## **PSA Oxygen Generator**







AirSep Alpha Series Oxygen Generators produce from 20 to 5,500 cubic feet of oxygen per hour at up to 95% oxygen concentration. When electricity and a source of compressed air is supplied, these dependable machines can provide oxygen for practically any application.

## **Features**

- Produces oxygen from an independent compressed air source
- Microprocessor controlled
- Low operating cost
- Automatic and unattended operation
- Easy to install and maintain
- HMI NEMA 4 Touchscreen control panel with integrated oxygen concentration monitor

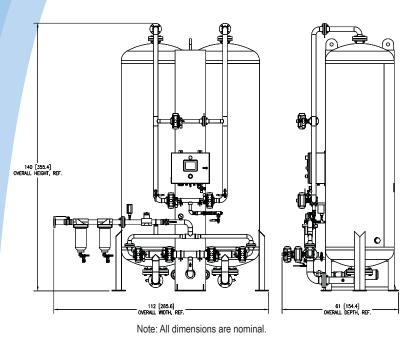
## **Typical Applications**

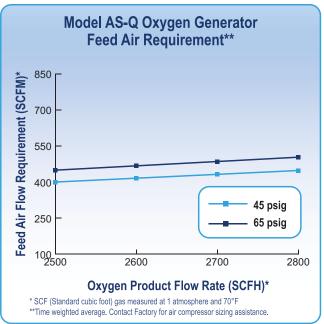
- Cutting/Brazing/Soldering
- Environmental Remediation
- Fish Farming
- Glass Work/Blowing
- Ozone (Generator) Feed Gas
- Thermal/Chemical Oxidation
- Waste/Water Treatment

