



FRITZ!Box 5690 Pro

The premium FRITZ!Box for fiber optic and DSL with Wi-Fi 7

The FRITZ!Box 5690 Pro sets new standards. The premium model can be connected either directly to a fiber optic connection (AON or GPON) or to a DSL line.

The box has an integrated modem for both connection types.

With Wi-Fi 7, which includes the new 6 GHz band, the box's improved latency, speed, and throughput are impressive, offering top performance in the home network.

Integration of the Zigbee wireless communication standard allows the use of many smart applications for energy efficiency, heating, and lighting. Gigabit LAN ports, a 2.5G LAN/WAN port, convenient telephony, VPN, Wi-Fi guest access, a firewall, and USB 3.1 for storage media round out the comprehensive features.

The FRITZ!Box 5690 Pro represents the next level for demanding broadband applications and is ready for real-time applications such as virtual reality, cloud computing, and gaming

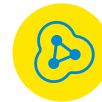
Product highlights



Flexible connectivity:
integrated fiber optic and DSL



Wi-Fi 7 with data rates of
up to 18.5 Gbit/s
(11,530 + 5760 + 1200 Mbit/s)



Tri-band Mesh:
Powerful 4 x 4 Wi-Fi
with the new 6 GHz band



1 x 2.5-gigabit WAN/LAN,
4 x gigabit LAN, 1 x USB 3.1



Smart home functions for
the intelligent home with DECT
and Zigbee devices

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Technical specifications



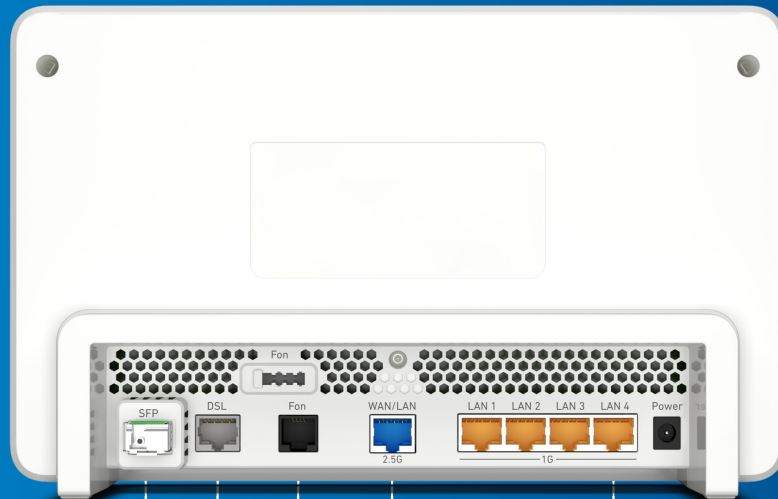
DECT



Wi-Fi 7



Zigbee



Fiber optics



DSL



Telephone



1 x 2.5 gigabit-WAN/LAN



4 x gigabit LAN



1 x USB 3.1

Ports and interfaces

- Powerful fiber optic and DSL router with Wi-Fi 7
- Supports the GPON (ITU-T G.984) and AON (IEEE 1000BX-10) fiber optic standards with FRITZ!SFP (package contents depend on the edition)
- Supports DSL including 35b supervectoring up to 300 Mbit/s
- 2.5G WAN port (switchable to LAN5) for connecting to a fiber optic modem (ONT) or network
- 4 x gigabit LAN
- 1 x a/b port for analog telephones, fax, etc.
- DECT base station for up to 6 handsets
- Smart home hub via DECT ULE and Zigbee

Wi-Fi

- 4x4 Wi-Fi 7 access point, backward compatible to the IEEE 802.11a/g/n/ac/ax wireless standards
 - 6 GHz up to 11.5 Gbit/s
 - 5 GHz up to 5.7 Gbit/s
 - 2.4 GHz (Wi-Fi 6) up to 1.2 Gbit/s
- Supports Multi-Link Operation (MLO) and puncturing
- Wi-Fi network encryption with WPA3/WPA2
- Mesh Wi-Fi – simply combine several FRITZ! products into one intelligent Wi-Fi network and extend the home network
- Wi-Fi Protected Setup (WPS)
- Wi-Fi can be turned on and off via button, connected telephones, or schedule
- Wi-Fi guest access – secure surfing for guest

WAN/LAN

- 2.5-Gbit/s WAN port (blue), can be switched to LAN port
- 4-port gigabit Ethernet switch (10/100/1000 BASE-T and 802.3bz-2016 (NBase-T))

FRITZ!SFP AON

- ITU-T G.652; IEEE 802.3ah 2004 1000BASE-BX10
- LC APC 8°
- Wavelength: TX 1310 nm, RX 1480 to 1580 nm
- Full duplex transmission
- Transmitter power: -9 to -3 dBm
- Reception range: -23 to -3 dBm
- Range: 10 km
- Support for SFF-8472
- Class 1 laser

