



GENERAL HYDROPONICS®

The basics

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www.eurohydro.com

BRINGING NATURE AND TECHNOLOGY TOGETHER



AF10 ①
110 cm x 50 cm x 50 cm



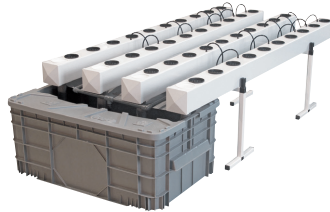
AF14 ①
160 cm x 50 cm x 50 cm



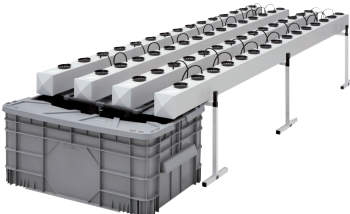
AF20 ①
130 cm x 73 cm x 47 cm



AF28 ①
180 cm x 73 cm x 47 cm



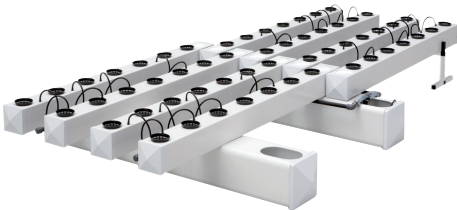
AF40 ①
224 cm x 105 cm x 57 cm



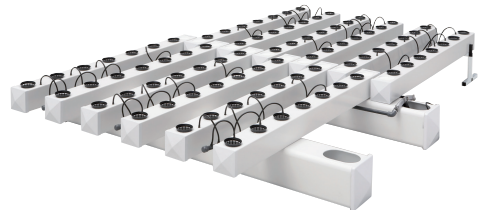
AF60L ①
325 cm x 105 cm x 57 cm



AF80 ①
410 cm x 105 cm x 57 cm



AF56B ①
290 cm x 140 cm x 32 cm



AF84B ①
290 cm x 195 cm x 32 cm



AF120 ②
324 cm x 209 cm x 57 cm

& made to measure

FEEDING CHARTS HYDRO, AERO, COCO

Flora Series

	1	2	3	4	5	6	7	8	9	10	...	
	18 H ☀			12 H ☀								
ml / 10 L	🌱			🌸 - 🍎								
FloraGro	2,5	2,5	7	15	15	5	5	5	5			
FloraMicro	2,5	2,5	7	10	10	10	10	10	10			
FloraBloom	2,5	2,5	7	5	5	15	15	15	15			
FloraKleen				1,5 - 3 ml/L			1,5 - 3 ml/L			1,5 - 3 ml/L		
Ripen										60		

FloraDuo

	1	2	3	4	5	6	7	8	9	10	...	
	18 H ☀			12 H ☀								
ml / 10 L	🌱			🌸 - 🍎								
FloraDuo Grow	5	5	15	30	30	10	10	10	10			
FloraDuo Bloom	5	5	5	10	10	30	30	40	40			
FloraKleen				1,5 - 3 ml/L			1,5 - 3 ml/L			1,5 - 3 ml/L		
Ripen										60		

FloraNova

	1	2	3	4	5	6	7	8	9	10	...	
	18 H ☀			12 H ☀								
ml / 10 L	🌱			🌸 - 🍎								
FloraNova Grow	6	6	12	14	8							
FloraNova Bloom				6			14	14	14	14		
FloraKleen					1,5 - 3 ml/L					1,5 - 3 ml/L		
Ripen										60		

Maxi Series

	1	2	3	4	5	6	7	8	9	10	...	
	18 H ☀			12 H ☀								
g / 10 L	🌱			🌸 - 🍎								
MaxiGro	8	12	12	6								
MaxiBloom				6	16	18	18	18	18			
FloraKleen				1,5 - 3 ml/L			1,5 - 3 ml/L			1,5 - 3 ml/L		
Ripen										60 ml / 10 L		

