

FRITZ!Box 6860 5G

The FRITZ!Box for high-speed internet via 5G mobile Network

FRITZ!Box 6860 5G brings ultra fast 5G mobile internet with up to 1.3 Gbit/s to the wireless home network.

As a fixed wireless access solution, it supports 5G (NSA, SA), 4G (Category 19), and 3G. With powerful Mesh and Wi-Fi 6, it distributes data wirelessly throughout the house at up to 3 Gbit/s. The highest security standards (WPA3/WPA2) ensure increased protection.

Thanks to the compact design combined with both power and data over Ethernet, the versatile FRITZ!Box 6860 5G can be used both indoors and outdoors. Its IP54 rating guarantees that it is weather-resistant. A DECT base station that can be used for telephony and smart home applications rounds off the versatile range of features. Telephone calls are made using the SIM card's mobile number (VoLTE/VoNR) or VoIP/SIP with encryption. The FRITZ!OS operating system makes it easy to integrate and control these devices.

Product highlights



For every 5G or 4G mobile network: High-speed internet access with up to 1.3 Gbit/s



High-speed Wi-Fi 6 + Mesh Wi-Fi: With up to 2400 Mbit/s (5 GHz) + 600 Mbit/s (2.4 GHz)



Integrated DECT base station for telephony via VoLTE/VoNR and SIP and for smart home devices



Indoor & Outdoor: Suitable for use indoors and in protected outdoor areas (IP54)



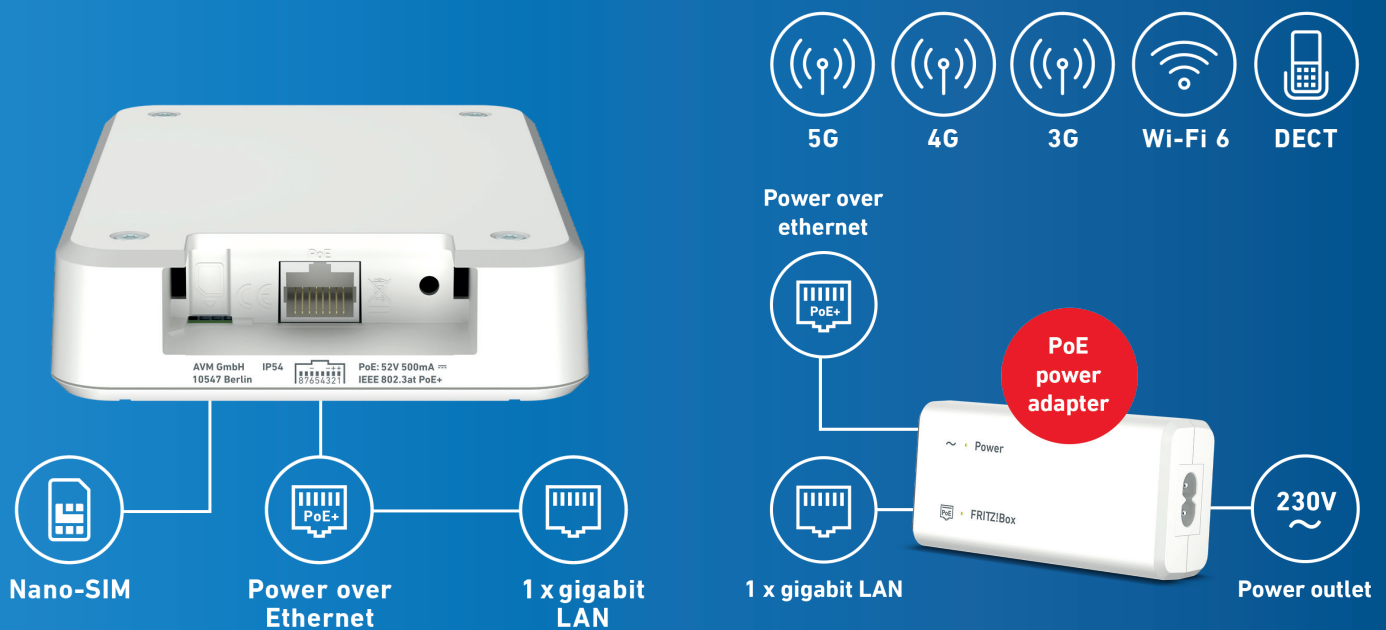
FRITZ!OS: MyFRITZ! and auto update

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Technical specifications



Interfaces

- Wireless router with integrated 5G/4G/3G modem
- Internet also via Wi-Fi hotspot
- LAN: 1.0 gigabit Ethernet, 10/100/1000 BASE-T
- 1x nano SIM slot
- Powered via Power-over-Ethernet (IEEE 802.3at / PoE+)
- Indoor & Outdoor - flexible use thanks to IP54 rating
- Can be placed on table/desk, mounted on window or wall
- Stateful Packet Inspection firewall with port sharing
- Parental controls with time budget, Filter lists (permitted and blocked websites)
- Complete support for IPv6 in the internet, home network, and for telephony
- Secure remote access over the internet with VPN using IPsec or WireGuard
- Security wizard with diagnostic tool and auto updates

