

Technical specifications

Interfaces

Integrated 5G mobile broadband modem (nano-SIM)

1 x Power over Ethernet (PoE+)

1x Gigabit LAN on PoE+ power adapter

Wi-Fi 6 on 2.4 and 5 GHz Integrated DECT base station for up to six cordless phones and up to 50 smart home devices

Mobile network

Mobile router for 5G, 4G and 3G

Connect to internet via 5G and 4G:

5G standalone (5G SA) with up to 1.3 Gbit/s downstream, up to 900 Mbit/s upstream

5G non-standalone (5G NSA) with up to 1.3 Gbit/s downstream, up to 450 Mbit/s upstream

4G with up to 1.3 Gbit/s downstream, up to 211 Mbit/s upstream

5G mobile communications in accordance with 3GPP Release 16 with dual 5G carrier aggregation

4G mobile communications (LTE Advanced Pro Category 19) with fivefold 4G carrier aggregation

Supports 5G standalone and 5G non-standalone operation as well as Dynamic Spectrum Sharing (DSS) Support for the following 5G bands: n1 (2.1 GHz), n3 (1.8 GHz), n5 (850 MHz), n7 (2.6 GHz), n8 (900 MHz), n20 (800 MHz), n28 (700 MHz).), n38 (2.6 GHz), n40 (2.3 GHz), n41 (2.5 GHz), n75 (1.5 GHz), n76 (1.4 GHz), n77 (3.8 GHz), n78 (3.5 GHz)

Support for the following 4G bands: 1, 3, 5, 7, 8, 20, 28, 32 (1.5 GHz), 38, 40, 41, 42 (3.5 GHz), 43 (3.7 GHz)

Support for 3G (UMTS/HSPA+)

Four internal mobile network antennas

4x4 MIMO available on all 5G and 4G mobile network bands

Alignment aid for antennas to find the ideal location for the FRITZ!Box

LEDs (three bars) indicate the strength of the mobile signal

Network

Stateful Packet Inspection Firewall with port sharing for secure surfing

NAT, DHCP server, DynDNS client

Access your own FRITZ!Box safely, no matter where you are with MyFRITZ! Complete IPv6 support

Secure remote access, LAN-to-LAN linkup and dial-in to the company network with VPN (WireGuard and IPSec)

Wi-Fi

Wi-Fi 6 2x2 MIMO

Wi-Fi 6 up to 2,400 Mbit/s (gross) at 5 GHz and 600 Mbit/s (gross) at 2.4 GHz

Compatible with Wireless 802.11ac, g and a

Mesh Wi-Fi – simply combine several FRITZ! products into one intelligent system and extend the home network

Dual Wi-Fi: Concurrent use of the 5-GHz and 2.4-GHz band

Wi-Fi network encryption with WPA3/WPA2 Wi-Fi Protected Setup (WPS) via Connect button

Wi-Fi guest access: Secure surfing for friends and visitors

Wi-Fi auto channel: Automated search for Wi-Fi channel free of interference

Wi-Fi eco mode for optimum performance at minimum power consumption

Telephony

Telephone system for mobile (VoLTE/VoNR)

Call lists, number blocking, quick-dial

and IP

Integrated DECT base station for up to six cordless phones

Voice transmission encrypted upon delivery

Supports HD telephony for natural sound

DECT Eco: Frequency channel switches off for maximum ergonomics

Five integrated answering machines including email forwarding (voice-tomail)

Fax function including email forwarding (fax-to-mail)

Manage telephone contacts locally or online (Google, Apple iCloud etc.) numbers, extensions

Dialing rules for tailoring use of specific numbers

Call diversion, internal calls (intercom), three-way conferencing, call transfer

Alarm, baby monitor, VIP calls and Do not Disturb

Support for door intercom systems

Internet telephony SIPcompliant in accordance with RFC 3261

Register up to 10 IP telephones (LAN/Wi-Fi) SIP-compliant

FRITZ!App Fon for landline calls via your smartphone

Smart home

Smart home features for energy, heating, lighting and more

Supports up to 50 smart home devices (DECT ULE and DECT HAN FUN)

Control your FRITZ!
Smart Home via the
FRITZ!Box interface,
FRITZ!Fon,
FRITZ!Smart switch or
FRITZ!App Smart
Home

FRITZ!OS

"fritz.box": Clear, easyto-use browser-based user interface

User interface optimized for smartphones and tablets (responsive design)

Handy FRITZ!Apps for your smartphone: MyFRITZ!App for FRITZ! convenience on the go, and FRITZ!App Wi-Fi, the clever Wi-Fi helper Help function with fulltext search

Push service by email for information about events in the home network

Security wizard with diagnostic tool

Free updates for new features and security, auto-updates if desired

Package Contents

FRITZ!Box 6860 5G

PoE power adapter (PoE+ in accordance with IEEE802.3 at, 26 watts) including Gigabit LAN uplink

2 network cables (2.5m, UV resistant)

Quick guide

Router bracket for indoors

Router bracket for outdoors (including mounting screw)

5 self-adhesive cable clips

2 adhesive pads for the router bracket

Device properties

Without router bracket: approx. 111 x 163 x 31 mm (W x D x H)

With router bracket for indoors (red): approx.

Average power consumption: 6.8 watts, a maximum of 16 watts

Operating

temperature: -10 °C to

111 x 166 x 55 mm (W x D x H)

With router bracket for outdoors (white): approx. 111 x 170 x 4 mm (W x D x H) 40 °C

UV-resistant housing