

## AQPET Osmosy 3

# AQPET Osmosy 3 Reverse Osmosis System 50 GPD Instruction Manual

Model: Osmosy 3 | Brand: AQPET

## 1. INTRODUCTION

The AQPET Osmosy 3 is a practical and compact 50 Gallons Per Day (GPD) reverse osmosis system designed for producing purified water for aquariums. This system features quick connections for easy cartridge replacement, ensuring efficient and reliable water treatment.

Reverse osmosis technology effectively removes dissolved inorganic salts, heavy metals, organic matter, bacteria, viruses, and other harmful substances, providing clean and safe water essential for aquatic environments.

## 2. SAFETY INFORMATION

- Always read these instructions thoroughly before operating the system.
- Keep the system and its components out of reach of children.
- Ensure all connections are secure to prevent leaks.
- Do not use the system with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

## 3. PRODUCT OVERVIEW

The AQPET Osmosy 3 system includes three distinct cartridges and a reverse osmosis membrane, each serving a specific purification stage:

- **Green Cartridge (Sediment Filter):** This cartridge retains larger particles such as sand, silt, and fine suspended solids, ensuring the water is visibly clean and protecting subsequent filters.
- **Blue Cartridge (Activated Carbon Filter):** Contains activated carbon to remove chlorine, chloramines, organic chemicals, and other contaminants that affect water taste and odor, and can damage the RO

membrane.

- **Red Cartridge (Empty Housing for RO Membrane):** This housing is designed to contain the Vontron Reverse Osmosis membrane, which is the core of the purification process.
- **Vontron RO Membrane:** The high-performance Vontron membrane is responsible for removing dissolved inorganic salts, heavy metals, organic matter, bacteria, and viruses from the water.



Figure 1: Complete AQPET Osmosy 3 Reverse Osmosis System.

The system is designed for easy integration into your existing water supply, providing a continuous flow of purified water.

## 4. SETUP

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1. **Unpack Components:** Carefully remove all components from the packaging and inspect for any damage. Ensure all parts listed in the product manual are present.
2. **Mount the System:** Choose a suitable location near a cold water supply and a drain. Securely mount the system using the provided brackets and screws.
3. **Connect Water Inlet:** Connect the system's inlet hose to your cold water supply. Use the quick connections by pushing the hose firmly into the fitting until it locks.
4. **Connect Purified Water Outlet:** Connect the purified water outlet hose to your collection container or aquarium top-off system.
5. **Connect Waste Water Outlet:** Connect the waste water outlet hose to a suitable drain.
6. **Insert RO Membrane:** Open the red cartridge housing. Carefully insert the Vontron RO membrane into the housing, ensuring it is seated correctly. Close the housing securely.
7. **Check Connections:** Double-check all hose connections to ensure they are tight and properly seated to prevent leaks.



Figure 2: Detail of quick-connect fittings for easy installation.



Figure 3: Connections and caps on the AQPET Osmosy 3 system.

## 5. OPERATING INSTRUCTIONS

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1. **Initial Flush:** After installation, slowly turn on the cold water supply to the system. Allow the system to run for approximately 30-60 minutes to flush out any manufacturing residues and air.
2. **Discard Initial Water: Important:** The first 30-40 liters of purified water produced with a new membrane should be discarded and not used for your aquarium. This ensures optimal performance and purity.

3. **Regular Operation:** Once the initial flush is complete, the system is ready for regular use. Monitor the water production and waste water flow.
4. **Monitor Water Quality:** Periodically test the Total Dissolved Solids (TDS) of the purified water to ensure the system is functioning effectively. A significant increase in TDS indicates that the membrane or pre-filters may need replacement.

## 6. MAINTENANCE

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Regular maintenance is crucial for the longevity and efficiency of your AQPET Osmosy 3 system.

### Cartridge Replacement

- The sediment (green) and activated carbon (blue) cartridges should be replaced every 6 months, or after processing approximately 7,000 liters of water, whichever comes first.
- To replace cartridges, turn off the water supply to the system. Relieve pressure by opening a faucet connected to the purified water line. Unscrew the cartridge housings, remove the old cartridges, insert new ones, and screw the housings back on securely.



Figure 4: Filter cap for accessing cartridges.

### **RO Membrane Replacement**

- The Vontron RO membrane typically has a service life of 2 to 6 years, depending on the quality of the incoming water and pre-filter maintenance.
- Replace the membrane when the TDS rejection rate drops significantly, or if water production decreases considerably.
- To replace the membrane, turn off the water supply. Unscrew the red membrane housing. Carefully remove the old membrane and insert the new one. Securely reattach the housing. Remember to perform an initial flush and discard the first 30-40 liters of water after membrane replacement.



Figure 5: Open filter housing for membrane access.

## 7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Low purified water production	Clogged pre-filters or RO membrane; low water pressure.	Replace pre-filters/membrane; check incoming water pressure.
High TDS in purified water	Worn out RO membrane; damaged pre-filters.	Replace RO membrane; replace pre-filters.
Water leaks	Loose connections; damaged O-rings or fittings.	Tighten all connections; inspect and replace O-rings or fittings as needed.
Excessive waste water	Flow restrictor issue; low water temperature.	Check flow restrictor; ensure adequate water temperature (optimal 25°C).

## 8. SPECIFICATIONS

Feature	Detail
Product Model Number	8050327301962
Production Capacity	50 Gallons Per Day (GPD) / 190 Liters Per Day
Filter Stages	3-stage filtration (Sediment, Activated Carbon, RO Membrane)
Dimensions (Shipping)	37.5 x 20.1 x 11.7 cm
Item Weight	1.56 Kilograms
Color	White
Recommended Cartridge Change	Every 6 months or 7,000 liters
RO Membrane Service Life	2-6 years (depending on water quality)

Feature	Detail
ASIN	B0B5GSB514

## 9. WARRANTY AND SUPPORT

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For warranty information, technical support, or replacement parts, please contact your retailer or the manufacturer directly. Keep your purchase receipt as proof of purchase.

For further assistance, please refer to the contact information provided with your purchase or visit the AQPET official website.