

# SUSTAINABLE NETWORK PLANNING FOR DIGITAL LIVING

- fast & secure internet for any device
- real Gigabit transmission
- fiber optics at every power socket
- prepared for the future
- personally customized & optimised WiFi
- high real estate added value with low investment



## DIGITAL SERVICES NEED SECURE AND STABLE CONNECTIVITIY

Build well - live well. Part of feeling good is being optimally networked. Fast, secure, flexible, online or sometimes simply offline all to yourself. If desired, without electrosmog and without cable clutter.

What's more: be ready for the future. For new digital services, growing data volumes, new and changing needs, new technologies and smart living.

How can we optimally prepare our houses and apartments for digitalization?

With the Homefibre home network based on polymer optical fiber (POF) you are perfectly prepared, for today and tomorrow. The POF cable is prepared everywhere in your electrical installation and connects your devices and services.

Electrical outlet with pre-installed POF Gigabit data cable

POF - SMI fiber optic data socket

Data socket with 2 x RJ45 interface

WLAN flush-mounted access point with data socket



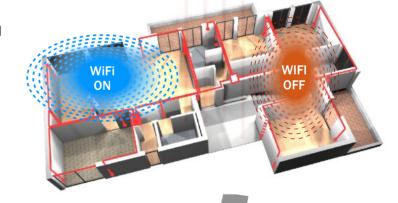






The digital equipment at home is constantly increasing. More and more devices are networked and use online services.

- smart TV, IP TV, UHD TV
- · computers, laptops, home office
- · IP audio systems, music streaming
- smartphones, tablets, laptops
- · game consoles, virtual reality
- home control, smart home
- security and cameras

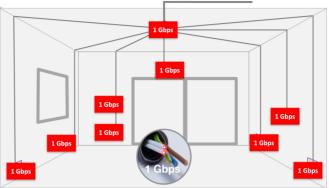






### FAST INTERNET EVERYWHERE YOU NEED IT





The example of a smart TV makes it easy to see why and where a data connection would be needed everywhere in a room. To give you the flexibility to decide where your smart TV goes, we recommend installing at least the POF Gigabit data cable to as many electrical outlets and sockets as possible.

The POF cable is laid with the electrical installation to all important sockets. At selected sockets, an optical POF-SMI connection interface, a 2-way Gigabit data socket or a WLAN access point is optionally installed.

The data line is also available at all junction boxes and in the electrical distribution cabinet. It can be used for all IP-based applications.

The polymer optical fiber (POF) is installed in one pipe combined with the electrical installation covering the entire house. This saves resources and cost.



### EACH OUTLET IS WIRED WITH A SECURE POF GIGABIT DATA LINE



Even the best planning cannot predict how an apartment will ultimately be furnished, where networked devices will be placed.

Living conditions, demands and requirements change. The need for secure networking, however, remains or even grows.

To ensure flexibility and security, Homefibre POFcabling provides the basis for optimal networking.

YOU DECIDE WHERE YOUR TV IS

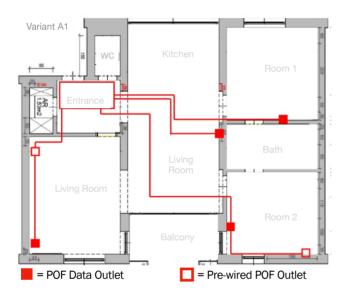


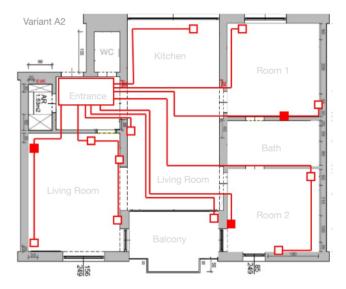
### CABLING IS THE PREREQUISITE FOR WELL-FUNCTIONING DIGITAL SERVICES

- How can we optimally prepare our houses and apartments for digitalization?
- What can we do today to use mobile communications and WiFi and consider their impact on our health?
- How can we design networking optimally and flexibly according to our personal needs?

Thanks to Homefibre, you can already equip your property with a Gigabit infrastructure today in a forward-thinking and area-wide manner. With the good feeling that you have also thought about performance, health and economy in digital networking.

Take advantage of the benefits that POF cabling offers you!