FRITZ!SFP GPON

- Suitable for ITU-T G.984.2/984.5 GPON
- LC/APC 8°
- Wavelength: TX 1310 nm, RX 1490 nm
- Supports rogue detection
- Transmitter power: +0.5 to +5 dBm
- Reception range: -28 to -3 dBm
- Range: 20 km
- Support for SFF-8472
- Class 1 laser

Telephony / DECT

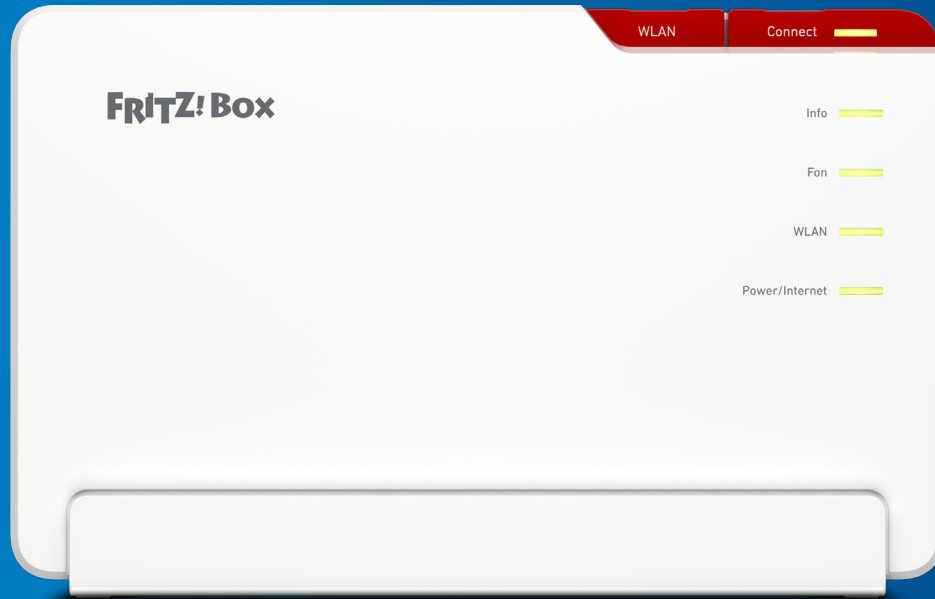
- Telephone system for IP-based connections
- Integrated DECT base station for up to 6 cordless phones
- 5 integrated answering machines featuring voice-to-mail
- Fax function with fax-to-mail
- Comprehensive telecommunication functions such as call diversion, internal calls, three-party conferences, call transfer, call blocking, alarm, baby monitor, VIP calls, Do Not Disturb, and caller ID display
- Internet telephony SIP-compliant (RFC 3261)
- Registration of IP telephones (LAN / SIP-compliant)
- Support for SIPTLS and SRTP
- FRITZ!App Fon for Apple iOS and Google Android

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Technical specifications



Networking

- TR-069 (TR-069/104/140) support including documentation of the data model in accordance with the Broadband Forum TR-106
- TR-369 support 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 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 operation launch)
- IGMP proxy (v3 and backward)
- DNSSEC and eDNS0 support

FRITZ!OS

- FRITZ!Box: a clear, browser-based user interface that's easy to use
- User interface protected by device-unique preconfigured password
- Sensitive user settings protected by 2FA including support for authenticator apps
- Multilingual user interface
- With MyFRITZ!, your FRITZ!Box can be accessed securely from anywhere
- Convenient features such as parental controls, push service, cloud contacts, online storage
- Wake on LAN over the internet
- Wi-Fi telephone 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
- New features provided in free updates: avm.de/en/fritzos
- Free FRITZ!Apps for telephony, smart home, access to the FRITZ!Box from on the go, and optimizing the Wi-Fi connection

Physical specifications

Dimensions in mm (W x H x D):

268 mm x 75 mm with base (60 without) x 165 mm

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 operation launch

Flexibility thanks to SFP modules

Exchangeable SFPs keep you flexible regarding your network technology. The FRITZ!Box is compatible with GPON and AON. The SFP modules can be obtained from AVM Sales and are available in different editions, so you can choose whether to purchase the FRITZ!Box with or without SFPs.

Fiber optic expertise

With our fiber optic development in Berlin you benefit from direct contact to relevant contacts from project management and development. Many of the fiber features are in-house developments, including Listen before Talk, packet processing optimizations, and energy-saving mechanisms.

FRITZ!IOS

FRITZ!IOS 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!IOS, 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

Besides OMCI management, the FRITZ!Box also masters 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 is a joint router and modem, installed directly at the internet connection. This saves power, while ensuring convenient operation and simplifying device management. Internet, Wi-Fi, streaming, telephony, smart home, and much more – combined in a single device.