

[manuals.plus](#) /› [AVM](#) /› **FRITZ!Box 6820 LTE | LTE (4G) and UMTS (3G) | Wi-Fi 4 up to 450 Mbit/s | 1 Gigabit LAN | International Version**

## AVM 6820 LTE

# FRITZ!Box 6820 LTE User Manual

Model: 6820 LTE | Brand: AVM

## INTRODUCTION

The FRITZ!Box 6820 LTE is a compact and versatile router designed to provide high-speed internet access via mobile networks (LTE/4G and UMTS/3G). It offers robust Wi-Fi connectivity and a Gigabit LAN port for wired devices, ensuring optimal performance for various applications. This manual provides essential information for setting up, operating, maintaining, and troubleshooting your FRITZ!Box 6820 LTE.

## PACKAGE CONTENTS

Before you begin, please ensure all items are present in the package:

- FRITZ!Box 6820 LTE device
- 1.5 m Ethernet cable
- Power adapter
- Quick installation guide



Image: The retail packaging for the FRITZ!Box 6820 LTE, showing key features and branding.

## SETUP GUIDE

Follow these steps to set up your FRITZ!Box 6820 LTE:

- 1. Insert SIM Card:** Locate the SIM card slot on the device. Carefully insert your activated SIM card into the designated slot until it clicks into place. Ensure the SIM card is correctly oriented.
- 2. Connect Power:** Connect the power adapter to the FRITZ!Box and then plug it into a power outlet. The Power/LTE/3G LED will illuminate.
- 3. Initial Configuration:**
  - Connect a computer or smartphone to the FRITZ!Box via Wi-Fi (SSID and Wi-Fi key are usually found on the device label) or via the included Ethernet cable to the Gigabit LAN port.
  - Open a web browser and enter **fritz.box** in the address bar.
  - Follow the on-screen setup wizard. You will be prompted to enter the device password (also on the label) and potentially the SIM card PIN.
  - If your mobile provider is not automatically detected, you may need to manually enter the APN (Access Point Name) settings. This information is typically provided by your mobile network operator.
- 4. Optimal Positioning:** The FRITZ!Box 6820 LTE includes a positioning aid feature to help you find the best location for optimal mobile network reception. Experiment with different locations in your home or office to achieve the strongest signal. Moving the device even a few centimeters can significantly impact performance.





*Image: Front view of the FRITZ!Box 6820 LTE router, showing its compact design and indicator lights.*



*Image: Rear view of the FRITZ!Box 6820 LTE, highlighting the WLAN, WPS buttons, LAN port, and SIM card slot.*

## OPERATING INSTRUCTIONS

### Internet Connectivity

The FRITZ!Box 6820 LTE provides internet access primarily through its integrated LTE (4G) and UMTS (3G) modem. It automatically connects to the best available mobile network. The device supports multiband frequencies for flexible usage.

### Wi-Fi Network (WLAN)

The device supports Wi-Fi 4 (802.11n) at 2.4 GHz, offering speeds up to 450 Mbit/s. You can connect your wireless devices such as smartphones, tablets, and laptops to the FRITZ!Box's Wi-Fi network.

- **Connecting Devices:** Use the Wi-Fi network name (SSID) and password found on the bottom of your FRITZ!Box or in the FRITZ!OS interface.
- **Guest Wi-Fi:** The FRITZ!Box allows you to set up a separate guest Wi-Fi network, providing internet access to visitors without granting them access to your main home network. This feature enhances security.

- **Mesh Wi-Fi:** The FRITZ!Box acts as a Mesh Master, allowing it to intelligently communicate with other FRITZ! repeaters to create a seamless, high-speed Wi-Fi network that covers your entire home.



*Image: The FRITZ!Box 6820 LTE with a graphical representation of its Wi-Fi signal, indicating wireless connectivity.*

## Gigabit LAN Port

The single Gigabit LAN port allows you to connect wired devices such as PCs, smart TVs, gaming consoles, or network-attached storage (NAS) for high-speed data transfer within your local network.

## FRITZ!OS Operating System

The FRITZ!Box runs on FRITZ!OS, a user-friendly operating system accessible via your web browser at [fritz.box](http://fritz.box). FRITZ!OS provides advanced features for network management, security settings, parental controls, and more. Regular updates for FRITZ!OS ensure optimal performance and security.

## Flexible Usage

The compact design and mobile network capabilities of the FRITZ!Box 6820 LTE make it ideal for flexible use, whether at home, in a remote office, or during travel, providing reliable internet access wherever mobile coverage is available.



*Image: The FRITZ!Box 6820 LTE positioned next to a laptop in an outdoor setting, demonstrating its portability and suitability for mobile internet access.*

## MAINTENANCE

To ensure the longevity and optimal performance of your FRITZ!Box 6820 LTE, consider the following maintenance tips:

- **Software Updates:** Regularly check for and install FRITZ!OS updates. These updates provide new features, performance improvements, and crucial security enhancements. You can configure automatic updates through the FRITZ!OS interface.
- **Cleaning:** Keep the device clean and free from dust. Use a soft, dry cloth to wipe the exterior. Do not use liquid cleaners or abrasive materials.
- **Ventilation:** Ensure the ventilation slots are not obstructed to prevent overheating. Place the device in a well-ventilated area.
- **Restarting:** If you experience minor issues, a simple restart of the device (by unplugging and replugging the power adapter) can often resolve them.