☀ = Changer l'eau - Change water - Wasserwechsel - Cambiar el agua - Cambiare l'acqua - Mudar de água - Water vervangen - Skift vannet
 Úprava vody - Zmiana wody - úprava vody - Zamenjajte vodo - Vizcsere - Schimbare apă - Promijeniti vodu - Променити воду

1 7 Semaine - Week - Woche - Semana - Settimana - Semana - Week - Uke
 Týden - Tydzień - Týždeň - Teden - Hét - Săptămână - Tjedan - Недеља

☰ = 10 ml

FEEDING CHARTS



Flora Coco

		18 H ☀			12 H ☀							
ml/10 L		1	2	3	4	5	6	7	8	9	10	...
SIMPLE	FloraCoco Grow	4	5	20	30	30	15	15	15	15		
	FloraCoco Bloom	4	5	10	15	15	30	30	30			
	FloraKleen				1,5 - 3 ml/L			1,5 - 3 ml/L			1,5 - 3 ml/L	3 ml/L
	Ripen										60	

Additives

EXPERT	Bio Roots	2									
	Bio Protect	5 ml/L		5 ml/L		5 ml/L					
	Bio Bloom						2				
	Diamond Nectar	20									
	Mineral Magic							4 g			

BioSevia

ml / 10 L		18 H ☀			12 H ☀				
Semaine - Week - Woche Semana - Settimana		1	2	3	4	5	6	7	...
SIMPLE	BioSevia Grow	3	3	15	20				
	BioSevia Bloom	3	3				20		
	BM			1 g / 10 L					

GENERAL ORGANICS®

		18 H ☀			12 H ☀						
ml / 10 L		1	2	3	4	5	6	7	8	9	10
SIMPLE	BT Grow (ml/10L)	2,5	15	10							
	BT Bloom (ml/10L)	2,5		10					20		
EXPERT	BM	1 g / 10L									
	Bio Root Plus	3 30 - 50									
	BioBud								3 30 - 50		
	BioWorm		50		50						
	BioWeed		3 50								
	Urtica		20 300		20 300		20 300			ml/L	ml/10L
	Diamond Black		2,5 40								

🗑️ = 10 ml



Thank you for choosing a GHE hydroponic system. Our systems are reliable, top quality growing units. Don't hesitate to contact us for information: +33 (0)5 62 06 08 30 or tech@eurohydro.com

UNPACKING AND CHOOSING A LOCATION

Check the packing list and familiarise yourself with all the parts. Each system comes with detailed assembly instructions.

Abundant light, proper temperature and humidity and adequate ventilation are essential to fast growing plants and the best crops. Set up your system in a warm, bright, well-ventilated location. Wherever you choose to set it up, bear in mind that spillage inevitably occurs when you are servicing the installation.

THE NUTRIENT SOLUTION

You can mix your nutrient solution directly in the tank or in a separate container. You can also prepare a reserve of several litres of solution (In a container away from the light or in an ACS Controller) and water your plants as and when they need it. In our systems, you can use tap water, or 30% tap water mixed with 70% demineralised water, or water obtained by reverse osmosis.

All our nutrients - Flora Series, FloraDuo, FloraNova, BioSevia, as well as our latest, FloraCoco and Maxi Series - are suitable for use with your system. They are complete, easy-to-use formulas and are regularly updated. Detailed nutrition programmes are included with all our products, we recommend you use them. Other products are also featured in the programmes to help you maximise your results - Diamond Nectar, Ripen, Mineral Magic, BioBoosters, BM, FloraKleen, the pH adjustors, and the GO line supplements.

Usually our systems come with a free sample of Flora Series. Flora Series is, in fact, the best of nutrients, specially formulated to allow you to finely control your plants' growth, and respond to their needs at each stage in their growth.

The following formula is a suggestion for fast flowering annuals. It is very easy to use and gives excellent results:

	FloraGro	FloraMicro	FloraBloom
Cuttings	1	1	1
Vegetative stage	3	2	1
Fruiting and flowering	1	2	3

EC* levels for your hydroponic mixes (these proportions are calculated for ordinary tap water):

Cuttings: 0.4 to 0.6 EC **Vegetative stage: 1.2 to 1.5 EC** **Fruiting and flowering stage: 1.5 to 2.2 EC**

During the last 10 days before harvesting, add only water with adjusted pH, or use Ripen. Just before harvesting add a little FloraKleen and let your system run for 48 hours.

