Ce module émetteur est autorisé uniquement pour une utilisation dans un appareil où l'antenne peut être installée et utilisée à plus de 20 cm entre l'antenne et les utilisateurs. Le produit final doit être

étiqueté dans un endroit visible avec l'inscription suivante: "Contient des IC: 9404A-EWMW192K"

**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.

**Manuel d'information a l'utilisateur final**

L'intégrateur OEM doit être conscient de ne pas fournir des informations à l'utilisateur final quant à la façon d'installer ou de supprimer ce module RF dans le manuel de l'utilisateur du produit final qui intègre ce module.

Le manuel de l'utilisateur final doit inclure toutes les informations réglementaires requises et avertissements comme indiqué dans ce manuel.

This radio transmitter IC: 9404A-EWMW192K has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 9404A-EWMW192K) a été approuvé par ISED pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur

**Antenna Type and Gains**

Only antennas of the same type and with equal or less gains as shown below may be used with the Intel® wireless adapters. Other types of antennas and/or higher gain antennas may require additional authorization for operation.

Antenna Type	Antenna Location (Main/Aux)	2.4GHz	2.6GHz	5.2GHz	5.5GHz	5.7GHz
		Peak Gain in dBi*				
PIFA	Main					

	Aux	3.24	3.47	3.73	4.77	4.77
	MIMO					
*All antenna gains include cable loss.						

**Antenna List - 2.4G**

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	INPAQ	RFPCA351746EMLB901 (Main)	PCB	2.41 dBi for 2400 MHz
		RFPCA351455EMLB901 (Aux)		2.60 dBi for 2400 MHz

**Antenna List - 5G**

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	INPAQ	RFPCA351746EMLB901 (Main)	PCB	3.77 dBi for 5150~5250 MHz 3.77 dBi for 5250~5350 MHz 2.52 dBi for 5470~5725 MHz 3.04 dBi for 5725~5850 MHz
		RFPCA351455EMLB901 (Aux)		2.57 dBi for 5150~5250 MHz 2.57 dBi for 5250~5350 MHz 2.37 dBi for 5470~5725 MHz 3.40 dBi for 5725~5850 MHz

Note: The antenna connector is Reverse IPEX4 type.

**Radiation Exposure Statement:**

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 20 cm entre le radiateur et votre corps

**Safety Approval Considerations**

This device has been safety approved as a component and is for use only in complete equipment where the acceptability of the combination is determined by the appropriate safety agencies. When installed, consideration must be given to the following:

It must be installed into a compliant host device meeting the requirement of UL/EN/IEC 60950-1 2nd edition including the general provisions of enclosure design 1.6.2 and specifically paragraph 1.2.6.2 (Fire Enclosure). The device shall be supplied by a SELV source when installed in the end-use equipment.

A heating test shall be considered in the end-use product for meeting the requirement of UL/EN/IEC 60950-1 2nd edition.

### **Low Halogen**

Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. Intel components as well as purchased components on the finished assembly meet JS-709 requirements, and the PCB / substrate meet IEC 61249-2-21 requirements. The replacement of halogenated flame retardants and/or PVC may not be better for the environment.