

R11e-LoRa8

R11e-LoRa8 - LoRa mPCIe Gateway module. Can be integrated into RouterBOARD product with mPCIe slot. Requires LoRa package installation to configure in RouterOS.

Specifications

Low power-consuming with mini PCIe interface, for long-distance data transmit:

- Interface – Mini-PCIe;
- Temperature Operating -40 / +70;
- Supports Class A and C;
- Frequency - 863-870MHz (EU);
- RF Output power - 863-870MHz (EU) @ 4.60 dBm
- *Receive max sensitivity - 137 dB @ SF12, Depends on the antenna used;*
- *Maximum power consumption 2 W.*

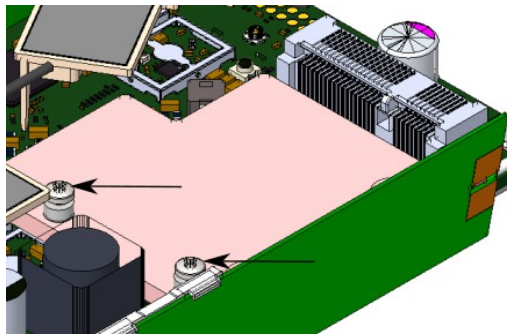
Installing the module in your device

R11e-LoRa8 for professional use. Each of the cards comes in ESD protective packaging. When handling electrical equipment please observe the following safety precautions:

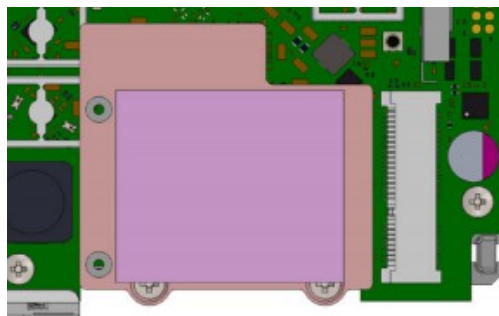
- Use a wrist grounding strap when unpacking and working with electrical components to avoid electrical discharge (ESD) damage;
- After unpacking please place the card on the anti-static mat;
- When installing make sure there are no objects that can damage or touch the PCB plate;
- The card can be installed in your desired device using the factory provided screw holes in a PCB plate;

Pictures added for illustration purposes, the device configuration and the placement of the miniPCIe card may vary.

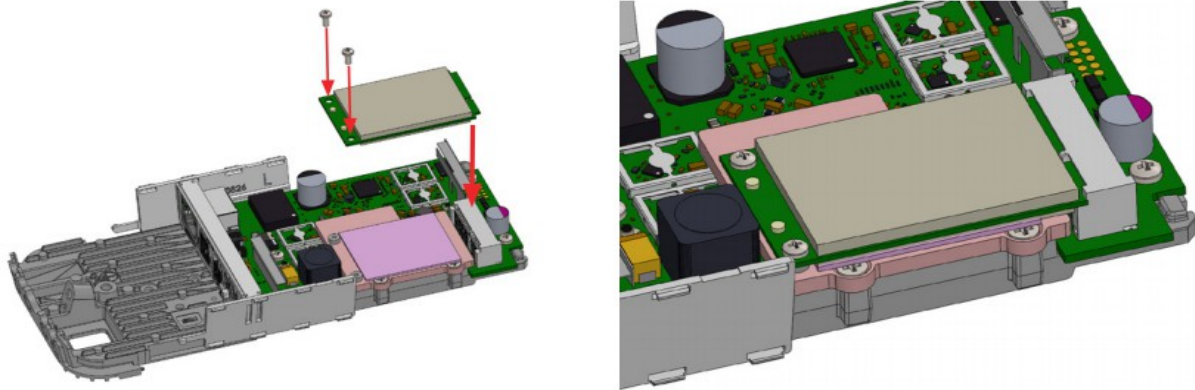
- Locate miniPCIe slot on your device;
- Unscrew two factory attached screws;



- Place thermal pad to the heat sink plate;



- Install module to the miniPCIe slot and secure with previously removed screws. Tightening torque 0,3 Nm.



Connecting to the antenna



If your device does not have internal antennas, it is possible to connect to the external antennas by adding cable connectors, product code – ACSMAUFL. <https://mikrotik.com/product/acσμαufl>



Please connect and disconnect the antenna, when the device is turned off!

- Attach antenna cable to the connector on the module:



When installing outdoors please ensure that the device case is waterproof and are designed for outdoor use. The IP rating scale for this device is IP0.

Mounting and configuration of this device should be done by a qualified person.

Configuration for RouterOS

To set the configuration for LoRa please connect to the device and log in with your web browser, Winbox or mobile application. Two easy steps to follow:

First step:

1. Once logged in, Quick Set will be selected, please switch to WebFig on the right side of the screen. If the configuration is done through mobile application then click on the gear symbol on the right side of the screen to open up an advanced menu.
2. On the left side menu please find and select section "Lora".
3. On the newly opened window select Servers tab.
 1. Click + to add new server configuration.
 2. A New window will appear and you will have to enter:

Name: (Server name)

Address: (Server address)

Up port: (Usually it's 1700)

Down port: (Usually it's 1700)

3. Click OK to save.

Second step:

4. Select the Device tab on the previous window.
5. Double-click or tap on the line to configure.
6. Choose previously entered network on the drop-down menu.
7. Click on the button Enable to enable the gateway.
8. Click OK to save.
9. The configuration is done.

