



## Internet access for all mobile communication networks

Slim and compact, the FRITZ!Box 6820 LTE fits in every environment. No matter how good your current reception is, the 6820 always provides maximum speed with both UMTS (3G) and LTE (4G). Thanks to gigabit LAN, music and videos are shared in the home network in no time at all. On top of this, fast Wireless N makes surfing on a tablet or other terminal devices extra fun.



**LTE** **Wireless N** **2.4 GHz** **450 MBit** **Gigabit LAN**

## Fast Internet at all times

With a download rate of up to 150 Mbit/s, large program updates are done in no time. The upright, slim form is perfectly cut out for best reception and high speeds. Your smartphone will also benefit from this when used at home, since it can access the connection to the LTE router for data applications.



## Works in all of Europe

With its flexible multi-band support the 6820 shows its strengths no matter where you're using it in Europe. Depending on network availability, it automatically accesses all common mobile communication bands currently used in Europe.



## More than 30 percent extra WiFi power

You'll surf on fast Wireless N with the 6820 when using a smartphone, tablet or laptop at home. Plus, the data is transmitted more than 30 percent faster than with the previous generation. This makes surfing the Internet more fun, helps to download games faster and shares documents before you know it.

## FRITZ!Box for safety's sake

You're always on the safe side with the FRITZ!Box! The comprehensive security concept protects your communications. Constant testing and further development mean it's always up to date. Thanks to the free updates, you can always rest assured.

## FRITZ!OS – fully loaded software

FRITZ!OS, the operating system of your FRITZ!Box, delivers new functions on a regular basis. Keep everything in sight with the central Home Network Overview. Make use of the parental controls feature and wireless guest access, and stay on top of current data consumption with the online meter. And of course, all apps are free.



## Award-winning simplicity

Honored by specialist publications and praised by users, the FRITZ!Box operating concept has just one goal: to keep everything as simple as possible. A clear user interface and step-by-step wizards help make this happen.



### Fast Internet with UMTS and LTE

The FRITZ!Box 6820 LTE transmits on the six LTE frequency bands 800 MHz, 850 MHz, 900 MHz, 1.8 GHz, 2.1 GHz and 2.6 GHz. The 6820 is ideal to connect your whole home network to the Internet via all types of mobile communication from GSM (2G) to UMTS (3G) and LTE (4G).



### Peace of mind

FRITZ!Box offers comprehensive protection against attacks. The preconfigured firewall, filter function, and DECT and wireless encryption ensure secure connections. Parental controls and guest Internet access are, of course, included free of charge.



### Encrypted communication via VPN

Thanks to the recognized industry standard IPsec, you can establish a virtual private network to connect with your FRITZ!Box or company network. The settings can be configured on your FRITZ!Box and transferred to smartphones, tablets, and computers.



### Ready for the future with IPv6

In addition to IPv4, FRITZ!Box supports the IPv6 Internet protocol. IPv6 makes existing services more convenient and simplifies a host of new applications, so you can rest assured that you're ready for the latest technologies.



### Wireless N with 450 Mbit/s

FRITZ!Box enables wireless connections of 450 Mbit/s, providing sufficient bandwidth even for larger amounts of data. It uses the 2.4 GHz frequency band and is able to automatically select the best wireless channel.



### Wireless guest access

Offer your guests easy-to-use Internet access with a separate network key and user name. Your guests have no access to your home network and your data remain private.



## FRITZ!Box as a private hotspot

When using your FRITZ!Box as a hotspot, you can restrict Internet usage to surfing and e-mail. You have a usage log, while your guests benefit from an integrated QR code that makes it easy for them to connect to the Internet.



## Secure ex works

Every FRITZ!Box is delivered with its own network key to protect your network from unauthorized access. The wireless network, as well as your wireless guest access, can be secured with their own keys.



## Connected in a flash

Thanks to WPS (Wi-Fi Protected Setup), you can connect new wireless-enabled devices in a flash. Simply press the "WPS" or "WLAN" button on the FRITZ!Box and on the new device – and it will be securely and automatically registered with the network.

