

OSI 125/250/500/1000 Oxygen Concentrator

OSI oxygen concentrators offer the lowest power consumption possible for a vacuum swing adsorption system (VSA). Their compact design allows them to be moved and installed with minimal handling. Totally self-contained, OSI oxygen concentrators can be online in a minimal amount of time. OSI oxygen concentrators require very little maintenance. They feature remote diagnostics and communications and automatic turn-down to suit demand and save energy.



All units are fitted with a programmable logic controller (PLC) and a variable frequency drive (VFD) for the main blower motor. This feature gives the highest possible efficiency and also gives a linear power demand on *turn down*. When using 50% of the capacity of the machine, only 50% of the energy is required.

All required maintenance information—oil changes and filter and seal replacements—is displayed on the HMI touch screen. Alarms and faults also appear on the touch screen and can be monitored remotely if an internet or cell connection is available. Alarms are sent by e-mail and/or cell text message to designated recipients. The touch screen displays all operating conditions, such as pressures and amperage draw, for easy monitoring of the VSA.

Applications

- Oxygen injection can improve the health of the aquaculture livestock and increase profitability for the aquaculture farmer
- Ozone generation for water treatment plants provides effective water purification
- Oxygen management on wastewater treatment speeds up biological breakdown and odour control

Features

- 75% turn down ratio modulation automatically reduces production as the load decreases
- Load control on multiple units takes units off-line for best efficiency
- Scalable configurations—113, 227, 454 or 908 kg/day oxygen production

Specifications

	OSI 125	OSI 250	OSI 500	OSI 1000
Discharge flow rate	60 Lpm 113 kg/day	120 Lpm 227 kg/day	240 Lpm 454 kg/day	475 Lpm 908 kg/day
Oxygen purity	92% ± 2%	92% ± 2%	92% ± 2%	92% ± 2%
Discharge pressure (w/ booster compressors)	0.30–0.45 bar 1.4–5.0 bar	0.30–0.45 bar 1.4–5.0 bar	0.30–0.45 bar 1.4–5.0 bar	0.30–0.45 bar 1.4–5.0 bar
Temperature range	4–32 °C	4–32 °C	4–32 °C	4–32 °C
Power options	460 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph 200 VAC/50 Hz 3Ph	460 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph 200 VAC/50 Hz 3Ph	460 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph	460 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph
Average current draw	6 A/460 VAC/60 Hz @ 5 bar 4 A/460 VAC/60 Hz @ 0.35 bar 8 A/380 VAC/50 Hz @ 5.0 bar 5 A/380 VAC/50 Hz @ 0.35 bar	11 A/460 VAC/60 Hz @ 5 bar 7 A/460 VAC/60 Hz @ 0.35 bar 14 A/380 VAC/50 Hz @ 5.0 bar 9 A/380 VAC/50 Hz @ 0.35 bar	17 A/460 VAC/60 Hz @ 5 bar 11 A/460 VAC/60 Hz @ 0.35 bar 21 A/380 VAC/50 Hz @ 5.0 bar 13 A/380 VAC/50 Hz @ 0.35 bar	29 A/460 VAC/60 Hz @ 5.0 bar 19 A/460 VAC/60 Hz @ 0.35 bar 35 A/380 VAC/50 Hz @ 5.0 bar 22 A/380 VAC/50 Hz @ 0.35 bar
Maximum current draw	9 A/460 VAC/60 Hz @ 5.0 bar 11 A/380 VAC/50 Hz @ 5.0 bar	14 A/460 VAC/60 Hz @ 5.0 bar 17 A/380 VAC/50 Hz @ 5.0 bar	22 A/460 VAC/60 Hz @ 5.0 bar 17 A/380 VAC/50 Hz @ 5.0 bar	44 A/460 VAC/60 Hz @ 5.0 bar 53 A/380 VAC/50 Hz @ 5.0 bar
Recommended electrical service	20 A/460 VAC/60 Hz 20 A/380 VAC/50 Hz	20 A/460 VAC/60 Hz 20 A/380 VAC/50 Hz	30 A/460 VAC/60 Hz 30 A/380 VAC/50 Hz	60 A/460 VAC/60 Hz 60 A/380 VAC/50 Hz
Average power consumption	5.5 kW @ 5.0 bar 3.5 kW @ 0.35 bar	8 kW @ 5.0 bar 5 kW @ 0.35 bar	12 kW @ 5.0 bar 7.5 kW @ 0.35 bar	22 kW @ 5.0 bar 14 kW @ 0.35 bar
Cost of oxygen generation	.69 kWh/kg	.66 kWh/kg	.60 kWh/kg	.50 kWh/kg
Oxygen outlet	3/8" NPT	1/2" NPT	1/2" NPT	3/4" NPT
Concentrator dry weight	~1,000 kg	~1,200 kg	~1,550 kg	~2,050 kg
HMI touch screen PLC	7" touch screen	7" touch screen	7" touch screen	7" touch screen

