

FULL HOME SYSTEM | COPPER

LIVING WATER TECHNOLOGY

FULL HOME SYSTEM

A comprehensive, multi-stage system for improving utility water quality - for the whole home, in one compact installation. Available with copper or stainless steel spheres.

- TECHNICAL GUIDE

How the Full Home System works

02

1

SYSTEM INLET

Mains or well water

Water enters the system directly from the home installation, at a working pressure of up to 8 bar, through 3/4″ connections.

2

SYSTEM HOUSINGS

EMI PROTECT - antibacterial housings

Four transparent housings made with antibacterial technology using a zinc-based active agent. They inhibit biofilm inside the housing and protect against microbial corrosion - protecting the equipment, not the water directly. Double seal (two O-rings) and a clear bowl for visual checks.

3

MECHANICAL FILTRATION

PS-PROTECT - 1 µm foam cartridge

A gradient polypropylene cartridge captures sand, silt, rust and suspended solids from 1 micron - which also covers mechanical retention of microplastic particles. A bactericidal agent on its surface limits bacterial growth in the filter itself.

4

ADSORPTION & TASTE

GAC-NS - silver-impregnated activated carbon

Granular coconut-shell activated carbon adsorbs chlorine and organic compounds responsible for taste and smell. Silver impregnation limits microbial growth inside the cartridge, extending its life and hygiene.

5

MINERAL BED

Shungite from Karelia

A natural silicon-carbon rock traditionally used in water treatment. In the system it enriches water with trace elements and helps improve its taste. Rinse several times in cold water before first use.

6

G.R.A.I.L. TECHNOLOGY - LIVING WATER TECHNOLOGY

5 active spheres Ø 5 cm - copper or stainless steel

The proprietary final stage of LWT technology: stabilisation and structuring of water. The copper version also uses the natural bacteriostatic property of copper surfaces.

7

SYSTEM OUTLET

Utility water

Water flows into the home installation, ready for everyday use in the kitchen, bathroom and other draw-off points.

SCOPE

What the system removes

03

Full Home System
effectively removes and improves

- Sand
- Silt and suspended solids (from 1 µm)
- Microplastics - mechanical particles from 1 µm
- Rust
- Chlorine
- Organic compounds affecting taste
- Improves taste and smell of water
- Enriches water with trace elements (shungite)
- Improves comfort of use

Outside the basic
scope of the system

- High manganese
- Very high iron
- Ammonia
- Nitrates and nitrites
- Arsenic
- Very high salinity
- Certified bacteriological disinfection
- Certified virological disinfection

The base system is compatible with most 10" cartridges on the market. For water with elevated manganese, iron or ammonia (e.g. from a well), see the example additional cartridges on p. 05.

Antibacterial protection of the system itself

Four independent mechanisms limit bacteria and biofilm **inside the device** - this protects the equipment and operating hygiene, and is not certified drinking water disinfection.

Zn

Zinc in EMI PROTECT

Eliminates Gram+/Gram- bacteria on contact and inhibits biofilm on the housing walls.

PS-PROTECT

A bactericidal agent breaks down the bacterial cell wall inside the cartridge.

Ag

Silver in GAC-NS

Damages the membranes and DNA of microorganisms in the carbon bed, limiting their growth.

Cu

Copper (Copper version)

The natural bacteriostatic property of copper active sphere surfaces.

CHOOSING A VERSION

Two Full Home System versions

04



Full Home System | Copper

- 5 copper active spheres, Ø 5 cm
- Additional bacteriostatic property of copper surfaces



Full Home System | Stainless Steel

- 5 stainless steel active spheres, Ø 5 cm
- Corrosion-resistant, neutral in contact with water

Both versions have an identical filtration layout (EMI PROTECT, PS-PROTECT, GAC-NS, shungite) - they differ only in the material of the 5 active spheres in the G.R.A.I.L. technology module.

Common technical specification

PARAMETER		VALUE
Set dimensions	→	520 × 320 × 110 mm (W × H × D)
Connections	→	3/4″
Max. working pressure	→	8 bar
Certification	→	PZH hygiene certificate (Poland)
Material safety	→	Free from BPA, heavy metals and nanomaterials
Cartridge compatibility	→	10″ standard - most cartridges on the market
Made in	→	Poland

SYSTEM EXPANSION

Well water - extra cartridges

05

EMI PROTECT housings use the 10″ standard and 3/4″ connections, so they accept most cartridges on the market. Well water often needs more than the basic Full Home System covers (p. 03) - below are typical cartridge types for expanding the layout. **Selection always requires a prior water analysis and consultation with Living Water Technology.**

Water problem → cartridge type

PARAMETER		CARTRIDGE TYPE
Sand, suspended solids	→	PP cartridge (mechanical, e.g. PS-PROTECT)
Iron	→	Iron removal cartridge
Manganese	→	MnO_2 catalytic cartridge
Ammonia	→	Zeolite cartridge
Chlorine (chemically treated water)	→	Carbon Block / GAC-NS
Hydrogen sulphide (rotten-egg smell)	→	Catalytic cartridge
Smell, aftertaste	→	Activated carbon

Example expanded configuration - well water

01	PP 1 µm cartridge (PS-PROTECT)
02	Iron removal cartridge
03	Catalytic cartridge (manganese)
04	Zeolite cartridge (ammonia)
05	GAC-NS - silver-impregnated activated carbon
06	Shungite from Karelia
07	5 LWT active spheres (copper or stainless steel)

The order and number of additional housings depends on the water analysis. Contact Living Water Technology to choose a configuration for your well.

