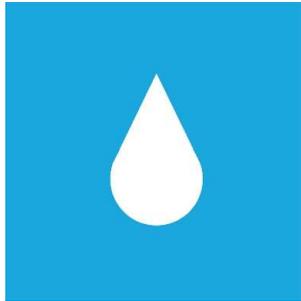


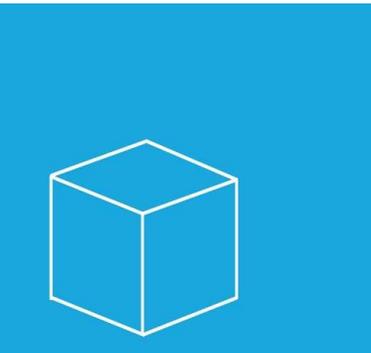


# Hydrogen-Rich Water Purifier EGT H2

PROJECT PLAN



GISE AQUA





# Contents



z

■ Why Choose EGT H<sub>2</sub>

■ Why H<sub>2</sub> is Important

■ The Structure of Hydrogen Water Create Module (HWCM)

■ FEATURES OF HWCM

■ SPECIFICATIONS OF Hydrogen Water Create Module (HWCM)

■ EGT H<sub>2</sub> Specifications & Certificates



01

## Why Choose EGT H2



# 01 Why Choose EGT H2

Deciding which water machine to buy has always been a confusing process.

The confusion is understandable, because all of the alkaline water ionizer companies offer slight variations of the same product that was created more than 30 years ago. Every alkaline water ionizer is based upon simple electrolysis.



## Now the choice is simple.

The EGT H2 is a new product designed for home use that is based upon leading-edge technology that has proven over 3 years in commercial applications to produce consistently high concentrations of molecular hydrogen across a wide spectrum of source water conditions. Alkaline water ionizers are unable to do this.

**The EGT H2 sells for 17% to 50% less than the leading alkaline water brands** despite being superior in all of the following metrics:



# 1) Hard water : No Problem

The EGT H2 has a Nano-filter 1st stage in its water cell which bypasses the calcium and magnesium found in source water past the electrolysis stage in its water cell. The calcium and magnesium are redirected back into the water supply before you drink the water. That means the EGT H2 will not form lime scale on the plates which renders alkaline water ionizers ineffective at producing dissolved H<sub>2</sub> unless they are cleaned once a week.

## 2) Soft water : No Problem

The Proton Exchange Membrane (PEM) incorporated into the second stage electrolysis chamber of the EGT H2 is made with a Solid Polymer Electrolyte (SPE) which is capable of conducting electricity. Don't worry about the fancy words. The bottom line is that the EGT H2 will operate efficiently at producing therapeutic concentrations of dissolved H<sub>2</sub> with or without the presence of alkaline elements in the source water. Alkaline water ionizers must rely upon the presence of alkaline elements (calcium, magnesium, sodium) in the water to produce H<sub>2</sub> which becomes a problem in many areas.

### 3) Neutral pH

The PEM in the electrolysis chamber found in the second stage of the EGT H2 water cell allows the water to remain at the same pH level as the source water. That means the calcium found in source water won't precipitate out of solution and form on downstream components (valves, connectors, tubing) or in your drinking glass or storage containers which is the case with alkaline water ionizers.

## 4) Better tasting water

The EGT H2 incorporates two filters inside the unit. The first filter is a carbon filter that removes chlorine, taste, and odor which is similar to many of the alkaline water ionizers. The real difference in taste comes from the ability of the EGT H2 to produce hydrogen without raising the pH of the source water. Alkaline water ionizers must create high levels of pH in order to produce therapeutic levels of H<sub>2</sub> which means they often begin to develop a metallic taste which is particularly noticeable if the water sits for awhile or is served at room temperatures.

## 5) Better filtration

The EGT H2 ultra filter is a true ultra filter which is vastly superior to the “ultra” filters offered as an upgraded filter by some of the alkaline water companies. Ultrafiltration is defined as the ability of a filter to remove particles greater than 0.2 microns absolute filtration. However, there is huge difference between **Absolute** filtration and **Nominal** filtration.