## TROUBLESHOOTING

If you encounter problems with your FRITZ!Box 6820 LTE, refer to the following common issues and solutions:

Problem	Possible Cause / Solution
No Internet Connection	<ul style="list-style-type: none"><li>• Check if the SIM card is properly inserted and activated.</li><li>• Verify mobile network coverage in your area.</li><li>• Ensure the correct APN settings are configured in the FRITZ!OS interface <a href="http://fritz.box">fritz.box</a>.</li><li>• Restart the FRITZ!Box.</li></ul>

Problem	Possible Cause / Solution
<b>Poor Wi-Fi Signal or Speed</b>	<ul style="list-style-type: none"> <li>Relocate the FRITZ!Box to a central position, away from obstructions and interference sources (e.g., microwaves, cordless phones).</li> <li>Use the positioning aid feature in FRITZ!OS to find the optimal spot for mobile reception.</li> <li>Consider adding a FRITZ! Repeater for extended Wi-Fi coverage.</li> </ul>
<b>Cannot Access FRITZ!OS Interface</b>	<ul style="list-style-type: none"> <li>Ensure your device is connected to the FRITZ!Box's network (Wi-Fi or LAN).</li> <li>Type <b>fritz.box</b> or the FRITZ!Box's IP address (e.g., 192.168.178.1) into your browser.</li> <li>Clear your browser's cache or try a different browser.</li> </ul>

## SPECIFICATIONS

Feature	Detail
Brand	AVM
Model Name	AVM FRITZ!Box 6820 LTE
Model Number	20002907
Connectivity Technology	Wi-Fi
Wireless Communication Standard	802.11b, 802.11g, 802.11n (Wi-Fi 4)
Frequency Band Class	Single Band (2.4 GHz)
Data Transfer Rate	Up to 450 Mbit/s (Wi-Fi)
Mobile Network Support	LTE (4G), UMTS (3G) - Multiband support
LAN Ports	1 x Gigabit LAN
Operating System	FRITZ!OS
Special Feature	Access Point Mode
Compatible Devices	Cellphone, PC, Smart TV, etc.
Product Dimensions (L x W x H)	69 x 9.9 x 13.4 cm
Product Weight	172 Grams

## WARRANTY AND SUPPORT

AVM provides support and warranty for its products. For specific warranty details, please refer to the documentation included with your product or visit the official AVM website.

- **Parts Availability:** Spare parts are available for 2 years.
- **Software Updates:** Information regarding guaranteed software updates is not available. However, AVM is known for providing regular FRITZ!OS updates.
- **Customer Support:** For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact AVM customer support. Contact information can typically be found on the AVM website or in the quick installation guide.

## OFFICIAL PRODUCT VIDEOS

No official product videos from the seller were found in the provided data. For additional visual guides or demonstrations, please check the manufacturer's official website or their authorized channels.

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## Related Documents - 6820 LTE

	<a href="#"><b>FRITZ!Box 7590 AX Quick Start Guide</b></a> Quick start guide for the AVM FRITZ!Box 7590 AX, detailing initial setup for internet, Wi-Fi, and telephone connections, along with device overview, status LEDs, safety information, and CE compliance.
	<a href="#"><b>FRITZ!Box 5590 Fiber Quick Start Guide</b></a> Quick start guide for the AVM FRITZ!Box 5590 Fiber, covering initial setup, internet connection, Wi-Fi configuration, telephone connections, and safety information.
	<a href="#"><b>AVM FRITZ!Box 7581 Quick Start Guide</b></a> A concise guide to installing and connecting the AVM FRITZ!Box 7581 wireless router, covering network setup, WLAN, WPS, and device connections.
	<a href="#"><b>FRITZ!Box 4060 Quick Start Guide - Setup and Configuration</b></a> Get started with your AVM FRITZ!Box 4060. This quick start guide provides step-by-step instructions for setup, internet connection, Wi-Fi configuration, and registering devices.
	<a href="#"><b>FRITZ!Repeater 1200 AX: Ultraschnelles Wi-Fi 6 für Ihr Heimnetz</b></a> Erweitern Sie Ihre WLAN-Reichweite mit dem FRITZ!Repeater 1200 AX. Erleben Sie ultraschnelles Wi-Fi 6, nahtloses Mesh-Networking und einfache Installation für ein optimales Heimnetz.



### [FRITZ!Box 6850 LTE Quick Guide - Connect and Configure](#)

A quick guide to setting up and connecting your FRITZ!Box 6850 LTE. Learn how to connect computers, configure internet access, optimize mobile connections, and register cordless telephones.