Contact

OSI Oxygen Solutions Inc.
 1243 70th Ave NW, Edmonton, Alberta, Canada T6P 1N5
 Phone: 1.866.416.0516 (toll free) or 1.780.669.1300
sales@osioxygen.com
www.osioxygen.com

OSI 2000/3000/5000/7000 Dual Bed Oxygen Concentrator

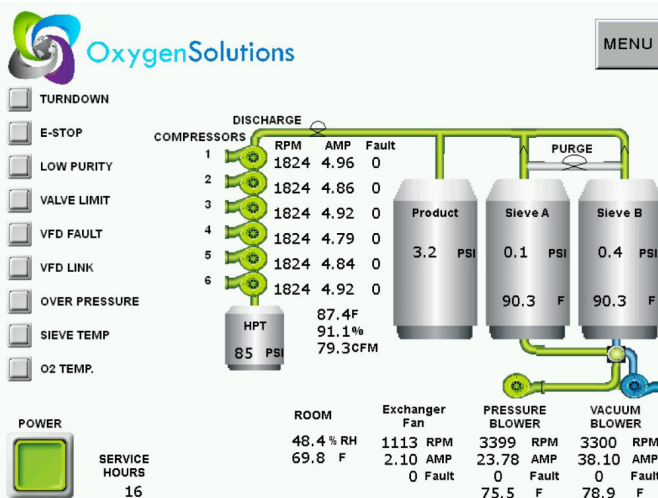
OSI's dual bed, stand-alone, plug-and-play oxygen concentrators are designed to make installation easy and fast. The only machine connections required are power, oxygen and a data/Internet line to the connections on the skid. The oxygen concentrator is housed in a 40' ISO ocean container and is easy to transport from site to site if needed.

Applications

- Supplementing oxygen at net pen sites
- Oxygen supply in remote locations
- Oxygen supply for large hatcheries
- Oxygen supply for RAS systems
- Onsite generation of ozone



OSI 5000



HMI touch screen PLC

All units are fitted with a programmable logic controller (PLC) and a variable frequency drive (VFD) for the main blower motor. This feature gives the highest possible efficiency and also gives a linear power demand on *turn down*. When using 50% of the capacity of the machine, only 50% of the energy is required.

All required maintenance information—oil changes and filter and seal replacements—is displayed on the HMI touch screen. Alarms and faults also appear on the touch screen and can be monitored remotely if an Internet or cell connection is available. Alarms are sent by e-mail and/or cell text message to designated recipients. The touch screen displays all operating conditions, such as pressures and amperage draw, for easy monitoring of the VSA.

One-year remote monitoring and software updates are provided at no additional cost.

Specifications

	OSI 2000	OSI 3000	OSI 5000	OSI 7000
Discharge flow rate	950 Lpm 1,818 kg/day	1,425 Lpm 2,724 kg/day	2,375 Lpm 4,540 kg/day	3,500 Lpm 6,363 kg/day
Oxygen purity	92% ± 2%	92% ± 2%	92% ± 2%	92% ± 2%
Discharge pressure (w/booster compressors)	0.30–0.45 bar 1.40–6.5 bar	0.30–0.45 bar 1.40–6.5 bar	0.30–0.45 bar 1.40–6.5 bar	0.30–0.45 bar 1.40–6.5 bar
Temperature range	4–32 °C	4–32 °C	4–32 °C	4–32 °C
Power options	460 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph	460 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph	460 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph	460 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph
Average current draw	104 A/460 VAC/60 Hz @ 6.5 bar 97 A/460 VAC/60 Hz @ 1.4 bar	104 A/460 VAC/60 Hz @ 6.5 bar 97 A/460 VAC/60 Hz @ 1.4 bar	104 A/460 VAC/60 Hz @ 6.5 bar 97 A/460 VAC/60 Hz @ 1.4 bar	120 A/460 VAC/60 Hz @ 6.5 bar 112 A/460 VAC/60 Hz @ 1.4 bar
Maximum current draw	56 A/460 VAC/60 Hz @ 6.5 bar	84 A/460 VAC/60 Hz @ 6.5 bar	115 A/460 VAC/60 Hz @ 6.5 bar	145 A/460 VAC/60 Hz @ 6.5 bar
Average power consumption	38 kW @ 6.5 bar 30 kW @ 0.4 bar	51 kW @ 6.5 bar 40 kW @ 0.4 bar	75 kW @ 6.5 bar 69 kW @ 0.4 bar	91 kW @ 6.5 bar 84 kW @ 0.4 bar
Recommended electrical service	100 A/460 VAC/60 Hz 100 A/380 VAC/50 Hz	100 A/460 VAC/60 Hz 150 A/380 VAC/50 Hz	150 A/460 VAC/60 Hz 200 A/380 VAC/50 Hz	150 A/460 VAC/60 Hz 200 A/380 VAC/50 Hz
Cost of oxygen generation	0.40 kWh/kg @ 6.5 bar	0.34 kWh/kg @ 6.5 bar	0.30 kWh/kg @ 6.5 bar	0.25 kWh/kg @ 6.5 bar
Dry weight, concentrator	~4,100 kg	~5,000 kg	~15,000 kg	~16,500 kg
Oxygen outlet	3/4" NPT	1" NPT	1" NPT	2" NPT
HMI touch screen PLC	7" touch screen display	7" touch screen display	7" touch screen display	7" touch screen display