Absolute means that no particle larger than the stated level of filtration can get past the filter.

Nominal means that the filter is capable of filtering the stated size of particle under ideal conditions.

The EGT H2 ultra filter provides absolute filtration which means it will not allow any particle larger than 0.01 microns (bacteria, cysts etc) to pass through the filter into the drinking water.

The “ultra” filters offered by the alkaline water ionizer companies provide Nominal ultra filtration which means that they are potentially capable of providing 0.01 micron filtration, but they may be allowing much larger particles (as high as 5 microns) through the filter into the drinking water.

## 6) Easy to use

The EGT H2 can be hooked up to a water tap in a couple of minutes. Once you plug the EGT H2 in and turn the water on, you are ready to use your machine by pressing a glass or bottle against the handle.

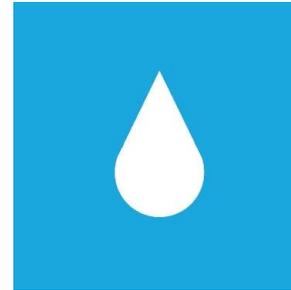
- No testing or adjusting levels.
- No weekly cleaning of the water cell required.
- No need to ship units back to distribution centers for an annual “deep cleaning”

## 7) Environmentally responsible

The EGT H2 is more efficient at producing dissolved H<sub>2</sub> which means it uses significantly less energy is required than for EWI's  
The EGT H2 use 30%~50% to less water than electric water ionizers.

02

Why H<sub>2</sub> is Important



## 02 Why H<sub>2</sub> is Important

Many supplements are only marginally supported or not supported at all by science. That is not the case for molecular hydrogen. With 1,600 scientists worldwide studying molecular hydrogen, the current number of 600 published studies and reviews is expected to grow exponentially in the coming years.

## 02 Why H<sub>2</sub> is Important

At this time, the scientific community has indicated that molecular hydrogen may be beneficial in more than 170 diseases and for every organ in the human body.

## Here is a list of some of the scientifically accepted benefits of including H<sub>2</sub> in your diet:

H<sub>2</sub> neutralizes/reduces the most harmful free radical (hydroxyl radical), converting it to water according to the reaction:



- The human body is unable to do this on its own.
- The byproduct formed when H<sub>2</sub> neutralizes a hydroxyl radical is water, while other antioxidants must either be neutralized as they become free radicals themselves after donating their electrons, or they must be removed entirely from the body
- H<sub>2</sub> does not neutralize other free radicals which are required by the body for normal function. This may not be the case for other antioxidants
- H<sub>2</sub> reduces oxidative stress by reducing the hydroxyl radical
- H<sub>2</sub> reduces inflammation which is associated with many diseases
- H<sub>2</sub> is the smallest molecule (1/88 the size of Vitamin C) allowing it to be effective in areas such as the mitochondria that other
- much larger antioxidants and supplements are incapable of reaching.

## Here is a list of some of the scientifically accepted benefits of including H<sub>2</sub> in your diet:

- H<sub>2</sub> helps your body naturally produce (upregulate) other antioxidants such as glutathione, catalase, and superoxide dismutase
- H<sub>2</sub> helps athletes in numerous ways including reducing lactate (lactic acid) production which can limit performance and training and published studies show.
- H<sub>2</sub> helps athletes recover faster from workouts
- Unlike other antioxidants, no evidence has been found that you can take too much H<sub>2</sub>.