## FRITZ!OS

### fritz.box – everything made easy

FRITZ!OS is the FRITZ!Box operating system and can be easily controlled via your browser. User-friendly menus, easy-to-understand wizards, and the optional advanced mode come in handy in all scenarios.



## Free updates

FRITZ!OS is continually being refined for increased convenience and performance. And, best of all, the latest developments can be downloaded for free to ensure that your FRITZ!Box always stays up to date.



## Maximum energy efficiency

The many features offered by FRITZ!OS remove the need for additional devices such as fax and answering machines. And DECT and wireless transmission power is decreased when devices are not in use, saving both energy and money.

## Ideal in combination with

### FRITZ!WLAN



!OS remove the need for additional devices such as fax and answering machines. And DECT and wireless transmission

[> FRITZ!WLAN](#)

### FRITZ!Powerline



!OS remove the need for additional devices such as fax and answering machines. And DECT and wireless transmission

[> FRITZ!Powerline](#)

### FRITZ!App WLAN



!OS remove the need for additional devices such as fax and answering machines. And DECT and wireless transmission

[> FRITZ!App WLAN](#)

## Interfaces

- Integration into the LTE broadband network with LTE-SIM card (mini SIM)
- Multi-band support for connections via LTE (4G), UMTS (3G) and GSM (2G)
- 1 x gigabit LAN
- Wireless N access point (IEEE 802.11n, g, b)



## LTE

- LTE category 4 modem (FDD)
- Rates of up to 150 Mbit/s for downloads and up to 50 Mbit/s for uploads
- Multi-band support: band 1 (2.1 GHz), band 3 (1.8 GHz), band 5 (850 MHz), band 7 (2.6 GHz), band 8 (900 MHz) and band 20 (800 MHz)
- Supports the channel bandwidths 1.4, 3, 5, 10, 15 and 20 MHz
- MIMO receiver technology (Multiple-In-Multiple-Out antenna technology)
- Integrated LTE antennas

## Internet

- LTE router with firewall/NAT, DHCP server, DynDNS client, UPnP AV
- Stateful Packet Inspection Firewall with port forwarding for secure web surfing
- Supports the IPv4 and IPv6 web protocol
- Secure remote access over the Internet with VPN (IPSec)
- Parental control with filter lists
- Remote maintenance via https

## Wireless LAN

- Wireless radio networks compliant with 802.11n (up to 450 Mbit/s gross; 2.4 GHz; MIMO 3 x 3) and 802.11b/g
- Secure ex works thanks to WPA2 encryption
- Wireless LAN encryption with WPA2, WPA/WPA2 mixed mode
- WLAN button (to switch wireless LAN on/off manually)
- Wi-Fi Protected Setup (WPS) for safe wireless connections at the touch of a button or by entering a PIN
- Wireless guest access – secure surfing for friends and visitors
- Green AP mode for optimum performance at minimum power consumption

- Advanced view for special configuration options, help function with full-text search
- FRITZ!APP WLAN for connections to the router and details on the wireless connection (Android)

## Interface details

- Integration into the LTE broadband network with LTE-SIM card (mini SIM)
- Internet connection via UMTS/HSPA+ (3G) and GSM/EDGE (2G)
- 1 x gigabit Ethernet (10/100/1000 Base T, RJ45 port) for PC, game console, network
- Wireless N access point (IEEE 802.11n, g, b in the 2.4-GHz band) for PC, notebook, tablet, smartphone

## FRITZ!OS

- Voice Clearly laid out user interface, for intuitive operation via web browser
- User interface optimized for smartphones and tablets (responsive design) and available in multiple languages (DE, EN, ES, FR, IT and PL)
- Alignment aid for antennas to find the ideal location for the FRITZ!Box
- Free updates for new functions and security

## Device properties

- Dimensions (W x H x D): 64 x 99 x 134 mm
- Average power consumption: under 6 watts

## Package contents

- FRITZ!Box 6820 LTE
- Power supply unit
- 1.5-meter LAN cable
- Quick guide