Product Flow       2,500 – 2,800 SCFH (65.72 – 73.61 Nm³/hr or 1,179 – 1,321 SLPM)¹         Product Pressure       45 – 65 psig (310 – 448 kPa or 3.0 – 4.4 barg)¹         Product Concentration       Up to 95%         Product Dew Point       -100°F (-73°C)         Dimensions (W x D x H)² (Nominal)       112 x 61 x 140 in (284 x 155 x 356 cm)         Weight²       8,025 lb (3,640 kg)         Physical Connections       2" 150# ANSI Flange         Compressed Air Inlet       2" 150# ANSI Flange         Product Gas Outlet       1" NPT	Specifications			
Product Pressure 45 – 65 psig (310 – 448 kPa or 3.0 – 4.4 barg)¹  Product Concentration Up to 95%  Product Dew Point -100°F (-73°C)  Dimensions (W x D x H)² (Nominal) 112 x 61 x 140 in (284 x 155 x 356 cm)  Weight² 8,025 lb (3,640 kg)  Physical Connections Compressed Air Inlet 2" 150# ANSI Flange Product Gas Outlet 1" NPT  Ambient Operating Conditions Locate the oxygen generator in a well-ventilated area that is protected from weather elements and remains betwee 40°F (4°C) and 104°F (40°C)  Storage Temperature -13°F (-25°C) to 131°F (55°C) Humidity 0-90% (non-condensing)  Feed Air Requirements Flow Rate: Refer to chart on reverse page. Clean and Dry "Plant Air" (Class 5.6.4 per ISO 8573.1) Pressure: 90 psig (621 kPa or 6.2 barg) minimum Temperature: 120°F (50°C) maximum  Control Power Requirements (Single Phase) 120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A  NRTL Certifications and Approvals ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)	Desiduat Flaur	•		
Product Concentration  Up to 95%  Product Dew Point  -100°F (-73°C)  Dimensions (W x D x H)² (Nominal)  112 x 61 x 140 in (284 x 155 x 356 cm)  Weight²  8,025 lb (3,640 kg)  Physical Connections  Compressed Air Inlet Product Gas Outlet  4" NPT  Ambient Operating Conditions  Locate the oxygen generator in a well-ventilated area that is protected from weather elements and remains between 40°F (4°C) and 104°F (40°C)  Storage  Temperature 1-13°F (-25°C) to 131°F (55°C) Humidity  Pressure: 90 psig (621 kPa or 6.2 barg) minimum Temperature: 122°F (50°C) maximum  Control Power Requirements (Single Phase)  120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A  NRTL Certifications and Approvals  ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)				
Product Dew Point  -100°F (-73°C)  Dimensions (W x D x H)² (Nominal)  112 x 61 x 140 in (284 x 155 x 356 cm)  Weight²  8,025 lb (3,640 kg)  Physical Connections  Compressed Air Inlet Product Gas Outlet  Ambient Operating Conditions  Locate the oxygen generator in a well-ventilated area that is protected from weather elements and remains betwee 40°F (4°C) and 104°F (40°C)  Storage  Temperature -13°F (-25°C) to 131°F (55°C) Humidity  0-90% (non-condensing)  Feed Air Requirements  Flow Rate: Refer to chart on reverse page. Clean and Dry "Plant Air" (Class 5.6.4 per ISO 8573.1) Pressure: 90 psig (621 kPa or 6.2 barg) minimum Temperature: 122°F (50°C) maximum  Control Power Requirements (Single Phase)  120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A  NRTL Certifications and Approvals  ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)		45 – 65 psig (310 – 448 kPa or 3.0 – 4.4 barg)¹		
Dimensions (W x D x H)² (Nominal)  112 x 61 x 140 in (284 x 155 x 356 cm)  8,025 lb (3,640 kg)  Physical Connections Compressed Air Inlet Product Gas Outlet  2° 150# ANSI Flange 1° NPT  Ambient Operating Conditions Locate the oxygen generator in a well-ventilated area that is protected from weather elements and remains betwee 40°F (4°C) and 104°F (40°C)  Storage Temperature 1-3°F (-25°C) to 131°F (55°C) Humidity 0-90% (non-condensing)  Feed Air Requirements Flow Rate: Refer to chart on reverse page. Clean and Dry "Plant Air" (Class 5.6.4 per ISO 8573.1) Pressure: 90 psig (621 kPa or 6.2 barg) minimum Temperature: 122°F (50°C) maximum  Control Power Requirements (Single Phase) 120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A  NRTL Certifications and Approvals ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)	Product Concentration	Up to 95%		
Weight²       8,025 lb (3,640 kg)         Physical Connections       2" 150# ANSI Flange         Compressed Air Inlet       2" 150# ANSI Flange         Product Gas Outlet       1" NPT         Ambient Operating Conditions       Locate the oxygen generator in a well-ventilated area that is protected from weather elements and remains between 40°F (4°C) and 104°F (40°C)         Storage       -13°F (-25°C) to 131°F (55°C)         Humidity       0-90% (non-condensing)         Feed Air Requirements       Flow Rate: Refer to chart on reverse page. Clean and Dry "Plant Air" (Class 5.6.4 per ISO 8573.1) Pressure: 90 psig (621 kPa or 6.2 barg) minimum Temperature: 122°F (50°C) maximum         Control Power Requirements (Single Phase)       120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A         NRTL Certifications and Approvals       ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)	Product Dew Point	-100°F (-73°C)		
Physical Connections Compressed Air Inlet Product Gas Outlet  Ambient Operating Conditions  Locate the oxygen generator in a well-ventilated area that is protected from weather elements and remains betwee 40°F (4°C) and 104°F (40°C)  Storage Temperature -13°F (-25°C) to 131°F (55°C) Humidity  -90% (non-condensing)  Feed Air Requirements  Flow Rate: Refer to chart on reverse page. Clean and Dry "Plant Air" (Class 5.6.4 per ISO 8573.1) Pressure: 90 psig (621 kPa or 6.2 barg) minimum Temperature: 122°F (50°C) maximum  Control Power Requirements (Single Phase)  120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A  NRTL Certifications and Approvals  ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)	Dimensions (W x D x H) <sup>2</sup> (Nominal)	112 x 61 x 140 in (284 x 155 x 356 cm)		
Compressed Air Inlet Product Gas Outlet  Ambient Operating Conditions  Locate the oxygen generator in a well-ventilated area that is protected from weather elements and remains betwee 40°F (4°C) and 104°F (40°C)  Storage Temperature 13°F (-25°C) to 131°F (55°C) Humidity 0-90% (non-condensing)  Feed Air Requirements  Flow Rate: Refer to chart on reverse page. Clean and Dry "Plant Air" (Class 5.6.4 per ISO 8573.1) Pressure: 90 psig (621 kPa or 6.2 barg) minimum Temperature: 122°F (50°C) maximum  Control Power Requirements (Single Phase)  120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A  NRTL Certifications and Approvals  ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)	Weight <sup>2</sup>	8,025 lb (3,640 kg)		
40°F (4°C) and 104°F (40°C)  Storage Temperature -13°F (-25°C) to 131°F (55°C) Humidity 0-90% (non-condensing)  Feed Air Requirements Flow Rate: Refer to chart on reverse page. Clean and Dry "Plant Air" (Class 5.6.4 per ISO 8573.1) Pressure: 90 psig (621 kPa or 6.2 barg) minimum Temperature: 122°F (50°C) maximum  Control Power Requirements (Single Phase) 120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A  NRTL Certifications and Approvals ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)	Compressed Air Inlet			
Temperature Humidity -13°F (-25°C) to 131°F (55°C) 0-90% (non-condensing)  Feed Air Requirements Flow Rate: Refer to chart on reverse page. Clean and Dry "Plant Air" (Class 5.6.4 per ISO 8573.1) Pressure: 90 psig (621 kPa or 6.2 barg) minimum Temperature: 122°F (50°C) maximum  Control Power Requirements (Single Phase) 120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A  NRTL Certifications and Approvals ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)	Ambient Operating Conditions	Locate the oxygen generator in a well-ventilated area that is protected from weather elements and remains between 40°F (4°C) and 104°F (40°C)		
Clean and Dry "Plant Air" (Class 5.6.4 per ISO 8573.1) Pressure: 90 psig (621 kPa or 6.2 barg) minimum Temperature: 122°F (50°C) maximum  Control Power Requirements (Single Phase)  120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A  NRTL Certifications and Approvals  ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)	Temperature			
NRTL Certifications and Approvals  ASME Section VIII Division 1, CAN/CSA-C22.2 No. 61010-1-12, ANSI/UL Std. No. 61010-1:2012 (for 120 V configurations only)  660 Gallon Oxygen Receiver	Feed Air Requirements	Clean and Dry "Plant Air" (Class 5.6.4 per ISO 8573.1) Pressure: 90 psig (621 kPa or 6.2 barg) minimum		
(for 120 V configurations only)  660 Gallon Oxygen Receiver	Control Power Requirements (Single Phase)	120 V ~ ±10%, 50/60 Hz, 3.0 A or 220 V ~ ±10%, 50/60 Hz, 1.0 A		
	NRTL Certifications and Approvals			
Dimensions (Dia. x H) 42 x 128 in (107 x 325 cm)	660 Gallon Oxygen Receiver			
	Dimensions (Dia. x H)	42 x 128 in (107 x 325 cm)		
Weight 1,300 lb (590 kg)	Weight	1,300 lb (590 kg)		