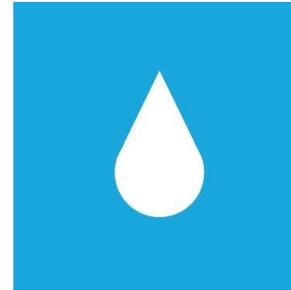
2016 Comprehensive Review Study on the Clinical Effects of Hydrogen Administration:

From Animal and Human Diseases to Exercise Medicine: [www.scirp.org/journal/PaperInformation.aspx?PaperID=62945](http://www.scirp.org/journal/PaperInformation.aspx?PaperID=62945)

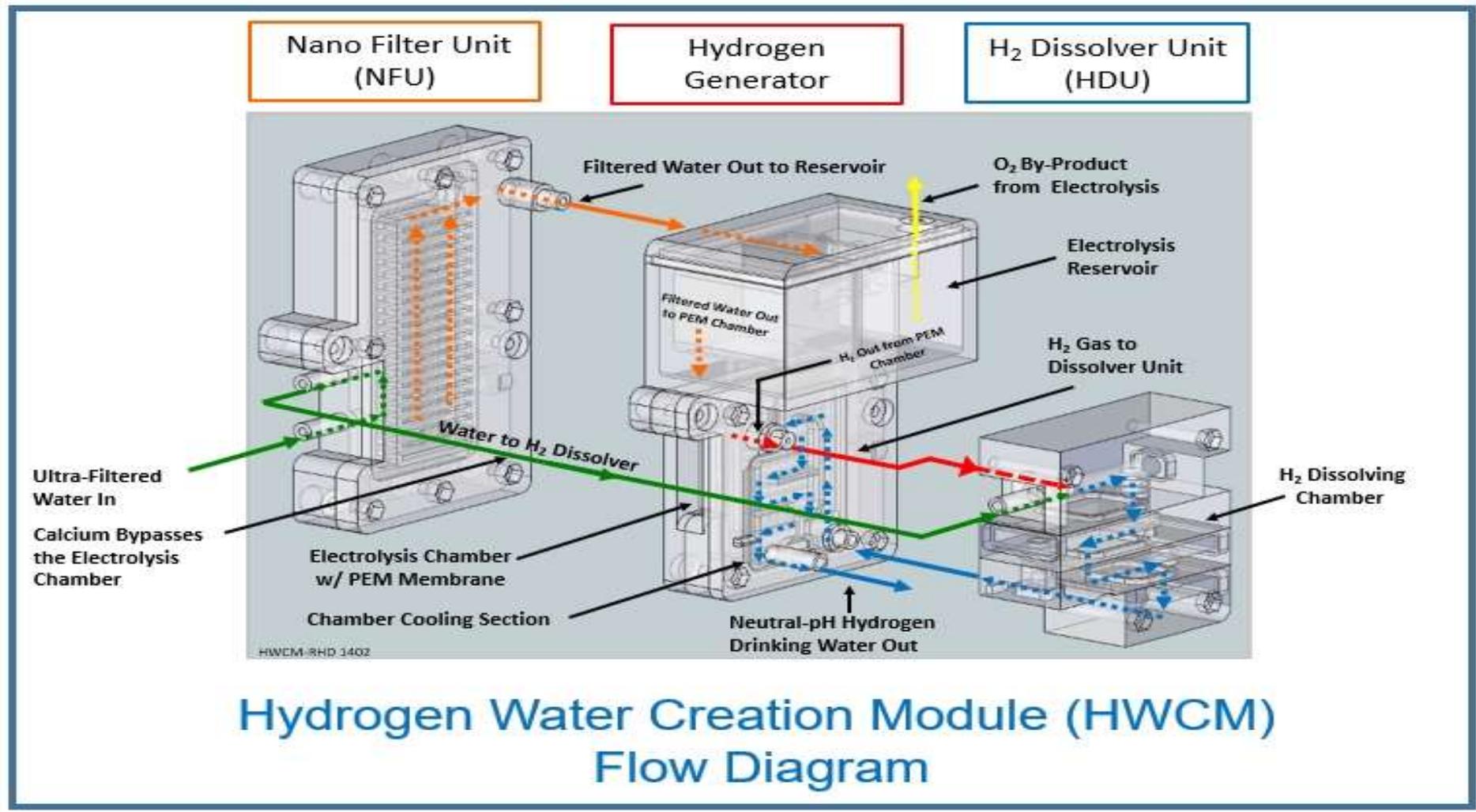
For more information on molecular hydrogen therapeutic benefits, please visit [www.molecularhydrogenfoundation.org](http://www.molecularhydrogenfoundation.org)

