

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,B and C
- Frequency - 863-870MHz (EU)
- RF Output power - 862-870MHz (EU) @ 14dBm
- Range 10km (@ 980bps) Depends on the antenna used.

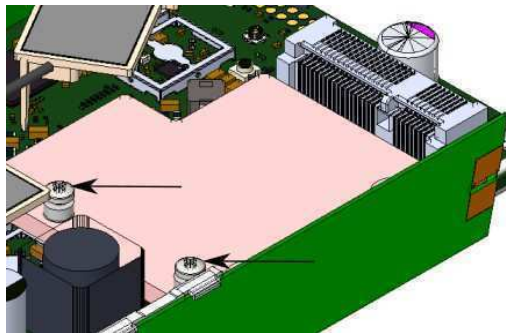
Installing the module in your device

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

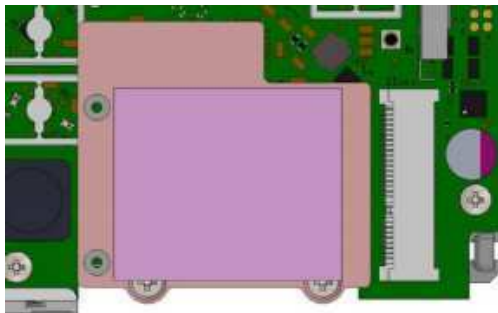
- Use a wrist grounding strap when unpacking and working with electrical components to avoid electrical discharge (ESD) damage.
- After unpacking please place the card on the anti-static mat.
- When installing make sure there are no objects that can damage or touch the PCB plate.
- The card can be installed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

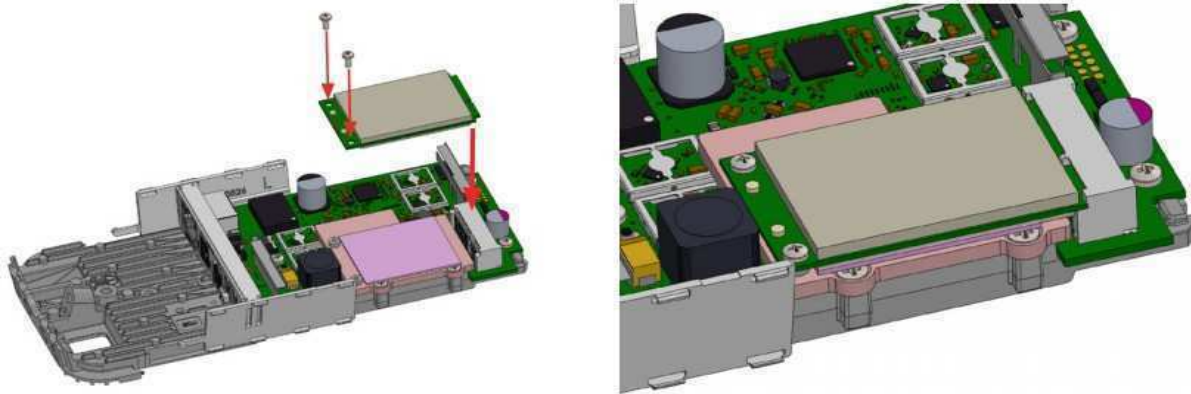
- Locate miniPCIe slot on your device.
- Unscrew two factory attached screws.



- 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.



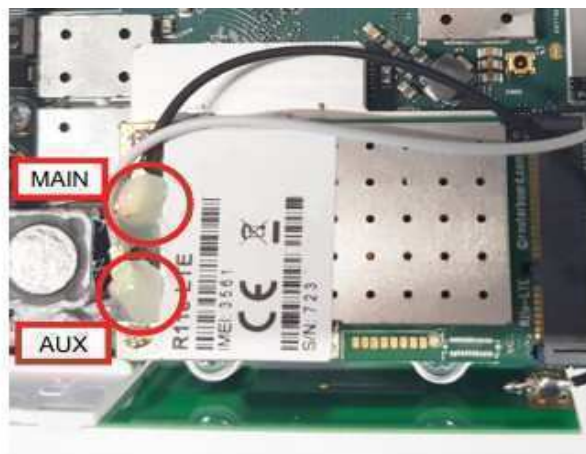
Connecting to the antenna



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/acsmufl>

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

- Attach antenna cables to the installed module. Black cable to the main connector of the module and gray cable to the aux connector. Use rubber/glue to secure them in place.



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



If LoRa card will be installed in different manufacturers device, please set packet forwarding from Semtech. It will require advanced configuration.

For more information about this product, specification and pictures please visit our web page:
<https://mikrotik.com/product/R11e-LoRa8>

Operating system support

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