Contact

OSI Oxygen Solutions Inc.
 1243 70th Ave NW, Edmonton, Alberta, Canada T6P 1N5
 Phone: 1.866.416.0516 (toll free) or 1.780.669.1300
sales@osioxygen.com
www.osioxygen.com

OSI 1000

with an output of 500 slpm or 970 kg per day
the **OSI 1000** would be the ideal oxygen
concentrator based on your unique needs



Our oxygen concentrators feature **Vacuum Swing Adsorption (VSA)** for maximum energy efficiency and productivity based on cost per kilogram of oxygen.

Benefits

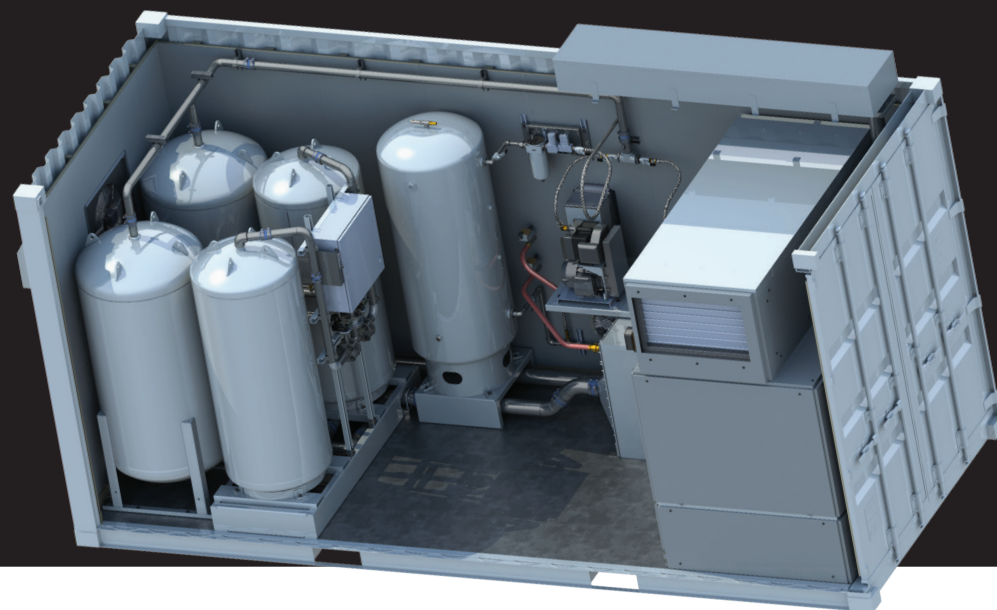
- Save money on power consumption
- Plug and play installation
- Self-contained and moveable
- Extremely low maintenance
- Remote diagnostics and communications
- Automatic turn-down to suit demand

Specifications

Power Options	460 or 575 VAC/60 Hz 3Ph 200 or 380 VAC/50 Hz 3Ph
Discharge Pressure (w/Booster Compressor)	0.30-0.45 barg 1.40-6.5 barg
Operating Temperature	4-32 °C
Average Current Draw	26 A/460 VAC/60 Hz @ 4.0 barg
Average Power Consumption	18 kW @4.0 barg
Cost of Oxygen Generation	0.45 kW/kg O ₂ @ 4.0 barg
Dry Weight, Container	~2,050 kg
Oxygen Outlet	3/4" NPT

OSI 2000

with an output of 1,000 slpm or 1,937 kg per day
the **OSI 2000** would be the ideal oxygen
concentrator based on your unique needs



Our oxygen concentrators feature Vacuum Swing Adsorption (VSA) for maximum energy efficiency and productivity based on cost per kilogram of oxygen.