Please refer to gb.eurohydro.com or our online catalogues on eurohydro.com.

Adjust your water to a pH between 5.5 and 6.5. Check the pH level regularly. To stabilise it use our GHE pH Down liquid as it contains organic regulators.

A simple measuring method: use the cap from the 1 or 1/2 litre bottles: 1 cap = 10 ml.

For 20L of water: mix 1 cap of FGro + 2 caps of FMicro + 3 caps of FBloom = +/- 1.00 at 1.50 EC, depending on the quality of your water.

Important notice: Shake your nutrients before use. Our nutrients are highly concentrated and very little is needed for a crop. To avoid precipitation while mixing your solution, make sure you rinse your measuring container between each product.

BIOPONICS

Bioponics allows you to grow organically in a hydroponic system.

When growing on a water-retaining substrate like rockwool, coir or perlite, only use BioSevia with BM (BioponicMix).

You will find extensive information about bioponics in our catalogue, and also on <http://gb.eurohydro.com/bioponics.html>. There are useful articles if you need more information and a free consultant service (tech@eurohydro.com) is available to answer any question you might have.

GROROX (CLAY BEADS)

There are several available qualities of clay beads.

Before harvesting:

- Wash your beads thoroughly to rinse off residue and dust.
- Check their pH: Put some beads in a glass of demineralised water (pH<4.0). Stir well and leave to rest. Measure the pH. If it is high (pH>7.0) then soak overnight in an acidic solution (pH<4.0). Then rinse thoroughly.

After harvesting:

If necessary, especially if your plants have suffered insect infestation or disease we recommend correct disinfection. Soak in strong pH Down overnight and rinse thoroughly.

COCOTEK (COIR)

At the beginning of 2016 we launched our own line of coir substrate. We currently have 2 available options, 100% coir, or our mix of 75% coir and 25% perlite, both in 50L bags. We selected CocoTek with great care.

OPERATING THE SYSTEMS

WATERFARMS, AQUAFARMS, AEROFARMS, WATERPACK ACS, ECOGROWERS, AEROFLOS,... and our latest, the EBB&GROW.

Attention: we no longer manufacture or sell the DPS and PANDA lines. Our Customer service remains open to help you with parts and advice.

1 - Filling and emptying the systems

1. For AquaFarms, WaterFarms, AeroFarms, EcoGrowers, CuttingBoards and RainForests, simply fill the tank with the nutrient solution and turn the pump on.

(Important notice: for RainForests² and 72, make sure the Vortex motor is always immersed. For CuttingBoards, remember that your cuttings must soak in the solution at all times). Empty them in a container or directly into the garden using the blue level tube.

2. For the Ebb&Grow, like for the DPS and Pandas previously, first fill the tank with the nutrient solution, then, when it is full start the pump to finish filling the rest of the system. Once the top of the system reaches the correct level, top up the tank. To empty, start with the tank, then empty the top into it and then drain the system completely. It is the same step-by-step process for AeroFlos.

3. When using AeroFlos:

The AeroFlo supplies just the right amount of water to your plants but no more to avoid them getting too heavy. It is therefore important to take a few precautions when filling and emptying them:

1. First fill your tank with the nutrient solution, then start the pump to fill the chambers.
2. When the chambers are full, continue to fill the tank up to two thirds but no more. If there was a power failure, or if you use a timer, the tank must be able to collect the surplus water without overflowing.
3. **To empty:** First empty the tank. Then, after removing the level tubes, empty the chambers into the tank one by one while slowly emptying the tank. Do not dispose of this solution. See § following «Warning»

2 - Levels, changing the solution, and watering cycles

Avoid using too strong or aggressive solution, and increase your EC progressively.

