SALES PROPOSAL

# PSA Oxygen Generator Solutions for Live Fish Holding Tanks

A dependable, on-site oxygen supply system built for fish markets, holding tanks, and live seafood transport — engineered by O2MOS / DK Solutions.

Prepared for: Live Fish Holding Tank Operators
Prepared by: DK Solutions






THE CHALLENGE

# Keeping Fish Alive Costs More Than It Should

Holding tanks and live seafood displays depend on a constant oxygen supply. Today, most operators still rely on high-pressure cylinders or liquid oxygen — a setup with real, ongoing risk.



### Sudden Oxygen Shortages

Cylinders run out without warning, causing sudden shortages and mass mortality events.



### Heavy & Hazardous Logistics

Refilling and transporting pressurized cylinders is costly, labor-intensive, and carries explosion risk.



### Rising, Unpredictable Costs

Ongoing purchase costs climb further in island and remote locations far from suppliers.



### No Backup When Power Fails

A blackout can stop aeration entirely — with no cylinder reserve, losses can happen within hours.

THE SOLUTION

# O2MOS Smart PSA Oxygen Generator

*Smart high-purity oxygen concentrator for live fish holding tanks — remote management compatible.*

Using only electricity, the unit separates 90%+ oxygen from ambient air (21% O2) with PSA technology. Performance and status are monitored digitally in real time, with remote control via the internet and predictive maintenance.

- **PSA Technology**
- **Remote Monitoring**
- **≥ 90% Purity**
- **Predictive Maintenance**

**90%+**
Oxygen Purity

**7 LPM**
Oxygen Flow

**27 kg**
Unit Weight




**O2MOS-7LC-K**
*Smart model · Remote management*

## Key Specifications

| | |
|---|---|
| **Model** | O2MOS-7LC-K |
| **O2 Flow / Purity** | 7 LPM / ≥ 90% (no-load: 9 LPM) |
| **Supply Pressure** | Max. 1.3 bar |
| **Outlet** | 6 mm one-touch fitting |
| **Power** | Avg. ≤ 480 W (220 VAC / 60 Hz) |
| **Size / Weight** | 355 × 375 × 578 mm / 27 kg |
| **Enclosure** | Steel frame, aluminum case, beige powder coating |
| **Monitoring** | Process/supply pressure, temp., voltage, O2 flow & concentration |
| **Network** | Wifi 2.4G |

*Source: Product Specification Sheet, Nov. 2025 · O2MOS-7LC-K, Remote Management System compatible*

HOW IT WORKS

# Core Technology — PSA System



Atmospheric Air Intake

Zeolite Adsorption Beds

High-Purity $O_2$ Output

Pressure Swing Adsorption (PSA) separates oxygen from ambient air. Zeolite beds selectively adsorb nitrogen while releasing concentrated, high-purity $O_2$ for immediate use.

## Key Advantages

### High Purity (90%+)

Consistent, medical-grade-comparable oxygen concentration.

### Stable Continuous Output

Reliable pressure and flow for uninterrupted aeration.

### Long Service Life

Durable components proven across years of field use.

### Compact & Lightweight

Only 27kg — easy to install in tight tank-side spaces.

PRODUCT OVERVIEW

# Key Features of the O2MOS Oxygen Generator

### Electricity-Only Operation

Delivers 90%+ high-purity oxygen 24/7, 365 days a year — no refills required.

### Advanced PSA Technology

Consistent oxygen production at a stable, controlled pressure.

### High-Quality Zeolite

Enhanced adsorption efficiency for reliable, high-purity output.

### Compact & Lightweight

Only 27kg — easy to transport, install, and relocate.

### Simple, Low-Maintenance Operation

Minimal upkeep required for day-to-day running.

### AC and DC Power Support

Flexible power options for fixed sites, vehicles, and vessels.

### Low Power Consumption

Only 480W draw — cost-effective, continuous operation.

### Proven Field Reliability

High durability based on real-world aquaculture deployments.