Benefits

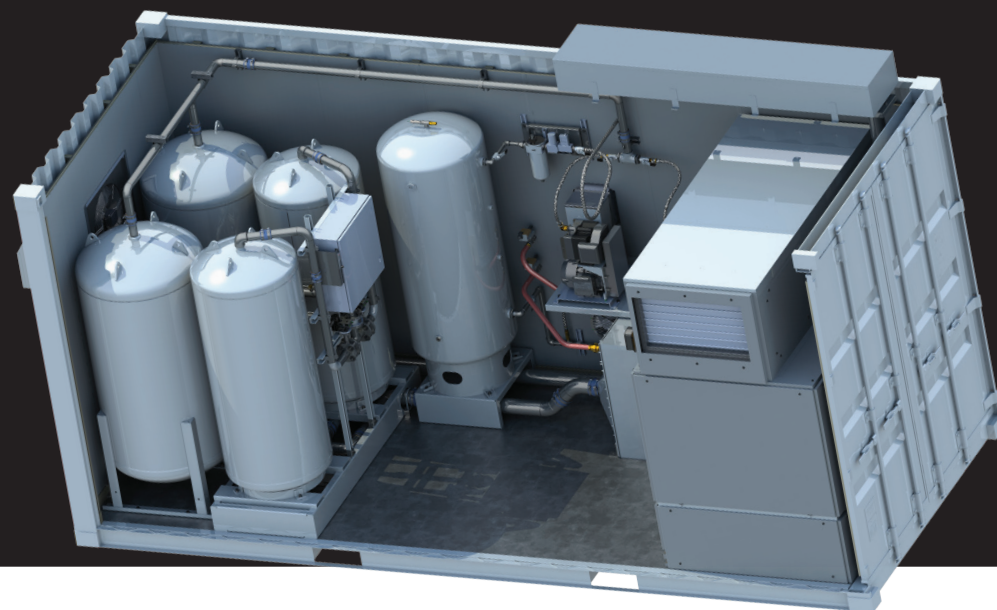
- Save money on power consumption
- Plug and play installation
- Self-contained and moveable
- Extremely low maintenance
- Remote diagnostics and communications
- Automatic turn-down to suit demand

Specifications

Power Options	460 or 575 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph
Discharge Pressure (w/Booster Compressor)	0.30-0.45 barg 1.40-6.5 barg
Operating Temperature	4-32 °C
Average Current Draw	45 A/460 VAC/60 Hz @ 4.0 barg
Average Power Consumption	38 kW @4.0 barg
Cost of Oxygen Generation	0.40 kW/kg O ₂ @ 4.0 barg
Dry Weight, Container	~4,100 kg
Oxygen Outlet	3/4" NPT

OSI 3000

with an output of 1,500 slpm or 2,905 kg per day the **OSI 3000** would be the ideal oxygen concentrator based on your unique needs



Our oxygen concentrators feature **Vacuum Swing Adsorption (VSA)** for maximum energy efficiency and productivity based on cost per kilogram of oxygen.

Benefits

- Save money on power consumption
- Plug and play installation
- Self-contained and moveable
- Extremely low maintenance
- Remote diagnostics and communications
- Automatic turn-down to suit demand

Specifications

Power Options	460 or 575 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph
Discharge Pressure (w/Booster Compressor)	0.30-0.45 barg 1.40-6.5 barg
Operating Temperature	4-32 °C
Average Current Draw	71 A/460 VAC/60 Hz @ 4.0 barg
Average Power Consumption	49 kW @4.0 barg
Cost of Oxygen Generation	0.40 kW/kg O ₂ @ 4.0 barg
Dry Weight, Container	~5,000 kg
Oxygen Outlet	1" NPT

OSI 5000

with an output of 2,500 slpm or 4,840 kg per day the **OSI 5000** would be the ideal oxygen concentrator based on your unique needs



Our oxygen concentrators feature **Vacuum Swing Adsorption (VSA)** for maximum energy efficiency and productivity based on cost per kilogram of oxygen.