**03**

**The Structure of  
Hydrogen Water Create Module  
(HWCM)**



# 03 The Structure of Hydrogen Water Create Module (HWCM)



- **Generation of High-Concentrated Hydrogen-Rich Water**

With system control from automatic control program, hydrogen water with more than a certain concentration is always provided by controlling generation of hydrogen, dissolution timing, concentration control of hydrogen water etc. (At present, regular concentration of hydrogen (DH) based on sample device: DH 1,000~1,300 ppb) (Unit to product Hydrogen-reduced water with the function of controlling concentration of dissolved hydrogen: Invention patent).

- **Reduction potential of Hydrogen with strong Antioxidant.**

Antioxidant power of hydrogen is about 150 times of Vitamin C, and 800 times of Coenzyme Q10.

The reduction potential of hydrogen water provided in the module of this system is about

-450mv ~ -580mv with strong reducing power.

- **Provision of Neutral (pH) Hydrogen Water**

Provision of hydrogen water in neutral PH7.2~7.8 with the nature of original water which can wipe out the controversy on pros and cons with strong alkaline in alkaline water.

- **Adoption of Hydrogen Generator in PEM Type**

PEM type electrolysis cell adopted Proton Exchange Membrane between platinum electrodes generates and provides the hydrogen with 99.9% of purity in rapid response and high efficiency.

- **Installation of High-efficiency hydrogen dissolving unit.**

Hydrogen Dissolving Unit with patent technology is a unique structure applying with an algorithm of gaseous/liquid mixture, and ensures high-efficiency safe operation and long life.

# 04

## Features of HWCM



## 04 Features of HWCM

### ■ Installation of ultra-pure reverse osmosis filters for electrolytic

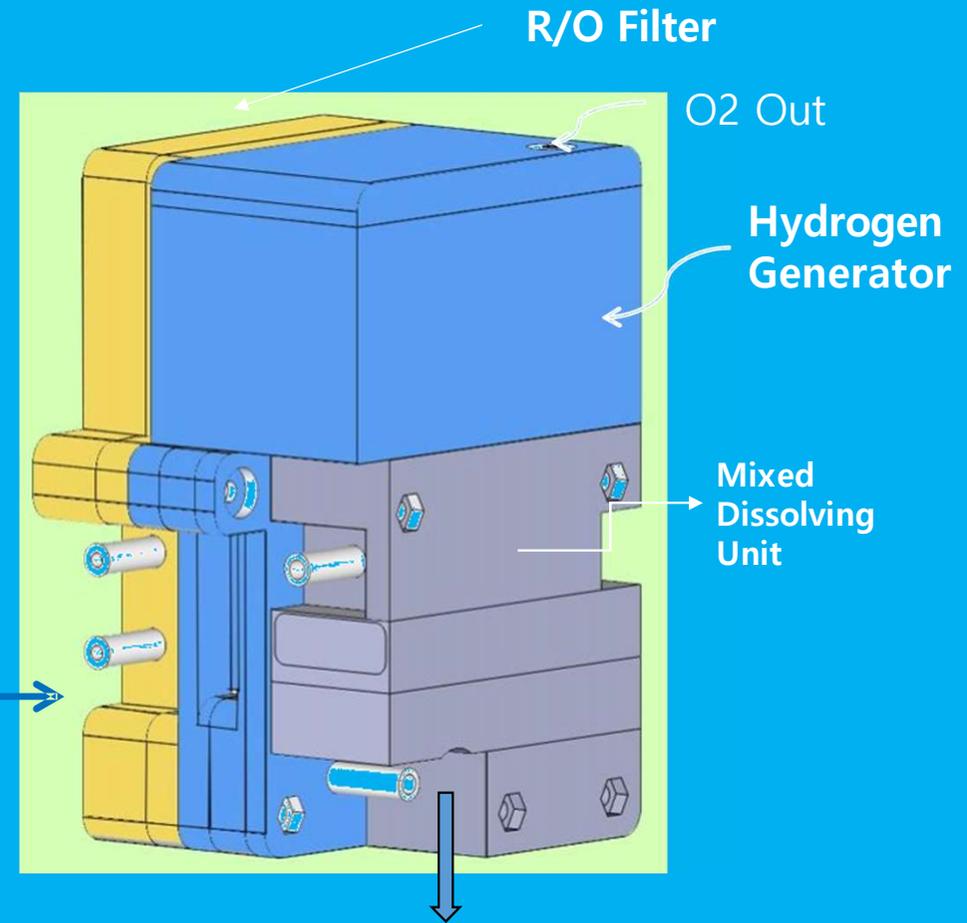
Ultra-mini reverse osmosis filter system is equipped for providing ultra-pure water to the hydrogen generating device. Minimum brain filter technology doubles the durability and efficiency of Platinum electrode and Proton exchange membrane