EXPANSION RESULT

Expanded system for well water

06

Combining the Full Home System with the recommended additional cartridges (p. 05) creates an expanded treatment layout for typical well water issues: PP cartridge → iron removal → catalytic (manganese) → zeolite (ammonia) → GAC-NS → shungite → 5 LWT active spheres. Each stage handles a different water parameter, and the order matters for the whole system.

Expanded system
additionally removes and improves

- Iron (iron removal cartridge)
- Manganese (MnO_2 catalytic cartridge)
- Ammonia (zeolite cartridge)
- Hydrogen sulphide - rotten-egg smell (catalytic)
- Sand, silt, solids and microplastics (PS-PROTECT, from 1 µm)
- Chlorine and some organic compounds (GAC-NS)
- Improves taste and smell of water
- Enriches water with trace elements (shungite)

Still outside the scope
even after expansion

- Nitrates and nitrites
- Arsenic
- Very high salinity
- Certified bacteriological disinfection
- Certified virological disinfection

The choice and order of additional cartridges always depends on a laboratory water analysis - not every well needs all the stages listed. Contact Living Water Technology for an individual configuration.

INSTALLATION

Installing the Full Home System

07

System performance depends on the **correct order of cartridges** in the direction of water flow. Prepare the cartridges as described below before installation.



WATER INLET ↓

1. **Sediment cartridge**
   Mechanical filtration
2. **Carbon cartridge**
   Silver end at the bottom, white at the top
3. **Shungite**
   Removed from bags and rinsed
4. **Active spheres**
   Copper or stainless steel

↓ OUTLET TO HOME / OFFICE

Preparing the cartridges

ALL CARTRIDGES

Remove tags and stickers

Before inserting into the housings, remove all tags, stickers and labels from the cartridges.

CARBON CARTRIDGE

Silver end down

Place the cartridge as in the photo above - silver part at the bottom, white part at the top of the housing.

SHUNGITE

Remove from bags and rinse

Pour the shungite out of the bags and rinse it in cold water until it no longer clouds the water.

Installation and start-up

01	**Insert the prepared cartridges** into the housings in order 1 → 4, counting from the water inlet side, and tighten the bowls.
02	**Connect the set to the installation** - inlet on the supply side, outlet to the home or office circuit.
03	**Start the system** - open the water supply and check all connections for leaks.

INSTALLATION RECOMMENDATION - shut-off valves before and after the filter. Fit a valve on the inlet and outlet of the system. This lets you isolate the filter from the installation and makes cartridge replacement much easier.

FREQUENTLY ASKED QUESTIONS

FAQ

Does the system remove minerals?

No. The Full Home System is not designed to demineralise water.

Does it lower TDS?

Slightly or not at all - the system filters mechanically and adsorbs chlorine and organic compounds; it does not desalinate water.

How do the Copper and Stainless Steel versions differ?

Only in the material of the 5 active spheres. The copper version also uses the bacteriostatic property of copper surfaces.

Does the system protect against bacteria in water?

Its components (zinc in EMI PROTECT, PS-PROTECT, silver in GAC-NS, copper) protect the equipment itself from biofilm and bacterial growth. This is not certified drinking water disinfection.

Can it be used for well water?

Yes, after a water analysis. With elevated manganese, iron or ammonia, see the example additional cartridges on p. 05.

Does the system remove microplastics?

The PS-PROTECT cartridge mechanically filters particles from 1 micron, which covers most microplastics. Particles below 1 µm (nanoplastics) are outside this range.

How long do PS-PROTECT and GAC-NS cartridges last?

Maximum cartridge life is approx. 9 months, depending on inlet water quality and usage.

Where can I buy the system?

Orders are handled by Living Water Technology Partners - see the partner list at livingwatertechnology.com.

CONTACT

Contact Living Water Technology

Get in touch about choosing a version, water analysis and ordering the Full Home System. info@livingwatertechnology.com

LIVINGWATERTECHNOLOGY.COM

This document is for information and technical purposes and is based on the product specification of Living Water Technology and of the EMI PROTECT, PS-PROTECT and GAC-NS components. The properties of the individual filter cartridges, the shungite bed and Living Water Technology's active sphere technology are described separately as distinct stages of the system. The antibacterial properties stated relate to protecting system components from biofilm and bacterial growth, not to certified drinking water disinfection. This document contains no medical or health claims.