

**Model SN#CL-501-C1**

*This specification is the standard configuration in 2025*

Single-sided stand-alone Zebrafish Housing System (SS-ZHS)

	Description
Dimension	System with with controller box Length 179±5cm, Width 40±3cm, Height 210±15cm
Rack	304 Stainless rack (without controller box): Length 159±5cm, Width 40±3cm, Height 210±15cm
Sump	Sump with biological filtration: Length 126±10cm, Width 40±3cm, Height 350±5cm A. PP Material B. Pre-filter plate above the water C. Biofilter packs for easy changing . D. No hassle and operational pause.
Flow and pipe system	A. UPVC(PVC-U) pipe system, white color B. Independent water inlet valve for each layer and each tank. Each layer pipe is detachable. Each tank water inlet valve is removable. C. One tank has one flow control ball valve. D. Each side has five shelf of 12 ball valves for 1.5 liter,3 liter, 10 liter tank E. Each shelf has control valve can adjust water flow. F. Ball valves can easily clean, NPT fitting. G. Food grade blue color silicone inlet tube.
Recirculation collection pipe system	Removable transparent blue acrylics(PMMA) drain gutter to recirculation water filter sump.
Tanks	A. Transparent PC material tank B. PC fish tank set: 1 1.5L: 20 PCS 2 3 Liter: 36 PCS 3 10 Liter: 6 PCS C. Blue PC material: lids and baffle D. Food grade, transparent quality, one piece molded and auto-clavable.
UV sterilization set	A. Purpose : sterilize the water. B. 12Gpm/48 Lpm, 39W, C. Ballast: 120~270V/50~60Hz. D. Ballast has lamp failure audible alarm, and inherent thermal protection. E. Chamber/housing : 304 stainless steel F. Filters and UV lamp can be changed without turning off the water pump. G. CE certification
Flow Water pump	A. 110~240VAC aquarium pump: controllable flow rate, 29 watt~73 watt B. DC Max. capacity 150 liter/min C. Max. head 5 meter D. 220VAC/50Hz

Air pump	<ul style="list-style-type: none"> <li>A. Min 5 liter per minutes</li> <li>B. 220/50Hz</li> <li>C. Food grade transparent silicon tube.</li> <li>D. Silicone Membrane Diffuser Tube : 250mm*28mm</li> <li>E. Connection: 1/2" FPT</li> </ul>
Consumable package (one year)	<ul style="list-style-type: none"> <li>A. Bio-filter media (165 x 365mm) 48 PCS</li> <li>B. Bio-filter media (320 x 385mm) 12 PCS</li> <li>C. Ca/Mg ion active bio-filter media 3 liter package x 1 PCS</li> <li>D. Far infrared active bio-filter media 3 liter package x 1 PCS</li> <li>E. Anion active filter bio-3 liter media package x 1 PCS</li> <li>F. Glass ceramic ring bio-3 liter media package x 1 PCS</li> <li>G. UV lamp</li> </ul> <p>Note: Accessory package increased based on warranty conditions  For example: One set is provided for a one-year warranty, two sets for a two-year warranty, and three sets for a three-year warranty.</p>
System low water level protection	<p>When the sump tank's liquid level exceeds the high water level, the water pump, UV disinfectant, and heater can be turned on. When the water level drops to the low water level, all systems will be shut down for safety reasons.</p>
Switch box control and display	<p>Mechanical switch: Turn ON/OFF directly</p> <ul style="list-style-type: none"> <li>A. Main flow pump control switch: FEED/STOP/RUN  Feed mode: Adjustable to turn off the water pump for a while, and then turn it on automatically.</li> <li>B. UV control switch: ON/OFF with 40watt UV sterilizer and usage time display(hours)</li> <li>C. Heater switch: ON/OFF, Max 500 watt</li> <li>D. Air pump control switch: MANU/STOP/AUTO</li> </ul> <p>Digital panel switch:</p> <ul style="list-style-type: none"> <li>A. Master alarm control: ON/OFF</li> <li>B. Air pump control OFF/AUTO/ON with air pump</li> <li>C. Intelligent read sensor function:OFF/ON  In order to extend the sensor use life, the reading time of the sensor during non-peak periods can be set to 1min/5min/10min/30min</li> </ul> <p>HMI-PLC function:</p> <ul style="list-style-type: none"> <li>A. Multi-function integrated touch screen controller system (HMI-PLC) is integrated, all-in one display and control.</li> <li>B. Integrated sensor: pH, conductivity, dissolved oxygen with temperature.</li> <li>C. Intelligent sensor detection: If the HMI-PLC panel detects that the sensor has been installed with pH, conductivity, temperature and dissolved oxygen sensors, it can control each sensor parameters.</li> <li>D. Maintenance date records.</li> <li>E. System date and intelligent sensor reading time setting</li> <li>F. Dealer and distributor contacts information.</li> <li>G. All data sensor readings within 24 hours can be manually exported to USB</li> </ul>