### Minimum network installation

Even with a very reduced network installation, an installed POF cable already offers an important advantage. For example, one circuit per room is installed with a POF cable. The POF cable is routed through an empty socket, for example, and one socket is designed as an end socket. One of the two sockets can then be connected to the central POF switch or a media converter via the POF cable.

### With this installation you have already doubled the possible mains outlets!

Each socket can also be supplied in a star configuration with its own POF line (e.g.  $1 \times 230V + 2 \times 20V$  POF in one pipe). This doubles the number of fully available outlets.

### Comprehensive network installation

In order to achieve better availability of data outlets, e.g. two separate low-voltage lines with e.g. two sockets each are installed per room. This means that at least 4 data outlets are available per room, two of which can be used simultaneously.

Connection sockets are cost-effectively designed as optical sockets, as WiFi access point or 2-way data sockets with RJ45 Ethernet connection. In an economy version also only 1 link with 2 media converters can be activated.

YOUR HOME OFFICE, YOUR SMART TV OPTIMALLY NETWORKED EVERYWHERE



# OPTIMAL BROADBAND SUPPLY IN HOUSES AND APARTMENTS

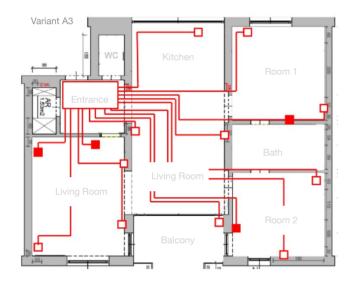


If power circuits are laid in a star configuration with POF and brought together in the electrical distributor, socket outlets, active modules (e.g. WiFi access points) or light outlets can be flexibly grouped and switched conventionally via push buttons or also via a central logic with smart home functions.

A Gigabit POF cable is available at each socket or junction box.

Whether today, tomorrow and the day after tomorrow. You will never again be annoyed by a missing network connection.

With the components from Homefibre, your home network is optimally adapted to your personal needs. The flush-mounted junction box with integrated WiFi access point, for example, is ideal for installing a separate WiFi cell per room.





### **Example optimal pre-installation**

- · For high flexibility and safety!
- E.g. fifteen (15) combined power-data outlets are wired in a star configuration

The wiring: The important sockets are supplied with the POF cable. This means that the optimum data rate of 1 Gbps is available at each data socket. Each link can be used and switched independently.

The connections: As a precautionary installation, only the POF cable is integrated into the electrical installation. So the network can be used flexibly by fiber optic sockets with SMI connection. For large, permanently placed devices such as smart TVs, home servers, etc... 2-way data sockets or WiFi access points are implemented. The network can be extended and connections can bechanged at any time.

### Maximum precaution future proof installation

- Maximum flexibility and future-proofing
- E.g. fifteen (15) data outlets plus light outlets In addition to the various data outlets, junction boxes and light outlets are wired with the POF cable.

This installation allows to integrate new technologies for wireless data transmission at very high frequencies or with light into the network. Examples are 5G, LiFi, infrared or VLC (Visual Light Communication).

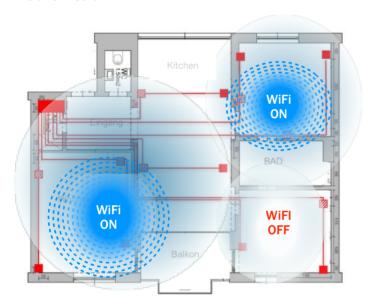
THE POF DATA CABLE IS PRE-INSTALLED AND READY EVERYWHERE. TODAY AND TOMORROW, WHENEVER YOU NEED IT!



### YOUR PERSONAL CUSTOMIZED WIFE

How should your wireless data transmission be designed? As much WiFi as possible or as little as absolutely necessary? People have very different needs and opinions here.

We recommend WiFi primarily for mobile applications (smartphone, tablet, etc.). Stationary devices such as TVs, PCs, game consoles, printers, etc. are preferably networked via wired data sockets. This guarantees optimal and efficient data transmission.



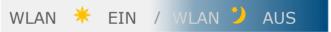
Several technical advantages also speak in favor of star-networked, spatial WiFi cells.