Benefits

- Save money on power consumption
- Plug and play installation
- Self-contained and moveable
- Extremely low maintenance
- Remote diagnostics and communications
- Automatic turn-down to suit demand

Specifications

Power Options	460 or 575 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph
Discharge Pressure (w/Booster Compressor)	0.30-0.45 barg 1.40-6.5 barg
Operating Temperature	4-32 °C
Average Current Draw	93 A/460 VAC/60 Hz @ 4.0 barg
Average Power Consumption	68 kW @4.0 barg
Cost of Oxygen Generation	0.33 kW/kg O ₂ @ 4.0 barg
Dry Weight, Container	~15,000 kg
Oxygen Outlet	1" NPT

OSI 7000

with an output of 3,500 slpm or 6,780 kg per day the **OSI 7000** would be the ideal oxygen concentrator based on your unique needs



Our oxygen concentrators feature **Vacuum Swing Adsorption (VSA)** for maximum energy efficiency and productivity based on cost per kilogram of oxygen.

Benefits

- Save money on power consumption
- Plug and play installation
- Self-contained and moveable
- Extremely low maintenance
- Remote diagnostics and communications
- Automatic turn-down to suit demand

Specifications

Power Options	460 or 575 VAC/60 Hz 3Ph 380 VAC/50 Hz 3Ph
Discharge Pressure (w/Booster Compressor)	0.30-0.45 barg 1.40-6.5 barg
Operating Temperature	4-32 °C
Average Current Draw	120 A/460 VAC/60 Hz @ 4.0 barg
Average Power Consumption	85 kW @4.0 barg
Cost of Oxygen Generation	0.30 kW/kg O ₂ @ 4.0 barg
Dry Weight, Container	~16,500 kg
Oxygen Outlet	2" NPT

OSI Ozone Generator



Aikcan Ozone Generators are the perfect accompaniment to any oxygen concentrator.

Benefits

- Great for sterilization applications
- Helps with decolouring and removing dye
- Natural deodorant
- Oxidizes heavy and dangerous chemicals, as well as organic compounds

Oxygen Source

Type	Oxygen Source (kg/h)			Air Flow			kwh/kgO ₂	Cooling Water Volume (m ³ /h)	Size (W*D*H) (mm)	Weight (T)
	7 wt%	10 wt%	12 wt%	7 wt%	10 wt%	12 wt%				
AKO-1KG	1.1	1	0.85	10.9	6.9	4.9	5 to 8	1.5-2	1300*600*1900	0.5
AKO-1.5KG	1.65	1.5	1.3	16.3	10.2	7.4	5 to 8	2.25-3	1400*600*900	0.7
AKO-2KG	2.2	2	1.7	21.7	13.6	9.7	5 to 8	3-4	1600*600*1950	0.92
AKO-2.5KG	2.75	2.5	2.1	27.1	17	11.9	5 to 8	3.75-5	2000*800*1950	1.2
AKO-3KG	3.3	3	2.6	32.5	20.4	14.7	5 to 8	4.5-6	2000*800*1950	1.35
AKO-4KG	4.4	4	3.4	43.2	27.1	19.2	5 to 8	6-8	2500*1000*1950	1.6
AKO-5KG	5.5	5	4.3	54	33.9	24.3	5 to 8	7.5-10	2500*1000*1950	1.8
AKO-6KG	6.6	6	5.1	64.8	40.6	28.8	5 to 8	9-12	2500*1000*1950	2.1
AKO-7KG	7.7	7	6	75.6	47.4	33.8	5 to 8	10.5-14	2800*1100*1950	2.5
AKO-8KG	8.8	8	6.8	86.4	54.2	38.3	5 to 8	12-16	2800*1100*1950	2.9

Air Source

Type	Oxygen Source (kg/h)			Air Flow			kwh/kgO ₂	Cooling Water Volume (m ³ /h)	Size (W*D*H) (mm)	Weight (T)
	1.5 wt%	2 wt%	2.5 wt%	1.5 wt%	2 wt%	2.5 wt%				
AKO-1KG	1.1	1	0.85	56	39	27	14-16	3-4	1600*600*1950	0.92
AKO-1.5KG	1.65	1.5	1.3	84	59	40	14-16	4.5-6	2000*800*1950	1.35
AKO-2KG	2.2	2	1.7	111	78	53	14-16	6-8	2500*1000*1950	1.6
AKO-2.5KG	2.75	2.5	2.1	139	97	65	14-16	7.5-10	2500*1000*1950	1.8
AKO-3KG	3.3	3	2.6	166	116	80	14-16	9-12	2500*1000*1950	2.1
AKO-4KG	4.4	4	3.4	221	155	104	14-16	12-16	2800*1100*1950	2.9



OxygenSolutions

Reliable supply of **high-purity oxygen**

www.osioxygen.com