

## Safety information

The BEAM 8x router must be used in compliance with any and all applicable national and international laws and with any special restrictions regulating the utilization of the communication module in prescribed applications and environments



Hereby, BEAM Onboard declares that this BEAM 8x router is in compliance with the essential requirements and other relevant provisions of Directive CE/RED.



Visit the **BEAM Onboard Knowledge Base** for complete, detailed documentation on the BEAM 8x router.

[owner.beamonboard.com](https://owner.beamonboard.com)

Visit our main website for all our products and services.

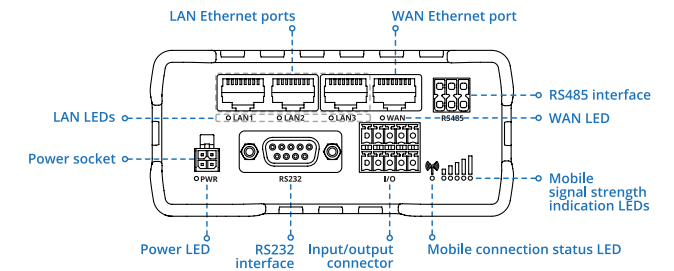
[www.beamonboard.com](https://www.beamonboard.com)



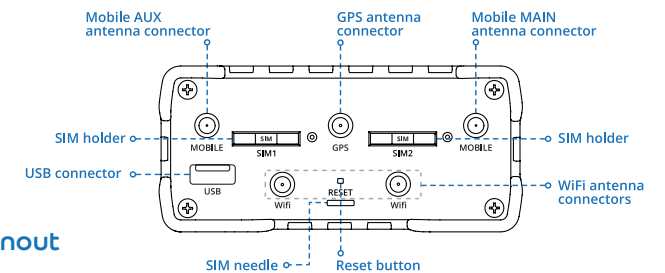
Automotive WiFi Router with GNSS location tracking

## Quick start guide

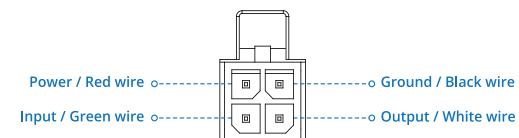
### Front view



### Back view

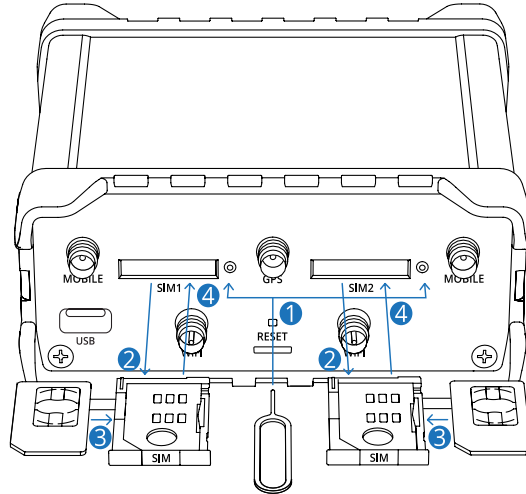


### Power socket pinout



## Hardware installation

1. Push the SIM holder button with a SIM needle.
2. Pull out the SIM holder.
3. Insert your SIM card into the SIM holder.
4. Slide the SIM holder back into the router.
5. Attach mobile and WiFi antennas.
6. Connect the power adapter to the socket on the front of the device. Then plug the other end of the power adapter into a power outlet.
7. Connect to the device wirelessly (SSID: BEAM\_\*\*\*\* (unique to each device)).



3. After you login, you will be prompted to change your password for security reasons. The new password must contain at least 8 characters, including at least one uppercase letter, one lowercase letter and one digit. This step is mandatory and **you will not be able to interact with the router's WebUI before you change the password.**
4. When you change the router's password, the **Configuration Wizard** will start. The **Configuration Wizard** is a tool used to setup some of the router's main operating parameters.
5. Go to the **Status > Network** page and pay attention to the **Signal Strength** indication (image below). To maximize the cellular performance try adjusting the antennas or changing the location of your device to achieve the best signal conditions.

Mobile	WAN	Wireless	Topology	Access
<b>Mobile Information</b>				
Mobile				
Data connection stat	Connected			
IMEI	123456789012346			
IMSI	123456789012346			
Sim card sta	Ready			
Signal strengt	-79 dBm			

## Login to device

1. To enter the router's Web interface (WebUI), type <http://192.168.42.1> into the URL field of your Internet browser.
2. Use login information shown in the image below when prompted for authentication.

← → ↻ <http://192.168.42.1>

**Authorization Required**

Please enter username and password

Username

Password

## Technical information

Radio specifications	
RF technologies	2G, 3G, 4G, WiFi, GNSS
Max RF power	33 dBm@GSM, 24 dBm@WCDMA, 23 dBm@LTE, 20 dBm@WiFi

Bundled antennas specifications*	
Power adapter	Input: 0.4A@100-240VAC, Output: 9VDC, 1A, 4-pin plug
Mobile antenna	698~960/1710~2690 MHz, 50 Ω, VSWR<3, gain** 3 dBi, omnidirectional, SMA male connector
WiFi antenna	2400~2483.5 MHz, 50 Ω, VSWR<2, gain** 5 dBi, omnidirectional, RP-SMA male connector
GNSS antenna	1575.42~1602 MHz, 2.2~5 VDC, VSWR<1.5, gain** 28 dB (typ.), RHCP polarization, SMA male connector

\*Order code dependent.

\*\*Higher gain antenna can be connected to compensate for cable attenuation when a cable is used. The user is responsible for the compliance with the legal regulations.