WHY SWITCH

# Say Goodbye to Dangerous High-Pressure Cylinders

*Choose a safer, more convenient way to generate oxygen on site.*

| | Oxygen Cylinders / LOX Tanks | O2MOS PSA Generator |
|---|---|---|
| **Oxygen Source** | Liquid oxygen refill, delivered | On-site electrical generation |
| **Convenience** | Heavy, hazardous; sudden leaks can cause shortages | Simple operation; safe, worry-free use |
| **Safety** | Risk of explosion under pressure | Electrical safety control, no pressurized gas storage |
| **Cost Burden** | Ongoing purchase cost; higher in island / remote areas | One-time investment; low running & maintenance cost |
| **Monitoring** | Manual checks of remaining supply | Real-time remote monitoring via Wi-Fi; predictive maintenance |

SYSTEM DESIGN

# Capacity & Tank Configuration

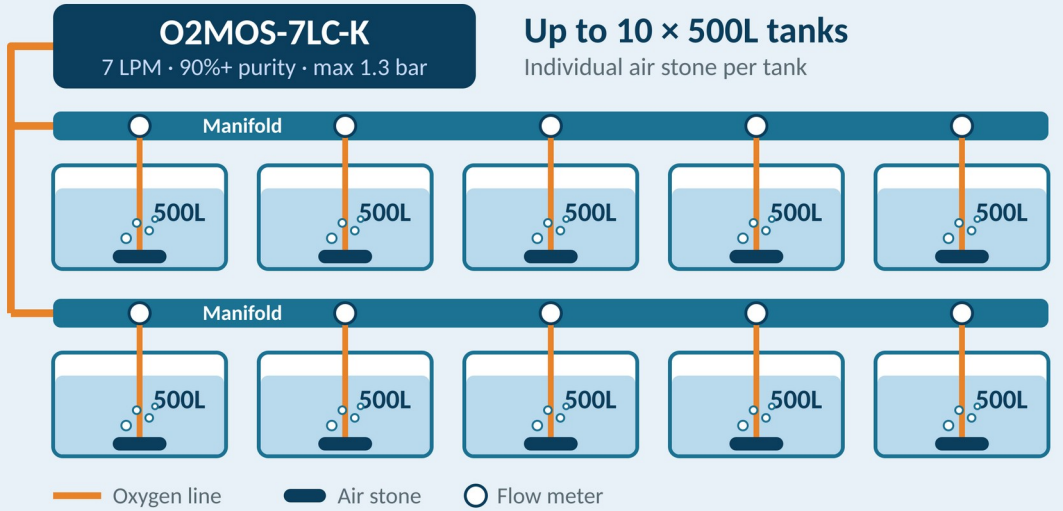
## Daily Oxygen Production Capacity

7 LPM Model, 90% Purity = **2 Standard Oxygen Cylinders(40L) / Day**

## Basic Configuration — Holding Tank Line

| | |
|---|---|
| Pressure | **Max 1.3 bar** |
| Flow Rate | **7 LPM** |
| Distribution | **Flow meter manifold → up to 10 x 500L tanks** |
| Diffusion | **Individual air stone per tank** |

## System Layout — O2MOS to Holding Tanks




## Remote Monitoring over Wi-Fi

Connect the unit to your network via Wi-Fi (2.4G) and check oxygen-generation parameters remotely in real time. Predictive maintenance supported.

- Process pressure
- Supply pressure
- Operating temperature
- Voltage status
- O2 flow rate
- O2 concentration

THE PAYOFF

# What This Means for Your Operation

*Increasing dissolved oxygen significantly improves the living environment for fish — contributing directly to better overall fish quality and lower losses.*



### Lower Live Fish Mortality

Stable dissolved oxygen reduces stress-related die-off during holding and display.



### Improved Live Fish Quality

Fresher appearance and condition for longer periods, supporting premium pricing.



### No Stress at High Density or Heat

Maintains healthy DO levels even in crowded tanks or hot summer conditions.



### Lower Long-Term Cost

Eliminates ongoing cylinder purchases — pays for itself over continued use.

*"Blowers and pumps alone are often not enough — O2MOS is especially effective in remote and hard-to-access regions."*

SCALABILITY

# Built to Scale — From a Single Tank to a Full Facility




*Multi-unit rack with integrated alarm & emergency $O_2$ controller*

Multiple O2MOS units can be racked together with a booster and manifold to serve large-scale holding facilities, wholesale markets, and export operations.

### Alarm & Emergency O2 Provide System

Continuously monitors output and alerts staff before oxygen levels become critical.

