

# Digitalization, WiFi and Good Living

## Klimahouse 2023



### Healthy living, digitalization, and high frequency electromagnetic fields

Today fast Internet, digitalization and networking ideally take place via fiber optics (FTTH=Fiber to the Home), often via existing telephone lines (xDSL) or via mobile communications such as LTE (4G) or 5G. In the house or apartment, where there is usually no cabling, then via PLC (Powerline, needs the electrical installation as an antenna) and wireless technologies such as WiFi, Mesh-WiFi and many other radio technologies used for Smart Home. All in all it leads to a considerable amount of high-frequency electromagnetic fields (HF-EMF).

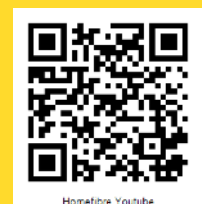
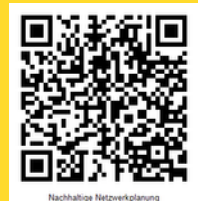
By using our Smartphones and tablets we use these technologies every day. We are permanently exposed to these fields and we cannot influence the increase in high-frequency electromagnetic fields. Just because of this, we repeatedly hear the question from customers:

#### How healthy or unhealthy is WiFi actually?

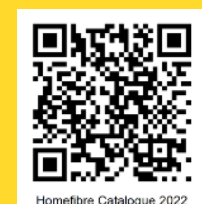
As a provider of solutions for optical in-house networking, customers express the demand to reduce the exposition of HF EMF (high frequency electromagnetic fields) in a controlled manner, at least in the private environment. We we present you a possibility to realize a balanced measure of HF-EMF in your private living area. In our brochure "Sustainable network planning" we show you options and perspectives for optimized WiFi performance and healthy digital living.



Nachhaltige Netzwerkplanung



Homefibre on YouTube:



Homefibre Catalogue

## WiFi - discussion and controversial views

Currently the topic of high-frequency electromagnetic fields and their influence on humans and the environment (animals and plants) is discussed very controversially. Studies are evaluated and interpreted differently. This makes it not easy for a user as well as for us as a supplier of

network systems to form an appropriate opinion. That HF-EMF influences the organism is undisputed. EMF are also used for healing. In the end, it depends on the type of EMF, on the strength and duration of the irradiation and on the personal disposition of each person how HF-EMF influences the organism. So at present everyone has to form his or her own opinion and make a personal decision.



Source: 2301\_230213\_ElektrosmogReport\_Web.pdf. 20230223

The table on the right shows how differently study results are interpreted. While industry-oriented interpretations certify no concerns (green), ecologically and civically oriented initiatives interpret studies very critically and cautionary (red, orange).

**We therefore recommend a precautionary network installation that provides you with security and many options for the future.**

Effect on human health	Organisationstyp	Krebs	Cancer	Kardiovaskuläre Effekte	Neurodegeneration	Reproduktion/Entwicklung	EEG	Kognition	Hormone / Stress	Elektrosensibilität / Schlaf	Blut-Hirn-Schranke		
												SSK	SCENIHR
SSK	W	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		
SCENIHR	W	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		
ICNIRP	W	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		
IARC	W	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		
dkfz	W	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		
Biolinitiative	W	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red		
WHO	S	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		
LUBW & LfU	S	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		
BfS	S	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		
Kompetenzinitiative	Z	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red		
IZMF	Z	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		
Ecolog	Z	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red		
Diagnose:Funk	Z	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red		
BUND	Z	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red		

← No statement  
 ← no health effect proven  
 ← Effect is inadequately demonstrated (\*)  
 ← Effect is limited proven  
 ← Effect is sufficiently proven

W ← Science  
 S ← Government organization  
 Z ← Civil Society

(\* Studienlage widersprüchlich, Studien nicht aussagekräftig, zu wenige Studien für seriöse Aussagen)

Source: <https://dserver.bundestag.de/btd/20/056/2005646.pdf>. 20230223

## WiFi Power and Health

We follow the state of the art and the latest scientific findings. Research over the last 20 years shows that permanent HF-EMF exposure of our organism, even to weak high-frequency electromagnetic fields, can have a long-term negative effect on health\*. It is our concern that you can network in a way that is good for you personally.

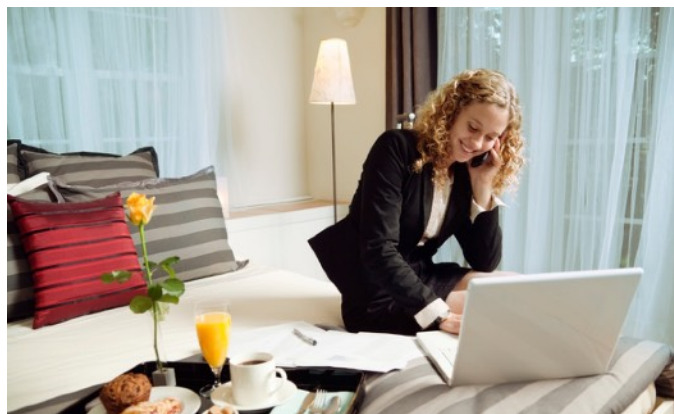
\* Ramazzini Studie / <https://www.sciencedirect.com/science/article/abs/pii/S0013935118300367?via=ihub>

Our proposal aims to limit the influence of high-frequency electromagnetic fields, at least temporal and spatial, in order to allow the organism to regenerate, comparable to switching off the light at night. You can't see, smell or hear radio, but that doesn't mean it doesn't affect the organism. As is well known, prevention is better than cure.

