



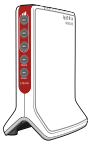
FRITZ!Box 6820 LTE



Quick Start Guide



Package Contents

Number / Name	Illustration
1 FRITZ!Box 6820 LTE	
1 power adapter	
1 network cable	
1 FRITZ! Notes	no illustration
1 quick guide	no illustration

LEDs

LED	Condition	Meaning
	on	Strong signal
	on	Average signal strength
	on	Weak signal
	flashing	Performing update
	flashing	Specified value of online meter has been reached
WLAN	on	Wi-Fi function enabled
	flashing	Adopting the wireless LAN settings
		Switching Wi-Fi on or off
		Performing WPS
Power	on	Connected to electric power, mobile network ready
	flashing	Connected to electric power, connection to mobile network being established or interrupted

Instant Internet Connection

- 1 Insert the mini SIM card and connect the FRITZ!Box to an electric outlet.
- 2 Connect a smartphone or computer with the FRITZ!Box.
- 3 Configure the FRITZ!Box using the wizard and optimize the mobile network connection.

Off you go!

Good to Know

- This guide assists you in taking the first steps with your FRITZ!Box. Find out more in our Knowledge Base at en.avm.de/service/support/knowledge-base
- Keep your FRITZ! Notes and the PIN of your SIM card handy during installation.

Security

- Do not install the FRITZ!Box during an electrical storm.
- During a storm, disconnect the FRITZ!Box from electric power.
- The ventilation slits of the FRITZ!Box must never be obstructed.
- Do not place the FRITZ!Box on heat-sensitive surfaces.
- Connect the FRITZ!Box to an easily accessible outlet.
- The FRITZ!Box is intended for indoor use only.



See also the security instructions in your FRITZ!Box manual
en.avm.de/service/manuals.

The Mini SIM Card

Use **original mini SIM cards** for mobile network connections.

Remove the mini SIM card in one piece from the SIM card, and do **not** use any cut-out micro or nano SIM cards in mini SIM card holders.

Card holders and adapters can get jammed and do permanent damage to the SIM slot of the FRITZ!Box.

SIM



Mini SIM

Nano SIM

Micro SIM

Insert the Mini SIM Card

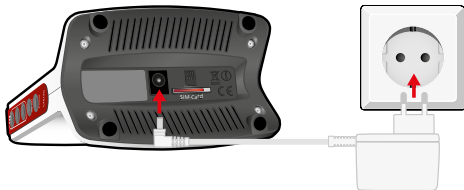
1. Push the mini-SIM card into the SIM card slot as shown until it clicks into place.



Pressing the mini SIM card again releases it from the slot.

Connect to Electrical Power

Connect the FRITZ!Box to electric power.



Connect Devices via Wi-Fi

You can connect wireless devices with the FRITZ!Box using Wi-Fi. To connect by Wi-Fi, use the Wi-Fi key of the FRITZ!Box, FRITZ!App WLAN, or a quick method like QR code or WPS.

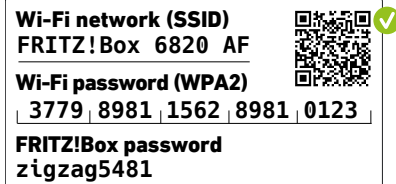
Here are the connection options for selected wireless devices:

Wireless Device	Connected to the FRITZ!Box by
Smartphone (iOS)	Wi-Fi network key or QR code
Smartphone (Android)	Wi-Fi network key, FRITZ!App WLAN, or QR code
Computer/Notebook (MacOS)	Network key
Computer/Notebook (Windows)	Wi-Fi network key or WPS

Wi-Fi by QR Code

Smartphones and tablets with a camera can establish a Wi-Fi connection to the FRITZ!Box by means of a QR code.

1. Scan the QR code on your FRITZ! Notes or on your FRITZ!Box.



The latest devices can scan the code using their camera. Older devices must use apps like FRITZ!App WLAN, i-nigma® or Qrafter®.

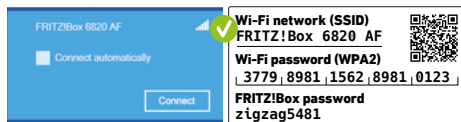
2. Follow the dialog presented by the camera or app to establish a Wi-Fi connection.

Wi-Fi at the Touch of a Button (WPS)

With your Windows computer you can establish a Wi-Fi connection to the FRITZ!Box at the touch of a button (WPS).

This example shows Wi-Fi connecting with a Windows computer:

1. Click on the **Wi-Fi symbol**  in the Windows task bar.
2. Select the network of your FRITZ!Box and click on **Connect**.



3. Press the **WPS** button on the FRITZ!Box until the **WLAN** LED flashes.

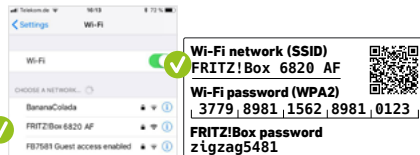
The connection will be established.

