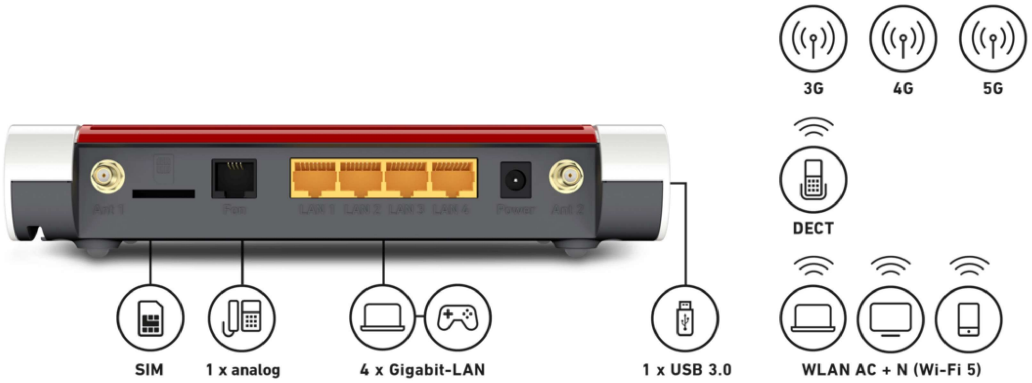

Technical specifications

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

Internet access via 4G (LTE Advanced Pro / CAT16) up to 1 Gbit/s

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)

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)

AVM Stick & Surf: automatic security for

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

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

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

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.)

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

Article number

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