<sup>1</sup> SCF (Standard cubic foot) gas measured at 1 atmosphere and 70°F (21°C) / Nm³ (Normal cubic meter) gas measured at 1 atmosphere and 32°F (0°C) / SLPM (Standard liters per minute) gas measured at 1 atmosphere and 70°F (21°C)

<sup>&</sup>lt;sup>2</sup> Includes filter assembly which is shipped separately, field assembly (by others) required.





		Ordering Information		
Model	Part Number	Description		
AS-Q AS109-	AS109-7	With HMI NEMA 4 Touchscreen and oxygen concentration monitor, 120 V $\sim$ $\pm1$	0%, 50/60 Hz <sup>1</sup>	
	AS109-8	With HMI NEMA 4 Touchscreen and oxygen concentration monitor, 220 V ~ ±10%, 50/60 Hz¹		
	AS109-21	With HMI NEMA 4 Touchscreen and oxygen concentration monitor, 220 V ~ ±10%, 50/60 Hz¹		
Required Accessories	TA079-1	660 Gallon Oxygen Receiver		
RG086-1  K1375-8  Optional Accessories  AN021-1  AN005-1  AN075-1	RG086-1	Regulator, Oxygen, 1" (30 – 80 psig, 2,000 – 5,000 SCFH)		
	KI375-8	Carbon Filter Add-On Kit		
	AN021-1	Oxygen Analyzer (Maxtec Handi)		
	AN005-1	Oxygen Analyzer (Maxtec Max O <sub>2</sub> Plus)		
	AN075-1	Oxygen Analyzer/Sensor (Maxtec Max O <sub>2</sub> Plus)		
Shipping Information		AS-Q	660 Gallon Oxygen Receiver	
Class		92.5	70	
Commodity Classification Number		8421.39.8040	7311.00.0000	
Dimensions (L x W x H)		144 x 84 x 68 in (366 x 213 x 173 cm) Generator (No Pallet) 48 x 48 x 16 in (122 x 122 x 41 cm) Filter(s) and Pallet	134 x 48 x 47 in (340 x 122 x 119 cm)	
Approximate Gross Weight		7,950 lb (3,606 kg) Generator (No Pallet) 128 lb (58 kg) Filter(s) and Pallet	1,520 lb (689 kg)	

Warranty: 1 Year Parts and Factory Labor\*\*\*

\*\*\* An unprotected or inadequately ventilated environment, or improper control power may cause damage to the oxygen generator not covered under warranty.

All performance ratings based on an ambient temperature up to 100°F (38°C), up to 1,000 feet elevation, and 80% relative humidity.





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Email: orders@medicalgassupplier.com

Specify oxygen flow and pressure at time of order.