Specifications

For more information about this product, specification and pictures please visit our web page:

<https://mikrotik.com/product/R11e-LoRa8>

Module can be installed on the miniPCIe to USB adapter and used in any of our devices with USB slot and installed Lora package.

To use module in other devices packet forwarder from Semtech is required. https://github.com/Lora-net/packet_forwarder

Operating system support

The module supports RouterOS software version v6. Other operating systems have not been tested.

CE Declaration of Conformity



Manufacturer: Mikrotikls SIA, Brivibas gatve 214i Riga, Latvia, LV1039, Latvia.

BG	С настоящото Mikrotikls SIA декларира, че този тип радиосъоръжение RouterBOARD е в съответствие с Директива 2014/53/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: https://mikrotik.com/products
CS	Tímto Mikrotikls SIA prohlašuje, že typ rádiového zařízení RouterBOARD je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: https://mikrotik.com/products
DA	Hermed erklærer Mikrotikls SIA, at radioudstyrstypen RouterBOARD er i overensstemmelse med direktiv 2014/53/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: https://mikrotik.com/products
DE	Hiermit erklährt Mikrotikls SIA, dass der Funkanlagentyp RouterBOARD der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: https://mikrotik.com/products
EL	Με την παρούσα ο/η Mikrotikls SIA, δηλώνει ότι ο ραδιοεξοπλισμός RouterBOARD πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: https://mikrotik.com/products
EN	Hereby, Mikrotikls SIA declares that the radio equipment type RouterBOARD is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: https://mikrotik.com/products
ES	Por la presente, Mikrotikls SIA declara que el tipo de equipo radioeléctrico RouterBOARD es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: https://mikrotik.com/products
ET	Käesolevaga deklareerib Mikrotikls SIA, et käesolev raadioseadme tüüp RouterBOARD vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: https://mikrotik.com/products
FI	Mikrotikls SIA vakuuttaa, että radiolaitetyypin RouterBOARD on direktiivin 2014/53/EU mukainen. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: https://mikrotik.com/products
FR	Le soussigné, Mikrotikls SIA, déclare que l'équipement radioélectrique du type RouterBOARD est conforme à la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: https://mikrotik.com/products
HR	Mikrotikls SIA ovime izjavljuje da je radijska oprema tipa RouterBOARD u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: https://mikrotik.com/products
HU	Mikrotikls SIA igazolja, hogy a RouterBOARD típusú rádióberendezés megfelel a 2014/53/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: https://mikrotik.com/products
IT	Il fabbricante, Mikrotikls SIA, dichiara che il tipo di apparecchiatura radio RouterBOARD è conforme alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet: https://mikrotik.com/products
IS	Hér með lýsir Mikrotikls SIA því yfir að RouterBOARD er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 2014/53/EU. Fullur texti ESB samræmisýfirlýsingar er að finna á eftirfarandi veffangi: https://mikrotik.com/products
LT	Aš, Mikrotikls SIA, patvirtinu, kad radijo įrenginių tipas RouterBOARD atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu: https://mikrotik.com/products
LV	Ar šo Mikrotikls SIA deklarē, ka radioiekārta RouterBOARD atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: https://mikrotik.com/products
MT	B'dan, Mikrotikls SIA, niddikjara li dan it-tip ta' taghmir tar-radju RouterBOARD huwa konformi mad-Direttiva 2014/53/UE. It-test kollu tad-dikjarazzjoni ta' konformità tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: https://mikrotik.com/products
NL	Hierbij verklaar ik, Mikrotikls SIA, dat het type radioapparatuur RouterBOARD conform is met Richtlijn 2014/53/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: https://mikrotik.com/products
NO	Mikrotikls SIA erklærer herved at utstyret RouterBOARD er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 2014/53/EU. Den fulle teksten til EU-samsvarserklæringen er tilgjengelig på følgende internetadresse: https://mikrotik.com/products
PL	Mikrotikls SIA niniejszym oświadcza, że typ urządzenia radiowego RouterBOARD jest zgodny z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: https://mikrotik.com/products
PT	O(a) abaixo assinado(a) Mikrotikls SIA declara que o presente tipo de equipamento de rádio RouterBOARD está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: https://mikrotik.com/products
RO	Prin prezenta, Mikrotikls SIA declară că tipul de echipamente radio RouterBOARD este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: https://mikrotik.com/products
SK	Mikrotikls SIA týmto vyhlasuje, že rádiové zariadenie typu RouterBOARD je v súlade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: https://mikrotik.com/products
SL	Mikrotikls SIA potrjuje, da je tip radijske opreme RouterBOARD skladen z Direktivo 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: https://mikrotik.com/products
SV	Härmed försäkrar Mikrotikls SIA att denna typ av radioutrustning RouterBOARD överensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: https://mikrotik.com/products

MPE statement

This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body, unless specifically stated otherwise in page 1 of this document. In RouterOS you must specify your country, to make sure local wireless regulations are observed.

Note. Information contained here is subject to change. Please visit the product page on www.mikrotik.com for the most up to date version of this document.

Receiver category 2