Monitor your nutrient solution by regularly checking water, EC and pH levels. Add water and nutrients and adjust the pH depending on needs. Remember plants can absorb:

1. Nutrients and water in a balanced manner. In this case, top up with a normal nutritive formula
2. More water than nutrients. In this case, top up with pH adjusted water, or with a very mild nutritive solution.
3. More nutrients than water. In this case, add nutrients.

Important:

1. As long as you are satisfied your crop is growing well, you don't need to replace your solution too often, this would be a needless waste. Every two weeks approximately, depending on the quality of your water and/or the health of your plants, let the level of solution decrease to the minimum (but don't let the pump draw in air), then fill it up again with water at the right temperature, adjust the pH, and add nutrients. Check the pH and adjust if necessary.
2. There are a few cases where it is good to replace the solution regularly (every 10 days). When the quality of your water is poor or unreliable (as is the case in some cities) and/or when your plants are not growing well. Don't dispose of the solution, instead, use it to water your house plants, they will look great!
3. No matter which growing system you use, always make sure that your roots are properly watered at all times. Never let them dry out. If you are using an AeroFlo, wait for the roots to be long enough to hang in the solution, then lower the level tubes down to lower the level of the solution to leave the upper part of the roots exposed to air.
4. If you use another substrate than clay beads, adapt your watering cycles accordingly. Some growth media, like coir or rockwool, will retain too much moisture and may become a disease factor for your plants. In these cases watering must be intermittent. Don't hesitate to contact us for more information.
5. Generally the tank should be relatively full, this will keep the nutrient solution more stable. Never let the pump run without water, as this will seriously damage it.
6. Cover all empty plant-steps with pots and Grorox to protect the nutrient solution from light and debris.

3 - The ACS Controller (or central water storage)

For AquaFarms, WaterFarms and AeroFarms you can use the ACS Controller which acts as water storage for four to six pots, connected in a line or in a loop. They have an active circulation system to guarantee the consistency and oxygenation of the nutrient solution, as well as a valve that balances and refills the levels as they drop inside the pots. Fill the ACS Controller with nutrient solution in the same way as any other system.

HOW TO START OFF CUTTINGS

CUTTINGBOARDS AND RAINFORESTS

GHE offers two systems for propagating cuttings - the CuttingBoard and the RainForest.

The CuttingBoard is a small unit ideal for beginners. The two version of the RainForest (RF² and RF72) are very powerful machines that give a high success rate.

Always use good quality cuttings. Do not use diseased or weak cuttings. Soft green stems work best. Woody stems grow more slowly. Don't forget to adjust your environment to suit the different plants you are growing as the needs of different species vary considerably.

If you start several cuttings in one pot, remember to repot them before the roots get entangled.

To start your cuttings:

1. Bevel each cutting +/- 2 cm just under a node and delicately scrape the base of the stem to facilitate root appearance. Remove all but 2 to 3 leaves.
2. Put the cuttings in pots and surround with Grorox. Place in the system.
3. Place your system in a warm place. Generally, the best temperature for most cuttings is 24 to 25°C and 80 to 95% humidity.
4. Keep the plants in bright, indirect sunlight, or using special sunlight-simulating lamps. Fluorescent lamps are best. If you are using metal halide or high pressure sodium bulbs, position them well above the cuttings to prevent burning the new plantlets. LED lamps are becoming increasingly effective and many people are now using them.
5. Once the roots have appeared – and before they become entangled – transfer them to another hydroponic system, or into any substrate you choose. Plants raised in our systems are extremely healthy and will thrive in their new environment.

Important:

1. In a CuttingBoard: as the roots grow, and until they are long enough to soak in the solution, keep the tank level very high.
2. The Vortex 220 V, the RainForest motor, is equipped with a thermocouple that will shut off if it gets too hot. It will start up again as soon as the temperature gets back to normal. If this keeps happening don't open the motor, but return it to us. We will either fix it or replace it.

HOW TO PLANT OUT YOUR SEEDLINGS

Plants must be sturdy before being transplanted, especially when transferring to a hydroponic system, where living conditions are drastically different.