### ■ Compact Module and Removable Structure

Compact Module (Size:(W)93 \* (L)76 \* (H)134) designed in 3 Part Units can be installed in small products, and easily separated and fixed.

### ■ Minimization of Maintenance Cost

Hydrogen Water Creation Module has no additional cost for consumables through its optimizing design.



# 05 Specifications of HWCM

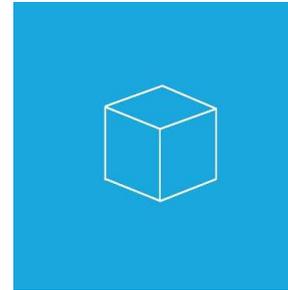


## 05 Specifications of HWCM

Division	Description
Manufacturing methods	PEM EC + R/O + HDU Combination
Power Supply	SMPS Only
Safety	Safety unit via the control circuit
Structural Features	Bulkhead separating structures
Maximum Water supply	More than 720 (Liter/day)
Hydrogen Concentration(DH)	1,000 ~ 1,300 ppb
Oxidation Reduction Potential(ORP)	-450 ~ -580 mv
Hydrogen Ion Concentration(pH)	7.2 ~ 7.8
Hydrogen Supply Pressure	2 ~ 4.2 kgf/cm <sup>2</sup>
Dissolved uptime	Immediate and continuous operation
Circulation feeding time (choice)	10 ~ 30 minutes period (User's control)
After installation, normal uptime	Available immediately

**06**

**EGT H2 Specifications  
& Certificates**



# 05 Specifications of HWCM

## PURIFIER for Home Use

Functions USE.	DRINKING WATER SUPPLY FOR HOME Water Purification, Hydrogen Rich Water
How it Works	Electronic control Create work immediately
Main Materials	Hydrogen Water Creation Module-Noryl. NSF Active Carbon & Membrane
Part Replacement	Use durable materials Water Filters Only
Power	DC 12V/ 5.6A (SMPS Power Supply)
Dimensions	(W)130 X (L)350 X (H)340 mm
Weight	4.5kg

## Features :

**Creation of high-concentrated Hydrogen Rich Water.**  
(DH) 1,000~1,300 ppb

**Reduction Potential of Hydrogen with strong antioxidant power.**  
ORP(mv): -450~580mv

**Provision of neutral(pH) Hydrogen Water.**  
pH 7.5~8.5 Neutral

**Performance:** Produces H<sub>2</sub> water with a typical concentration of 0.9ppm to 1.2 ppm or higher at the pre-set flow rate of 1.1 liters per minute

- Quality and Safety Proved
- Hydrogen-Rich Water Creation
- Hydrogen Dissolving to Water Line
- One Touch Easy Filter Holder
- Complete Purification System