## How you can make provisions

Use wired devices at home and in the office as much as possible and WiFi only as much as necessary. Allow yourself WiFi-free times and help your organism to regenerate (keyword: cell regeneration). This effect has also been proven, for example, during longer stays in nature.

In order to control the exposition and performance of WiFi according to your personal requirements, we therefore recommend the installation of area-wide network cabling.



## Optimize WiFi personally

You can operate the individual WiFi cells with high or low power and program them temporally. WiFi - cells ( Access Points) are then switched off at night so the organism can recover and regenerate.

## Good Building - Good Living

Homefibre uses POF and WiFi for the system solutions. The basis of our systems is data transmission via optical fiber = polymer optical fiber (POF). This cabling supplies data sockets and local cells with WiFi access points.

With POF cabling in combination with electrical installation you save time, resources and costs. You get network cabling that is available everywhere and that you can activate at any time. Important, stationary devices are operated wired with it. This cabling provides a stable connection to small, spatial WiFi cells (e.g. per room), which you can switch on and off as required.

With an area-wide POF cabling you also have an ideal basis also for future radio technologies using higher frequencies or also LiFi communication over light.



The POF (Polymer Optical Fiber) is installed in combination with the electrical installation.



WiFi access points can be integrated into the electrical installation.

## Social housing and digital networking

A digital infrastructure is particularly important in social housing. Only with existing cabling it is possible, for example, to set up a secure home office. Cost-saving, sustainable pre-cabling with POF offers future security. Apartments can be flexibly adapted to new technologies or changing requirements of the occupants. High renovation costs in the future are avoided.





## You decide where and how much WiFi you need and when you use it.

POF Gigabit cabling is available at every major power outlet to connect stationary devices to the network anywhere in the house.

WiFi is divided into individually switchable cells. The transmission power can also be managed individually. WiFi free or WiFi reduced areas support a healthy, private living environment.

### The advantage of a Homefibre system:

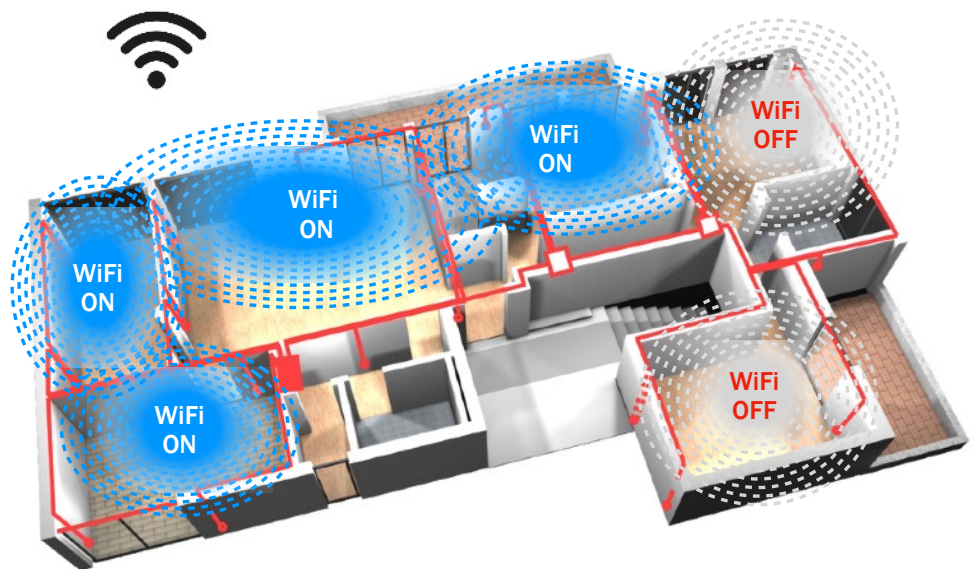
best technical performance, save energy and control the exposition of electromagnetic fields.

- fast & secure internet for any device
- true Gigabit transmission
- POF optical fibre at every socket
- prepared for the future
- personally optimized WiFi
- high real estate added value with low investment

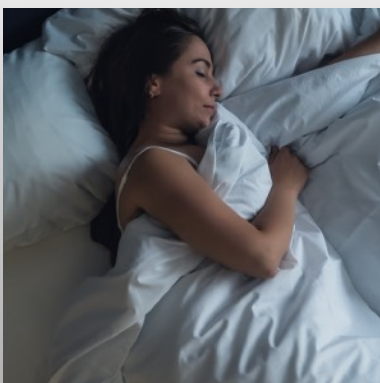
### THE DAILY - OR ACTIVE MODE



During the day, WiFi is used across the board or on a local basis.



### THE NIGHT - OR RESTING MODE



In certain rooms WiFi is switched off at night. The body, the cells can recover and regenerate