Whenever possible, use young plants (minimum two sets of true leaves) as they will recover quickly, contrary to older plants will not appreciate the change.

1. Fill your tank with nutrient solution and plug in the pump to obtain an oxygen-rich nutrient solution when you plant your seedlings.
2. If your seedlings come from soil or other substrates, before transplanting them, gently clean the roots and carefully rinse them in clean water. You can avoid these operations by starting plants from cuttings in a RainForest or a CuttingBoard and simply transferring the pots. In all situations, when transplanting, take special care not to damage the root system, including the side rootlets.

3. Once your roots are clean:

- If working with an "Aero" type system - place the roots in the centre of the net-pots and fill with clay beads to support the stem.
- If working with a "Hydro" type system - make a hole in the centre of the substrate, plant and cover as you would do when planting in soil.

CLEANING THE SYSTEM

To avoid plant disease and clogging, and to get the best out of your system, keep your growing area and your hydroponic system clean at all times.

Between crops and before starting a new cycle, clean thoroughly. Use FloraKleen. See eurohydro.com or our online catalogue.

Stop the pump. Empty your system as explained in "How to empty and fill the systems", dismantle it and wash each component thoroughly. Collect the beads and place them in a bucket to wash them before reuse. Dismantle the pump, rinse it and clean the filter.

If your system is very dirty, fill it with a very acid solution (pH<4.0) and let it run for an hour. Then rinse all parts thoroughly.

If you have disease or pest infestation, use a household disinfectant (chlorine), to clean properly. Rinse thoroughly to remove all traces of bleach and let it rest 24 hours to allow the chlorine to evaporate completely.

IMPORTANT ADVICE

1. In summer, if you are using lamps in an enclosed space, and in order to avoid extreme temperatures, run the lamps at night to take advantage of the cooler air outside. Stop your operation when the season is at its hottest and clean your system while waiting for better conditions.
2. The growing area should be well ventilated. Continuous ventilation will eliminate excess humidity and bring in much needed CO² and Oxygen to your plants.
3. If plants are not growing well and you suspect low water quality:
 1. Get a water analysis from your water company.
 2. Enquire about our hard water formulas.
 3. Collect rainwater (from unpolluted areas). Try distilled or purified water.
 4. Use a reverse osmosis system, they are expensive but very effective! Always add 25% of tap water.
4. If the nutrient solution is not flowing correctly:
 1. Check to make sure that the pump is in working order and the tank has enough solution.
 2. Check your distribution circuit. Clean and rinse it correctly.
 3. Make sure the distribution tubing and injectors are not clogged. Too much clogging may indicate that you have "hard" water or too strong a nutrient solution.
5. Apply proper prevention. This is the best solution:
 1. Always start with healthy vigorous plants or good quality seeds.
 2. Periodically check the roots. Hydroponic gardening offers you the rare opportunity to access and observe the root system and take action long before any disease can take hold, especially when working with bare roots in "Aero" versions. Do not do this too often and take care not to damage the root system when handling the plants.
 3. Use BioProtect to protect your plants.

Plants, like all living organisms can be infected with a variety of diseases. The best way to avoid diseased plants is to feed them a complete and well-balanced diet, maintain clean conditions and correct environmental factors for each given crop. To get the best results:

- Use the fertiliser best adapted to your water (hard or soft). To do so, get a water analysis from your local water company.
- Always clean your system thoroughly between crops.
- Keep the water temperature under 24°C (ideally between 18 and 20°C) and keep humidity between 65 and 75%. For cuttings, keep it between 24 and 25°C, with a humidity level between 80 and 95%.
- On the hottest days the water temperature can rise as high as 35 or 40°C! Don't panic. Make sure your solution contains as much oxygen as possible (with the clean pump working continuously and the distribution system fully unclogged).
- Offer each plant the location and environment it needs: adequate space, light, temperature, ventilation and humidity, as different plants have different needs.