<p>Water Quality Control</p>	<ul style="list-style-type: none"> <li>A. pH monitor and alarm, settings are integrated in HMI-PLC</li> <li>B. Conductivity and alarm, settings are integrated in HMI-PLC</li> <li>C. pH sensor:               <ul style="list-style-type: none"> <li>1. 0~14 pH <math>\pm</math> 0.01 pH</li> <li>2. 0-60°C <math>\pm</math> 0.1 °C</li> <li>3. IP68 waterproof</li> </ul> </li> <li>D. Conductivity sensor:               <ul style="list-style-type: none"> <li>1. 0~2000 <math>\pm</math> 1 uS/cm</li> <li>2. 0-60°C <math>\pm</math> 0.1 °C</li> <li>3. IP68 waterproof</li> </ul> </li> </ul>
<p>Accessories</p>	<ul style="list-style-type: none"> <li>A. One liter spawning feeding box: x 5 PCS</li> <li>B. Two liter artemia hatchery: x 2 PCS</li> <li>C. Fish Net 4 inch 4 PCS</li> <li>D. Fish Net 8 inch 2 PCS</li> </ul>
<p>Warranty</p>	<p>One year</p> <p>Note: Each completed system comes with a standard one-year warranty. If you would like to extend the warranty, an additional charge of 12% of the item's total price will apply for each additional year.</p>

*The above specifications are for reference only.*

## UPGRADE OPTIONS

Below is a list of parts that can be upgraded for GENDANIO system

No.	SN	Description
1	AQ-6710U	Waterproof LED light with timer control
2	AQ-6720U	HMI-PLC temperature control
3	AQ-6810U	Data logger and automatic export to USB disk function
4	AQ-6820U	Remote data monitoring function via WiFi
5	AQ-6921U	Upgrade to pH sensor controller
6	AQ-6922U	Upgrade to conductivity sensor controller
7	AQ-6924U	Upgrade to dissolved oxygen sensor controller

## SPARE

### Spare Parts List

No.	SN	Description
1	T-CLPC-015	1.5 Liter Classic PC Tank Set
2	T-AZPC-015	1.5 Liter Classic PC Tank Set, baffle Improved
3	T-CLPC-030	3.0 Liter Classic PC Tank Set
4	T-CLPC-032	3.0 Liter Classic PC Tank Set, Lid improved
5	T-CLPC-100	10.0 Liter Classic Tank Set
6	T-CLPC-102	10.0 Liter Classic Tank Set, Lid improved
7	T-AZPC-040	4.0 Liter AQUAZOO Tank Set
8	T-AZPC-080	8.0 Liter AQUAZOO Tank Set
9	T-030-500	3L Baffle 500um netting for larvae fish (1 month~)
10	T-030-500	3L Baffle 750um netting for larvae fish (2 months~)
11	T-030-240	3L Baffle SS304 netting 240um for larvae fish (4 dpf to 5 weeks)
12	T-030-450	3L Baffle SS304 netting 450um for larvae fish (5 weeks to 2 months)
13	T-030-600	3L Baffle SS304 netting 600um for larvae fish (2 months~)
14	T-030-800	3L Baffle SS304 netting 450um for larvae fish (3 months~)
15	T-040-500	4L Baffle 500um netting for larvae fish (1 month~)

*To ensure the integrity of the equipment and consistency in after-sales service, some additional accessories or spare parts must be ordered together with the main equipment.*

# Components

Certain components in the equipment, such as the pump motor, heating element and sensors, are consumables with an unpredictable lifespan. They may wear out or fail due to various factors during use. We recommend regularly checking these parts, and if any malfunction or failure is detected, they should be replaced immediately to ensure the proper functioning of the equipment.

If the original parts are no longer in production, the replacement will be made with a tested, equivalent part that meets the same specifications.

## Components List:

No.	SN	Description
1	Heater-300	Heater-300 watt with temperature control
2	Heater-350	Heater-350 watt with temperature control
3	Heater-450	Heater-450 watt with temperature control
4	Heater-500	Heater-500 watt with temperature control
5	MD-18	Main water pump 72~95/min, 180Watt
6	MD-25	Main water pump 118~120L/min, 250Watt
7	DS-4000	Main water pump 50~65L/min, 30Watt
8	DS-6000	Main water pump 80~100L/min, 50Watt
9	DS-9000	Main water pump 130~150L/min, 73Watt
10	DS-12000	Main water pump 180~200L/min, 88Watt
11	UVC-842T5	UVC 39 watt lamp
12	UVC-645T5	UVC 32 watt lamp
13	UVC-450T5	UVC 24 watt lamp
14	AQ-6920	Industrial pH Sensor with IP65 Waterproof Protection (BNC)
15	AQ-6921	Industrial pH Sensor with IP65 Waterproof Protection
16	AQ-6922	Industrial Conductivity Sensor with IP65 Waterproof Protection
17	AQ-6924	Industrial Dissolved Oxygen Sensor with IP65 Waterproof Protection

# BIOFILTER & CONSUMABLES

## Biofilter media and consumables list

No.	SN	Description
1	FM-1010	Magnesium Ion Active Biofilter, 3 Liter Pack
2	FM-1020	Far Infrared Rays Active Biofilter, Mesh 3 Liter Pack
3	FM-1030	Anion Filter, Active Biofilter 3L Liter Pack
4	FM-1040	Ceramics Bio-media, Mesh 3 Liter Pack
5	FM-SA355165	Sponge/filter media, length355mm, width165mm 48 PCS
6	FM-SA385320	Sponge/filter media, length385mm, width320mm 12 PCS
7	FM-SA385270	Sponge/filter media, length385mm, width270mm 24 PCS

*All specifications reserve the right to revise errors  
Contents must be confirmed before shipment*