FRITZ!Box 5690 XGS

The next generation 10G FRITZ!Box for XGS-PON fiber optics

The FRITZ!Box 5690 XGS enables the full speed potential of XGS-PON connections in your customers home network. The 10G connection can alternatively be used as a LAN port. Equipped with innovative Wi-Fi 7 in a 4x4 configuration, several gigabits can also be transmitted via the wireless network - 5760 Mbit/s on 5GHz and 1376 Mbit/s on 2.4GHz.
This means that fast XGS-PON tariffs can be used both wirelessly and via the 10G LAN port.

In addition, the FRITZ!Box 5690 XGS integrates telephony services via the integrated DECT base station, which can also offer smart home services.
FRITZ!OS makes it easy for users to customize and set up the FRITZ!Box to suit their needs. Integrated services and automated features for network operators enable flexible initial setup through to zero-touch setup via TR-069 or TR-369 (USP). Continuous improvements to the product via regular software updates including new features round off the offer.

Product highlights

- XGS-PON fiber integrated for multi-gigabit connections
- Innovative Wi-Fi 7: High speed Wi-Fi up to 5760 Mbit/s + 1376 Mbit/s
- 10 Gbit/s WAN/LAN port for full fiber optic speed in the home network
- Mesh Wi-Fi: an intelligent Wi-Fi system for the home network
- FRITZ!OS: Media server, NAS, MyFRITZ!, auto update

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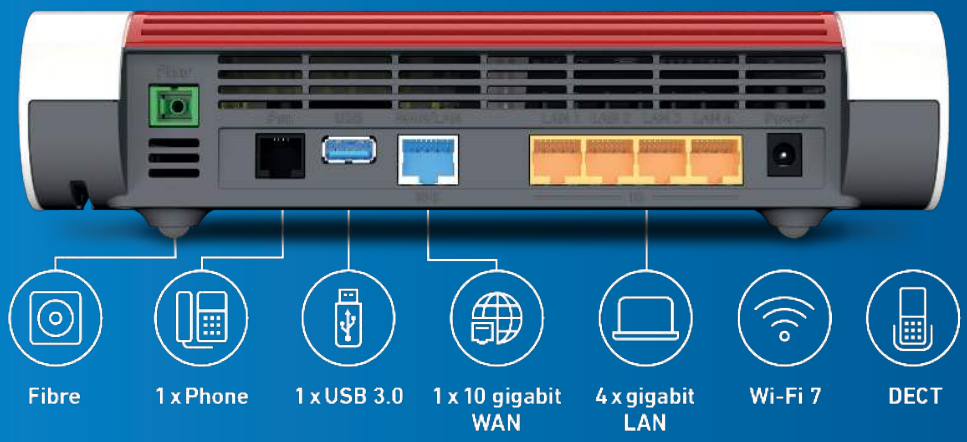
Technical specifications



Interfaces

- Wireless router with integrated XGS-PON interface
- Fiber interface on-board - no need for SFP
- Supports XGS-PON up to 10Gbit/s
- Integrated 10G Ethernet Port
- 10G port can be used for WAN access (i.e. with ONT)
- 4x1G Ethernet Swtich
- Stateful Packet Inspection Firewall with port sharing for secure surfing
- Parental controls with time budget, youth protection module, blacklist and whitelist
- Complete support for IPv6 in the internet, home network and for telephony
- Secure remote access over the internet with VPN
- Security wizard with diagnostic tool and auto update

Wi-Fi

- 4 x 4 Wi-Fi access point with Wi-Fi 7 up to 5760 Mbit/s (5 GHz) and 1376 Mbit/s (2.4 GHz)
- Dual-band concurrent Wi-Fi™ 7 (802.11be)
  - 2.4 GHz (4x4 MIMO) iFEM
    - 2.4 GHz frequency bands
      - 2400 - 2483.5 MHz - power up to 20 dBm
  - 5 GHz (4x4 MIMO) eFEM
    - 5 GHz Frequency bands
      - 5150 - 5250 MHz
      - 5250 - 5350 MHz with Dynamic Frequency Control - Transmission Power (max) = 23 dBm / 200 mW EIRP
- Extend the home network with Mesh Wi-Fi – simply combine several wireless access points into one intelligent system
- Compatible with IEEE 802.11a/g/n/ac/ax/be
- Wi-Fi network encryption with WPA3/WPA2
- Wi-Fi can be turned on and off via button, connected telephones, or schedule
- Supports Multi-Link Operation (MLO) and puncturing
- Wi-Fi guest access – secure surfing for guests
- Can be mounted on a wall or table/desk
- **Wifi Requencies**

Frequency	Frequency Range	max. transmitter power
2,4 GHz	2400 - 2483 MHz	100 mW
5 GHz	5150 - 5350 MHz 5470 - 5725 MHz	200 mW 100 mW

WAN/ LAN

- 10G WAN/LAN
- 4x1G LAN

Telephony / DECT

- 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
- Support for SIPTLS and SRTP
- SIP ALG
- Answering machine and fax
- 5 integrated answering machines featuring voice-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 in accordance with RFC 3261
- Registration of IP telephones (LAN / SIP-compliant)
- Telephony app for Apple iPhone and Google Android

Frequency	Frequency Range and Transmitter power
DECT	• Frequency Range: 1880 MHz - 1900 MHz • Maximum transmitter power: 250 mW

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Technical specifications

Network

- IR-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 (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 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 y 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: en.fritz.com/products/fritzos/
- Free FRITZ!Apps for telephony, smart home, access to the FRITZ!Box from on the go, and optimizing the Wi-Fi connection

Device Properties

Dimensions in mm (W x H x D): 250 x 184 x 69 mm

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Why FRITZ!

- Direct contacts in Sales, PreSales, and Engineering
- Training sessions with FRITZ! 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 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), 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, by ensuring proven reliability with success in the field. 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, 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.

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