Technical specifikations

Interfaces

- Integrated 5G mobile broadband modem (mini-SIM)

- IP-based telephony

- 4 x gigabit LAN ports

- Wireless access point compliant with IEEE 802.11ac, n, g, a

- 1 x USB 3.0 port for printers and storage media

- Integrated DECT base station for up to six cordless telephones

- 1 a/b port (either TAE or RJ11) for an analog telephone, answering machine or fax

Mobile Network

- Wireless router with integrated 5G modem according to 3GPP Release 15 with 4x4 MIMO support, supports 5G standalone and 5G non-standalone operation as well as Dynamic Spectrum Sharing (DSS)

- Internet access via 5G up to 1.3 Gbit/s downstream and 600 Mbit/s upstream: Support for band 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), n78 (3.5 GHz)

- Internet access via 4G (LTE Advanced Pro / CAT16) up to 1 Gbit/s downstream and 211 Mbit/s upstream: Support for FDD band 1, 3, 5, 7, 8, 20, 28 and 32 (1.5 GHz) and TDD band 38, 40, 41, 42 (3.5 GHz), 43 (3.7 GHz)

- Internet access also via 3G (UMTS/HSPA+) with up to 42 Mbit/s

- 2 internal antennas and 2 external antennas via an SMA connector

Internet

- Stateful Packet Inspection Firewall with port sharing for secure surfing

- NAT, DHCP server, DynDNS client, UPnP AV

- Optimized for streaming and Internet TV e.g. Disney+, Netflix etc.

- Supports IPv6

- Secure remote access over the internet with VPN (IPSec)

Wi-Fi

- Wi-Fi 5 (up to 866 Mbit/s gross, 5 GHz) and 4 (up to 400 Mbit/s gross, 2.4 GHz)

- Compatible with IEEE 802.11g and a wireless standards

- Extends your home network with [Mesh Wi-Fi](#) – simply combine two or more wireless access points into one intelligent system

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

- Secure upon delivery with WPA2 encryption, WPA3/2 transition mode is also available

- AVM Stick & Surf: automatic security for cable-free surfing

- WLAN button (switch Wi-Fi on/off manually)

- Wi-Fi Protected Setup (WPS)

- 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 for optimum performance at minimum power consumption

Telephony

- Telephone system for IP-based connections

- Integrated DECT base station for up to six cordless telephones

- Voice transmission encrypted upon delivery

- 1 a/b port (either TAE or RJ11) for an analog telephone, answering machine or fax

- Supports HD telephony for natural and clear sound

- DECT Eco: Frequency channel switches off for maximum ergonomics

- Five integrated answering machines including email forwarding (voice-to-mail)

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

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

- Call lists, number blocking, quick-dial numbers, extensions

- Dialing rules for tailoring use of specific numbers

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

- Call blocking, alarm, baby monitor, VIP calls and Do not Disturb

- Support for door intercom systems

- Internet telephony SIP-compliant in accordance with RFC 3261

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

- FRITZ!App Fon for landline calls via your smartphone

Home Network convenience

- Media server makes music, pictures and movies available to devices in the home network (DLNA/UPnP AV)

- Secure access to your own FRITZ!Box from anywhere with MyFRITZ!

- FRITZ!NAS – simple, browser-based access to all files in the network, wherever they are stored

- Networked applications such as Internet TV, video on demand and streaming

- Parental controls, push service, cloud contacts, online storage

- Guest access: share your internet connection over LAN or Wi-Fi

- Wake on LAN over the internet

- Supports DLNA-compliant devices

- Also supports online storage, web radio and podcasts

- Sharing data with friends both simple and secure

FRITZ!OS

- "fritz.box": multi-language user interface, for intuitive operation via Web browser

- User interface optimized for smartphones and tablets (responsive design)

- Free updates for new functions and security

- Advanced view for special configuration options, help function with full-text search

- Handy FRITZ!Apps for your smartphone: [MyFRITZ!App](#) for FRITZ! convenience on the go, the clever Wi-Fi helper [FRITZ!App WLAN](#) and [FRITZ!App Smart Home](#) for intuitive control of your FRITZ! Smart Home

- Smart Home features integrated in the user interface

- Smart Home support for DECT ULE/HAN FUN devices

- Smart Home devices can be switched manually and automatically both in the home network and from the Internet

Package contents

- FRITZ!Box 6850 5G

- Power adapter

- External mobile communications antennas (SMA)

- 1.5 meter-long LAN cable

- Quick guide

Device properties

- Dimensions (W x H x D): 208 x 150 x 37 mm

- Mount on wall or place on any surface e.g. a table or shelf

- Average power consumption: 6 watts