

# R11e-LTE6

**R11e-LTE6** is a standard Mini PCIe module, supports LTE for next-generation cellular networks and provides high speed and reliable mobile broadband data connection. LTE data rate can achieve DL 300Mbps/DL 50Mbps.

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

## General Features

- **CA(FDD):** B1+B5, B1+B8, B1+B20, B2+B5, B2+B17, B3+B5, B3+B7, B3+B8, B3+B20, B7+B8, B7+B12, B7+B20, B8+B1, B20+B1, B5+B2, B12+B2, B5+B3, B7+B3, B8+B3, B20+B3, B20+B7, B1+B1, B2+B2, B3+B3, B5+B5, B7+B7, B8+B8, B12+B12
- **CA(TDD):** B38+B38, B39+B39, B40+B40, B41+B41, B39+B41
- **LTE(FDD):** Band 1/2/3/5/7/8/12/20/25/26
- **LTE(TDD):** Band 38/39/40/41
- **UMTS:** Band 1/2/5/8
- **E8hko/GPRS/GSM:** Band 2/3/5/8

## Data Features

- **CA FDD :** Category 6, DL 300Mbps UL 50Mbps
- **CA TDD:** Category 6, DL 224Mbps UL 10Mbps
- **WCDMA CS:** DL 64 kbps/UL 64 kbps
- **WCDMA PS:** DL 384 kbps/UL 384 kbps
- **HSPA+:** DL 21.6 Mbps/UL 5.76 Mbps
- **DC-HSPA+:** DL 42 Mbps/UL 5.76 Mbps
- **GPRS:** DL 107 kbps/UL 85.6 kbps
- **E8hko:** DL 296 kbps/UL 236.8 kbps

•**MIMO:** 2\*2 and 4\*2 DL

•**Environmental**

Operating Temperature: -20°C ~ +70°C

Extreme working temperature: -40°C ~ +80°C

Humidity: 5% ~ 95%

•**Power Supply:** 3.2 V to 4.2V (typical: 3.8V)

•**Dimensions:** 51mm \* 30mm \* 5.0mm

•**AT Command:** 3GPP TS 27.007 and 27.005

•**OS:** Windows/Linux/Android

**RF Parameters**

•**Output Power**

LTE: 23dBm±2dB (3GPP TS 36.101 R9 Class 3)

UMTS: 24dBm+1/-3dB (Power Class 3)

EGPRS 1800/1900MHz: 26dBm+3/-4dB (Power Class E2)

EGPRS 850/900MHz: 27dBm±3dB (Power Class E2)

GSM/GPRS 1800/1900MHz: 30dBm±2dB (Power Class 1)

GSM/GPRS 850/900MHz: 33dBm±2dB (Power Class 4)

•**Sensitivity**

FDD LTE: -99 dBm(10MHZ)

TDD LTE: -97 dBm(20MHZ)

GSM 850/900 MHz: -109 dBm

GSM 1800/1900 MHz: -110 dBm

WCDMA 850/1900 MHz: -110 dBm

WCDMA 900/2100 MHz: -110 dBm

**Interfaces**

• Mini PCIe interface

• USB 2.0 x1

• SIM Card x1


• IIC Interface x1

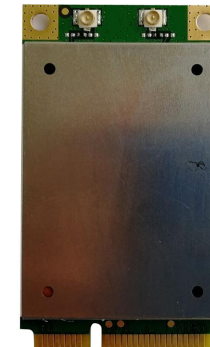
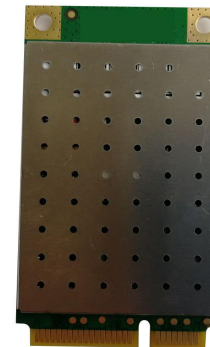
• PCM Interface x1

• LED

• RESET

• Antenna interface

		
BE	BG	CZ
DK	DE	EE
IE	EL	ES
FR	HR	IT
CY	LV	LT
LU	HU	MT
NL	AT	PL
PT	RO	SI
SK	FI	SE
UK		



## Certific

- FCC\*(North America)
- CE\*(Europe)
- IC\*(Canada)

### EU Regulatory RED Declaration of Conformance

Hereby, we (Mikrotik SIA) declared that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU

### FCC Warning:

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

### RF Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Les antennes installées doivent être situées de façon à ce que la population ne puisse y être exposée à une distance de moins de 20 cm. Installer les antennes de façon à ce que le personnel ne puisse approcher à 20 cm ou moins de la position centrale de l'antenne.

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

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.

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

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.

The host will satisfy Class I or Class II permissive change based on this module FCC ID. If the identification number is not visible when the module is installed inside the host, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module Contains FCC ID: TV7R11ELTE6" or "Contains FCC ID: TV7R11ELTE6. Any similar wording that expresses the same meaning may be used.