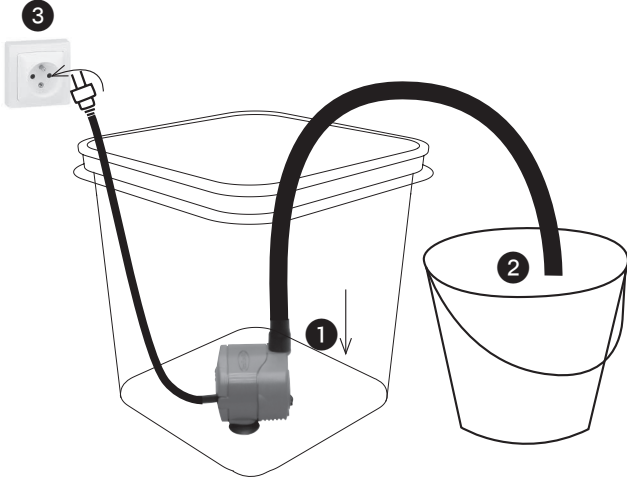
If you have any questions on your water quality or plant growth, please don't hesitate to contact us. We guarantee free technical support and advice to all our customers.

Important notice: The aspect of recycled plastic depends on the materials it is made with. There are regular modifications in the shades and colours of our systems because we do not completely control our supply chain. But we are getting ready to manufacture our own raw materials which will allow us to provide more constant results.

Ebb&Grows, AquaFarms, WaterFarms, AeroFarms, WaterPacks, Controllers, and all rotary-moulded parts in our systems are very strong and have a lifetime guarantee!

HAPPY GROWING!

Draining kit



1
PM11001



/M
RU01003

FloraKleen

SALT CLEARING SOLUTION



DATE of purchase

Dealer's stamp :

YOUR PUMP IS GUARANTEED ONE YEAR FROM DATE OF PURCHASE.

It must not be opened or modified.

KEEP YOUR INVOICE

AquaFarm Line



WaterFarm

30,5 cm x 30,5 cm x 37 cm
+/- 15 L



AquaFarm

46 cm x 46 cm x 43 cm
+/- 45 L



AeroFarm

46 cm x 46 cm x 38,5 cm
+/- 45 L



Controller ACS

46 cm x 46 cm x 80 cm
+/- 60 L



WaterPack ACS ①

Ebb&Grow



Ebb&Grow ⑤

88 cm x 88 cm x 38 cm
+/- 100 L

Panda Systems

AVAILABLE UNTIL END OF STOCKS
DISPONIBLE JUSQUE FIN DES STOCKS



Hydro ①

124 x 62 x 53 cm
+/- 150 L



Aero ①

HexPots

66 cm hexagonal x 43 cm
+/- 65 L



EcoGrower ④



RF 236
RF 236 : 2" x 36



RF 318
RF 318 : 3" x 18



RF 66
RF 66 : 6" x 6

RainForest² ④

Cutting Machines



CuttingBoard ③

66 x 30 x 14 cm
+/- 13 L



RainForest72 ①

67 x 67 x 31 cm
+/- 60 L

GRATIS

①



FLORA SERIES

②



FLORA SERIES

③



pH TEST KIT

④



FLORA SERIES
pH TEST KIT

pH DOWN DRY

⑤



FLORA SERIES



GENERAL HYDROPONICS®

AQUAFARM



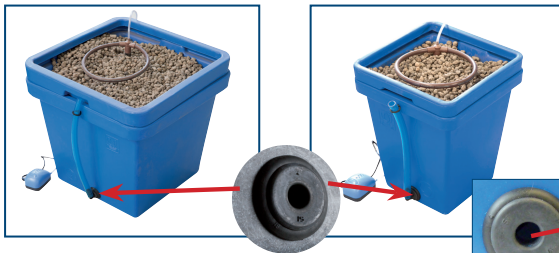
WATERFARM



NEW PUMPING COLUMN



WATERPACK ACS NEW PARTS



GHE EXCLUSIVE
DOUBLE GROMMET



GHE PATENTED
SPLIT TEE



GHE
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