1 Warning

FCC Warning:

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;

(2) This device must accept any interference received, including interference that may cause undesired operation.

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

FCC 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."

INTEGRATION INSTRUCTIONS

1. This Modular Approval is limited to OEM installation for mobile and fixed applications only. The antenna installation and operating configurations of this transmitter, including any applicable source-based time- averaging duty factor, antenna gain and cable loss must satisfy MPE categorical Exclusion Requirements of 2.1091. This equipment complies with FCC & Industry Canada exposure limits set forth for an uncontrolled environment.

2. When the module is installed in the host device, the FCC ID label must be visible through a window on the final device or it must be visible when an access panel, door or cover is easily removed. If not, a second label must be placed on the outside of the final device that contains the following text: -Contains FCC ID: 2AF6B-RAK5147.



3. The Shenzhen Rakwireless Technology Co., Ltd. modular transmitter is only FCC authorized for the FCC Part15.247 listed on the grant, and that the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. If the grantee markets their product as being Part 15 Subpart B compliant (when it also contains unintentional-radiator digital circuity), then the grantee shall provide a notice stating that the final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed.

RF Exposure: 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 and your body.

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

ISED Warning:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.

2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;

2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with FCC & Industry Canada exposure limits set forth for an uncontrolled environment.

L'équipement est conforme aux limites d'exposition établies par fac et Industrie Canada pour les environnements non contrôlés.

The host product shall be properly labelled to identify the modules within the host product. The ISED certification label of a module shall be clearly visible at all times when installed in the host product; otherwise, the host product must be labelled to display the ISED certification number for the module, preceded by the word "contains" or similar wording expressing the same meaning, as follows:

Contains IC: 25908-RAK5147



Le numéro d'homologation d'ISDE, le NIVM, le NMP et le NIVL ne doivent pas nécessairement être adjacents.

Le numéro d'homologation se compose d'un numéro de compagnie (NC), attribué par le Bureau d'homologation et de services techniques d'ISDE, suivi du numéro de produit unique (NPU) attribué par le requérant. Le numéro d'homologation doit apparaître comme suit : IC: 25908-RAK5147

RSS-102 Statement

This equipment complies with IC RSS_102 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.

Cet équipement est conforme aux limites d'exposition aux radiations IC CNR_102 établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

Labelling

The proposed FCC IC label format is to be placed on the module. If it is not visible when the module is installed into the system,

"Contains FCC ID: 2AF6B-RAK5147, Contains IC: 25908-RAK5147" shall be placed on the outside of final host system.

Labelling

— This radio transmitter [25908- RAK5147] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

— Le présent émetteur radio [25908- RAK5147] a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antenne énumérés cidessous 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 pour tout type figurant sur la liste, sont trictement interdits pour l'exploitation de l'émetteur.





Antenna info

| Antenna # | Manufacturer | Model | Antenna Gain | Antenna Type | Connector Type |
|-----------|---|----------|-----------------|------------------------|--------------------------|
| 1# | Shenzhen RAKwireless Technology Co., Ltd | RAKARG15 | 8dBi | Fiber Glass Antenna | N-type male connector |
| 2# | | RAKARG14 | 5.8dBi | Fiber Glass Antenna | N-type male connector |
| 3# | | RAKARG19 | 5.1dBi | Fiber Glass Antenna | N-type male connector |
| 4# | | RAKARJ14 | 2.3 dBi | Dipole Antenna | RPSMA connector |
| 5# | | RAKARJ16 | 2.3 dBi | Dipole Antenna | RPSMA connector |



About RAKwireless:

RAKwireless is a pioneer in providing innovative and diverse Cellular and LoRaWAN connectivity solutions for both Edge and Gateway IoT devices. We believe that through easy to use and modular designs we can accelerate the time to market for various IoT Applications in order to optimize system deployment in both Developer and Commercial settings.