WiFi requires increasingly high frequencies for high data rates. These are strongly attenuated by objects and walls.

The "room WiFi" achieves very good transmission quality even with low transmission power. Neighbors or devices in other rooms are less influenced and not disturbed. Interference (overlapping of frequencies) is minimized and the efficiency of the system is significantly increased.

WiFi access points from Homefibre are flushmounted. WiFi power is designed for each room, electromagnetic radiation can be timed, limited and reduced on demand.

### YOU DECIDE WHEN, WHERE AND HOW YOUR WIFI IS ACTIVATED!



### BEST PERFORMANCE FOR EVERY WLAN ACCESS POINT

Our suggestion: To ensure best WiFi performance and keep control over WiFi exposure according to your personal needs, a separate WiFi access point is installed in each room, connected via the cabling in a star configuration to the central switch or directly to the router. The single WiFi cells can be individually programmed and switched. This enables optimum data transmission even with reduced transmission power. In addition, security is increased and the electromagnetic load is attenuated.

Additional future-proofing through installation is achieved if the POF data cable is also installed to the light outlets and junction boxes. In this way, new transmission media such as data transmission via light (LiFi or VLC = Visual Light Communication) can be integrated into the network tomorrow.

SMALL WIFI CELLS ARE
SPATIALLY DIVIDED,
INDIVIDUALLY SWITCHED AND
DIRECTLY CONNECTED TO THE
ROUTER VIA THE NETWORK.



# REAL GIGABIT DATA TRANSMISSION - AVAILABLE EVERYWHERE

### 1) Wired for area coverage:

Less installation effort and more network. The POF cable is pre-installed to every power outlet, making it available everywhere. Time-consuming, subsequent cabling is never necessary again. You have made provisions for the digital future.



### 2) Flexible optical data socket: The simplest and most cost-effect.

The simplest and most cost-effective connection is an optical POF-SMI data socket. External devices can be connected to this via an external media converter. Safe, fast and energy saving.



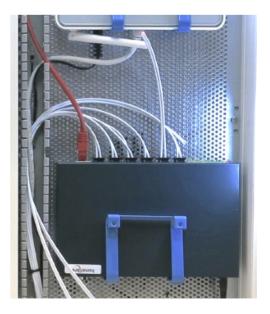
### 3) Active components:

Data sockets or WiFi access points are installed as required where they are needed in the long term. They are neatly integrated into the electrical installation.

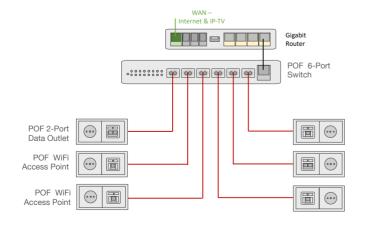


### 4) The access and multimedia distributor:

The network is connected in a star configuration to the central switch behind the access router. You enjoy full bandwidth at every connection.



#### **Network Scheme**





# 5 REASONS FOR YOUR HOMEFIBRE HOME NETWORK



#### FAST:

Whether IP-TV, video streaming, music streaming, gaming, photo shipping, or video conferencing in the home office, our POF cables ensure the appropriate speed.

### STABLE:

Always, everywhere and trouble-free networked. Nothing upsets your home network.

### **CLEAN & GREEN:**

Living without or with reduced electromagnetic radiation?

In the POF network it is also possible without electrosmog. You decide for yourself how much WiFi you want. WiFi cells divided into rooms optimize performance and can be controlled as desired. WLAN can be programmed for a specific time and switched off if necessary - also to protect children.

The installation is also clean.

No post-installation with ugly cable ducts, no time-consuming drilling or chiseling, and still a stable, real gigabit connection everywhere.

### SAFE:

In terms of the future: TVs, audio systems, desks, etc. change their place over time - the POF cable is installed in every socket and is thus available for your devices when needed. Nothing, from a purely technical point of view, is as secure as a wired network.

### SMART:

With your home network you are future-proofed. Whether entertainment, home control or home security: Everything that is IP-capable can be integrated into the network..











# THE DIGITAL INFRASTRUCTURE FOR YOUR PROPERTY FUTURE-PROOF ADDED VALUE FOR LITTLE MONEY

CONTACT US!

WE WILL BE HAPPY TO ADVISE YOU.

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