Mobile Network

- Mobile internet access over 5G or 4G with up to 1.3 Gbit/s
- Support for 5G standalone and non-standalone (Rel. 16)
- 5G bands: n1, 3, 5, 7, 8, 20, 28, 38, 40, 41, 75, 76, 77, 78
- 4G (LTE Advanced Pro) according to 3GPP category 19
- 4G bands: b1, 3, 5, 7, 8, 20, 28, 32, 38, 40, 41, 42, 43
- 4x4 MIMO support for all 5G and 4G bands
- Supports Dynamic Spectrum Sharing (DSS)
- 3G support (UMTS/HSPA+) for bands: B1, 5, 8
- Practical alignment aid and 3 LEDs for indicating signal strength and connection type

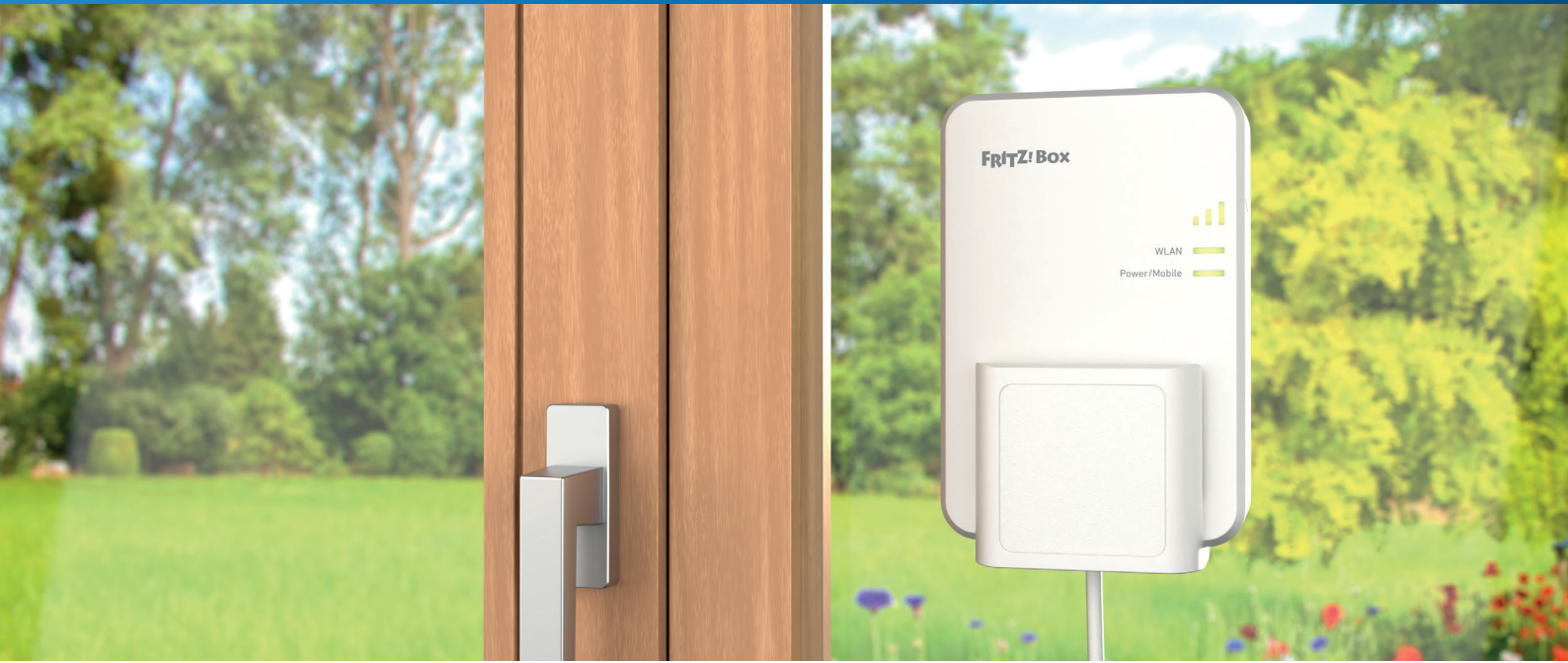
Wi-Fi

- 2 x 2 Wi-Fi access point with Wi-Fi 6 up to 2400 Mbit/s (5 GHz) and 600 Mbit/s (2.4 GHz)
- Extends the home network with Mesh Wi-Fi – several wireless access points can be simply combined into one intelligent system
- Compatible with IEEE 802.11a/g/n/ac/ax
- Wi-Fi network encryption with WPA3/WPA2
- Wi-Fi can be switched on and off via schedule or telephones
- Wi-Fi guest access – secure surfing for guests