### Booster + Manifold Distribution

Regulates pressure and flow across multiple tank zones simultaneously.

### Field-Proven at Scale

Deployed in wholesale markets, processing lines, and mobile live-transport fleets.

### Wi-Fi Remote Monitoring

Monitor oxygen-generation parameters remotely in real time over Wi-Fi (2.4G).

SPECIFICATIONS

# O2MOS-7LC-K — Technical Specifications

| | | | |
|---|---|---|---|
| **Model No.** | O2MOS-7LC-K | **Power Supply** | AC 220V / 60Hz (DC options available) |
| **Oxygen Purity** | 90%+ (20℃, standard air condition criteria) | **Power Consumption** | Avg. ≤ 480 W |
| **Oxygen Supply** | 7 L/min | **Weight** | 27 kg |
| **Max. Oxygen Supply Pressure** | Max 1.3 bar | **Material** | Steel frame / Aluminum case, beige powder coating |
| **Operation Noise** | Less than 55 dB | **Dimensions** | 355 × 375 × 578 mm |
| **Oxygen Outlet Port** | 6 mm one-touch fitting | **Operating Temperature** | 0℃ ~ 40℃ (auto cool-down above 70℃ control unit temp) |

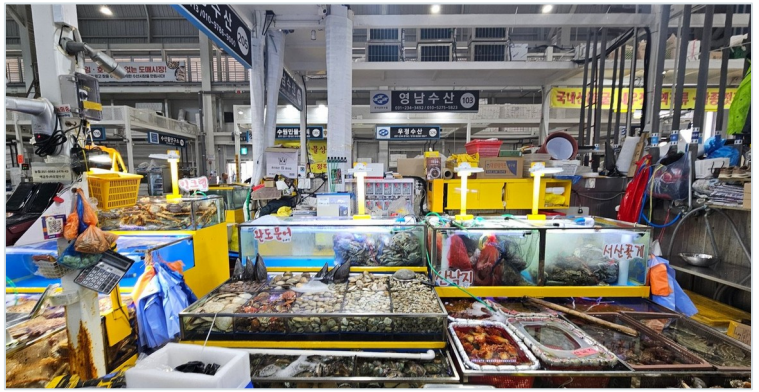
*Also available in 2 LPM and 3 LPM models, and vehicle-mounted DC variants for live transport applications.*

PROVEN IN THE FIELD

# Already at Work in Live Fish Holding Tanks & Fish Markets




**Wholesale fish market**
Individual tank-and-control units along the stall rows




**Modular tank line**
Multi-species holding tanks, after installation



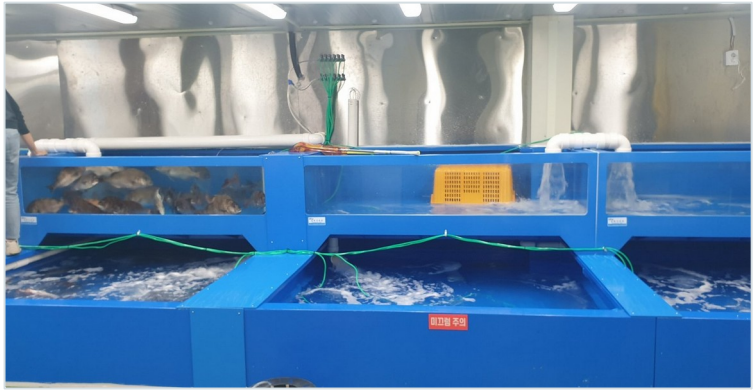
**Retail market stall**
Compact tanks with dedicated aeration lines




**Rooftop-mounted units**
Multi-tank setup with round and rectangular tanks



**Compact trough-side aeration**
Space-saving setup for narrow market stalls



**Full-scale indoor facility**
Multi-tier acrylic tanks with continuous water flow

# Let's Keep Your Fish Healthier, Longer.

We'd welcome the opportunity to assess your holding tank setup and recommend the right O2MOS configuration — including emergency backup — for your site.

## 01

**Site & Tank Assessment**

We review your tank volume, count, and current oxygen setup.

## 02

**Custom System Proposal**

Sizing, layout, and emergency backup (alarm + emergency O2 supply) for your site.

## 03

**Installation & Support**

Delivery, setup, and ongoing technical support.

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