R11e-4G

R11e-4G is a standard Mini PCIe module, supports TDD-LTE/FDD-LTE network and provides high speed and reliable mobile broadband data connection. LTE data rate can achieve DL 150 Mbps/UL 50 Mbps.

The rich interfaces and RF bands allow it to be widely used in CPE, industrial routers, security monitoring, industrial equipment and other applications.

General Features

- **LTE(FDD):** B3/B7/B20/B31
- **LTE(TDD):** B41/B42/B43
- **Environmental**

Operating Temperature: -10℃～60℃

Extreme working temperature: -10℃ ～+60℃

Humidity: 5% ～ 95%

- **Power Supply:** 3.2 V to 4.2V (typical: 3.3V)
- **Dimensions:** 50.95mm * 30mm * 4.4mm
- **AT Command:** 3GPP TS 27.007 and 27.005
- **OS:** Windows/Linux/Android

RF Parameters

- **Output Power**

FDD LTE: 22dBm±2.26dB (3GPP TS 36.101 R9 Class 3)

TDD-LTE: 22dBm±0.6dB (3GPP TS 36.101 R9 Class 3)

- **Sensitivity**

FDD LTE:-93 dBm(20MHZ) @ 2 antenna

TDD LTE:-94 dBm(20MHZ) @ 2 antenna

Data Features

- **LTE FDD :** Category 4, DL 150Mbps UL 50Mbps
- **LTE TDD:** Category 4, DL 112Mbps UL 10Mbps

Additional Features

- **Firmware update via USB**
- **FOTA**

Interfaces

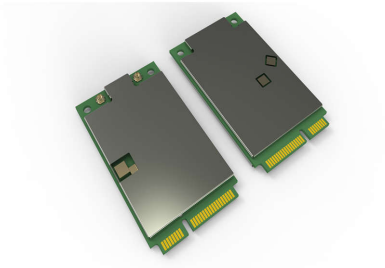
- **Mini PCIe interface**
- **USB 2.0 x1**
- **SIM Card x1**
- **I2C Interface x1**
- **SPI Interface x1**
- **PCM Interface x1**
- **LED x4**
- **Reset x1**
- **Antenna interface x2**

Certifications

- **FCC*(North Americal)**
- **CE*(Europe)**

Application

- **LTE CPE**
- **Industrial Routers**
- **Security Monitoring**



Important Notice to OEM integrators

1. This module is limited to OEM installation ONLY.

2. This module is limited to installation in mobile or fixed applications, according to Part 2.1091(b).

3. The separate approval is required for all other operating configurations, including portable configurations with respect to Part 2.1093 and different antenna configurations

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.

CAN ICES-3(B)/NMB-3(B)

Innovation, Science and Economic Development Canada

This device complies with Industry Canada's licence-exempt RSSs. 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.

(1) Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(2) l'appareil ne doit pas produire de brouillage, et
l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi， même si le brouillage est susceptible d'en compromettre le fonctionnement."

Federal Communication Commission Interference 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.

For class B digital device

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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be
co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement

This equipment complies with FCC/IC RF 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.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition RF FCC / IC définies 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.

End Product Labeling

The host system using this module must display a visible label indicating the following text: Contains FCC ID: TV7R11E4G

The host system using this module must display a visible label indicating the following text: Contains IC:7442A-R11E4G

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

The antenna must be installed such that 20 cm is maintained between the antenna and users,

The transmitter module may not be co-located with any other transmitter or antenna

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC/IC authorization is no longer considered valid and the FCC/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 FCC/IC authorization