Telephony / DECT / Smart Home

- Telephony via VoLTE/VoNR and SIP - Internet telephony SIP-compliant in accordance with RFC 3261 (incl. SIP TLS and SRTP support)
- Telephone system with DECT base station for up to 6 cordless telephones, 10 FRITZ!DECT 200/210 smart plugs, 10 FRITZ!DECT 440/400 switches, 12 FRITZ!DECT 300/301/Comet DECT radiator controls, 10 smart home devices from third-party manufacturers with HAN FUN
- 5 integrated answering machines and integrated fax featuring voice- or fax-to-mail
- Comprehensive telecommunications functions such as call diversion, internal calls, three-party conference, call transfer, call blocking, alarm, baby monitor, VIP calls, Do Not Disturb, and caller ID display
- Registration of up to 10 IP telephones (SIP-compliant)
- Door intercoms can be connected via DECT or IP/SIP
- Telephony app for Apple iPhone and Google Android integrates iPhone and Android smartphones via Wi-Fi

Technical specifications



Network

- TR-069 (TR-069/104/140) support including documentation of the data model in accordance with the Broadband Forum TR-106
- TR-369 support (USP) for real-time monitoring with multi-controller support including rights management
- Speed test via iPerf and TR-471 (depending on the platform)
- SPI firewall, DoS protection
- IPv6 and IPv4 dual stack including DS-Lite with PCP support
- 802.1Q support for WAN connections
- Multiservice (e.g. HSI, VoIP, TR-069, IPTV) WAN connection type with PPPoE, DHCP, static IP, bridging encapsulation
- Public subnet configuration (up to /28) for addressing clients publicly in the LAN
- Exposed host / port forwarding
- VPN support (IPSec and WireGuard), VPN passthrough
- No vendor lock-in. Platform and data remain with ISP (internet service provider)
- ACS URL via DHCP Option 43, or PPPoE (Zero Touch Deployment)
- IGMP proxy (v3 and below)
- DNSSEC and eDNSO support

FRITZ!OS

- Offers a clear, browser-based user interface that's intuitive
- User interface protected by device-unique preconfigured password
- Sensitive user settings protected by 2FA, including support for authenticator apps
- Multilingual user interface
- Secure remote access to your FRITZ!Box with MyFRITZ!
- Convenient features like parental controls, push service, cloud contacts, online storage
- Wake on LAN over the internet
- Wi-Fi calls in the home network with iPhones and Android smartphones
- FRITZ!Box interface specially designed for smartphones and tablets
- Home network overview, help functions with full-text search, and much more
- Free updates add new features:
<https://en.avm.de/products/fritzos/>
- Free FRITZ!Apps for telephony, smart home, remote access to the FRITZ!Box, and Wi-Fi optimization

Device Properties

FRITZ!Box 6860 5G housing dimensions

- Without adapter: 163 x 111 x 31 mm
- With indoor adapter (red): 166 x 111 x 55 mm
- With outdoor adapter (white): 170 x 111 x 42 mm

Average power consumption: 6.8 W

Maximum power consumption: 16.0 W

Why AVM?



Direct contacts in Sales, PreSales, and Engineering



Training sessions with AVM staff for engineering and support



Technical support (also on site) and sales consultation



In-house hardware and software development in Berlin



Real-time monitoring with the open TR-069 & TR-369 standards



Prepared for zero-touch deployment

FRITZ!OS

FRITZ!OS is the genius of the FRITZ! family. With this smart operating system, the FRITZ! team opens up a broad spectrum of possibilities in your customers' home networks. Your FRITZ!Box uses the most advanced technologies while providing for the right balance between exciting features and simple operation.

Software updates

FRITZ!OS, our router operating system, is updated regularly to implement new features and to guarantee long-lasting product life cycles. And all updates are offered to our customers free of charge.

Device management

The FRITZ!Box supports not only OMCI management but also offers comprehensive support for TR-069 and USP (TR-369), immediately, right out of the box. The use of open standards puts a broad palette of ISP-relevant management parameters at your disposal, no matter which technology you use.

Eco design

FRITZ! products are characterized by low power consumption and configurable energy-saving modes. Production in Europe means short transport routes, secure labor conditions, and the use of environmentally sustainable materials. Many years of software updates with expanded functions, bug fixes, and security updates ensure long life cycles.

Product quality

Developed and produced in Germany and Europe, our FRITZ!Box fulfills its market promise to its end customers, because our products are also available commercially. Before being launched on the market, the products run through extensive lab phases which offer customers the opportunity to evaluate new features in advance.

An all-in-one device

A FRITZ!Box integrates a router and modem as a combined device and is connected directly with the internet. This saves electricity, ensures easy and convenient operation, and simplifies device management. Internet, Wi-Fi, streaming, telephony, smart home, and much more – all combined in a single device.