Wi-Fi by Network Key

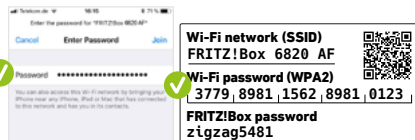
You can establish a Wi-Fi connection to the FRITZ!Box with all wireless devices by entering the Wi-Fi network key.

This example shows Wi-Fi connecting with an iPhone:

1. Open **Settings / Wi-Fi** on your iPhone.
2. Select the network of your FRITZ!Box.

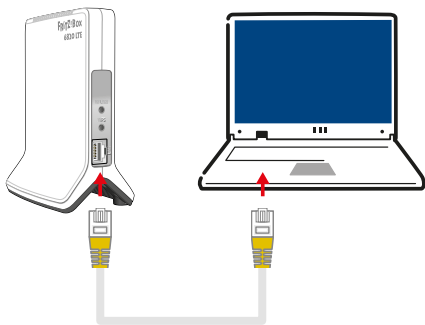


3. Enter the network key and establish the connection.



Connecting Devices by Cable

You can connect your computer and other network devices to the LAN port of the FRITZ!Box using a network cable.



Configuring the Internet Connection

You can configure the FRITZ!Box's internet connection on devices on which you can start a web browser that are connected with the FRITZ!Box via Wi-Fi or a network cable.

1. Start your web browser and enter **<http://fritz.box>**. The user interface appears.
2. Enter the FRITZ!Box password.

Wi-Fi network (SSID)
FRITZ!Box 6820 AF



Wi-Fi password (WPA2)

3779 8981 1562 8981 0123



FRITZ!Box password
zigzag5481

3. Follow the wizard's instructions all the way to the end.

And you're done! You can surf the internet with all connected devices.

Optimizing the Mobile Network

Once you have established the internet connection, you can optimize the mobile network connection.

1. Open the user interface by entering **<http://fritz.box>** in your web browser and go to the **Internet / LTE Information / Reception** menu.
2. Click on **Start Alignment Aid** and change the location of the FRITZ!Box until the signal strength is as high as possible.
Parallel to the display in the user interface, the signal strength is shown by the LEDs on the FRITZ!Box for ten minutes. The more LEDs light up, the greater the signal strength.
3. To end the alignment aid manually, click on **Stop Alignment Aid**.

The FRITZ!Box Home Network

As soon as the internet connection is configured, the FRITZ!Box provides a home network in which all devices connected with the FRITZ!Box are connected with each other. In the Mesh of a FRITZ!Box, FRITZ! products that support Wi-Fi connect to form an especially powerful Wi-Fi network with a single name and password.

The user interface displays a diagram of the structure of your home network with the Mesh. Here you can adjust the settings for FRITZ! devices, check the quality of existing connections, and see whether updates are available for the devices.

Users in the home network can be assigned different rights. Depending on the rights assigned, they can use FRITZ!Box functions jointly or even reach the home network from elsewhere using the MyFRITZ!App.

Declaration of EU Conformity

CE AVM declares herewith that the device is compliant with directive 2014/53/EU. The full text of the declaration of EU conformity is available at en.avm.de/service/declarations.

Radio Frequencies and Transmitter Power

Wi-Fi

2.4 GHz – 2.483 GHz, max. 100 mW

 Also note the table of LTE and UMTS radio frequencies on page 59.

Diagnostics Data

To improve the product and ensure safe operation on your connection, AVM uses error reports and diagnostic data where needed.

 This function can be changed in the user interface under **Internet / Account Information / AVM Services**.

Legal Notice

Legal information and the valid licensing conditions are presented in the user interface under

 **Legal Notice / Legal Notice.**



en.avm.de/service

LTE	Band	Downlink	Uplink	max. Sendeleistung (Uplink)
	1	2110 MHz – 2170 MHz	1920 MHz – 1980 MHz	200 mW
	3	1805 MHz – 1880 MHz	1710 MHz – 1785 MHz	200 mW
	5**	869 MHz - 894 MHz	824 MHz - 849 MHz	200 mW
	7	2620 MHz – 2690 MHz	2500 MHz – 2570 MHz	200 mW
	8	925 MHz – 960 MHz	880 MHz – 915 MHz	200 mW
	20	791 MHz – 821 MHz	832 MHz – 862 MHz	200 mW
	32*	1452 MHz – 1492 MHz		0 mW
	38**	2570 MHz – 2620 MHz	2570 MHz – 2620 MHz	200 mW
	40**	2300 MHz – 2400 MHz	2300 MHz – 2400 MHz	200 mW
	41**	2496 MHz – 2690 MHz	2496 MHz – 2690 MHz	200 mW

UMTS	Band	Downlink	Uplink	max. Sendeleistung (Uplink)
	1	2110 MHz – 2170 MHz	1920 MHz – 1980 MHz	250 mW
	5**	869 MHz – 894 MHz	824 MHz – 849 MHz	250 mW
	8	925 MHz – 960 MHz	880 MHz – 915 MHz	250 mW

