

## **User Manual**

Since this module is not sold to general end users directly, there is no user manual of module.

For the details about this module, please refer to the specification sheet of module.

This module should be installed in the host device according to the interface specification (installation procedure).

## FCC Notice

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.

### List of applicable FCC rules

This device complies with below part 15 of the FCC Rules.

Part 15 Subpart C

Part 15 Subpart E

### Test Modes

silex technology, Inc. uses various test mode programs for test set up which operate separate from production firmware. Host integrators should contact silex technology, Inc. for assistance with test modes needed for module/host compliance test requirements.

### Additional testing, Part 15 Subpart B disclaimer

The modular transmitter is only FCC authorized for the specific rule parts (i.e., FCC transmitter rules) listed on the grant, and 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.

The final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed.

### Summarize the specific operational use conditions

This module designed for mounting inside of the end product by end product manufacturer professionally. Therefore, it complies with the antenna and transmission system requirements of § 15.203.

### Compliance with FCC requirement 15.407(c)

Data transmission is always initiated by software, which is the passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by the MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinues transmission in case of either absence of information to transmit or operational failure.

### RF exposure considerations

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

## Co-Location Rule

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

## Label and compliance information

Following information must be indicated on the host device of this module.

**Contains Transmitter Module FCC ID : N6C-SDMAC**

Or

**Contains FCC ID : N6C-SDMAC**

## FCC CAUTION

The following statements must be described on the user manual of the host device of this module;

### **FCC CAUTION**

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

## WLAN Channel 12 & 13

Product hardware has the capability to operate on channel 12 & 13.

However, these 2 channels will be disabled via software and user will not be able to enable these 2 channels.

## ISED Notice

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.

## Label and compliance information

The following information must be indicated on the host device of this module.

Les informations suivantes doivent être indiquées sur le périphérique hôte de ce module.

**Contains Transmitter Module IC: 4908A-SDMAC**

Or

**Contains IC: 4908A-SDMAC**

## Operation in the band 5150-5350 MHz

Operation in the band 5150-5350 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

La bande 5150-5350 MHz est 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.

## Data transmission

Data transmission is always initiated by software, which is the passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by the MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinues transmission in case of either absence of information to transmit or operational failure.

La transmission des données est toujours initiée par le logiciel, puis les données sont transmises par l'intermédiaire du MAC, par la bande de base numérique et analogique et, enfin, à la puce RF. Plusieurs paquets spéciaux sont

initiés par le MAC. Ce sont les seuls moyens pour qu'une partie de la bande de base numérique active l'émetteur RF, puis désactive celui-ci à la fin du paquet. En conséquence, l'émetteur reste uniquement activé lors de la transmission d'un des paquets susmentionnés. En d'autres termes, ce dispositif interrompt automatiquement toute transmission en cas d'absence d'information à transmettre ou de défaillance.

## RF exposure considerations

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'ISDE. Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le radiateur et le corps humain.

## Antenna Type

This radio transmitter (4908A- SDMAC) 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.

Antenna Type	Gain		Impedance
	2.4GHz	5GHz	
PCB Antenna	+3.25dBi	+5.0dBi	50ohms
Rod Antenna	+2.14dBi	+2.1dBi	50ohms
PIFA Antenna	+2.5dBi	+3.5dBi	50ohms

Le présent émetteur radio (4908A- SDMAC) a été approuvé par Innovation, Sciences et Développement économique Canada 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 pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l'émetteur.

Type d'antenne	Gain		Impedance
	2.4GHz	5GHz	
Antenne PCB	+3.25dBi	+5.0dBi	50ohms
Antenne tige	+2.14dBi	+2.1dBi	50ohms
Antenne PIFA	+2.5dBi	+3.5dBi	50ohms