



DS-PSA GENERATOR

PREMIUM PLUS 1000

Medical oxygen up to 99.5%

Combining cutting edge performance and design, Premium Plus is the first and only PSA generator on market capable to deliver your choice of high concentration medical oxygen with an exceptional stability. For the first time, oxygen concentration becomes an adjustable parameter between 96% and 99.5%, and never varies over $\pm 0.2\%$. This is OXYPLUS next generation PSA.

Key features :

- DS-PSA Technology: 96-99.5% oxygen purity
- Oxygen Concentration Stabilizer OCS®
- 15" colour touch-screen
- Lateral panel for oxygen analyzer calibration

Benefits :

- Up to 99.5% oxygen purity
- Ultra stable concentration : $\pm 0.2\%$
- Adjustable purity on-site by end-user
- User friendly & easy to maintain

Certifications :

- 93/42/CE Medical Device Directive - Class IIB
- 2014/68 EU Pressure Equipment Directive
- 2004/108/CE Electromagnetic Compatibility
- 2006/42/CE Machinery Directive
- 2006/95/CE Low Voltage Directive



Premium Plus 1000

Medical oxygen generator up to 99.5%

Performances

Oxygen Purity		96%		99%		99.5%	
		Continuous	Peak	Continuous	Peak	Continuous	Peak
Oxygen Flowrate ⁽¹⁾	m ³ /h	35.0	38.0	21.0	24.0	18.0	21.0
	scfh	1282.5	1392.0	771.0	880.5	654.0	763.5
Oxygen Discharge Pressure	bar(g)	from 4.5 to 6 10 bar available in option ³					
	psig	from 65 to 87 145 available in option ³					
Min. Air / O ₂ Receiver ⁽²⁾	liter	1500 / 2000					
	gallon	396 / 528					

(1) Definition of Nm³ based on reference conditions 0 °C, 101,325 kPa(a) and dry basis

Indicated flow rates are valid for operation of the concentrator at atmospheric conditions 20 °C / 70 °F, 1013 mbar / 14.7 psi and 60% humidity rate.

(2) Smaller receiver volumes might result in lower pressures. Please contact manufacturer for details.

(3) Without additional equipment

Standard Components

- PSA towers with high quality molecular sieve
- Advanced control panel Visio HD featuring High Definition colour touch screen and 15" size
- Oxygen Concentration Stabilizer system OCS[®] ensuring at the most +/-0.2% concentration fluctuation
- Double compressed air inlet filtration (pre-filter and submicronic filter with automatic drain)
- Exhaust Mufflers
- Pneumatic Valves with stainless steel bodies
- Local Instrumentation, incl. O₂ Pressure and purity transmitters

Peripheral Equipments & Options

- Feed Air Unit
- High pressure cylinder filling system
- Electronic Flow Meter Medgas Flow[®]
- Medical Gas Quality Monitor Pharmagas[®]
- Set of External Oxygen Bacterial Filters
- Dew Point & Temperature Transmitters
- Central Supervision
- Oxygen Manifold
- Automatic Change Over System

Oxygen quality	
Concentration	up to 99.5%
Dew point	-60° C / -76° F
CO	< 2 ppm
CO ₂	< 150 ppm
SO ₂	0 ppm
NO ₂	0 ppm
Oil	< 0.1 mg / m ³

Feed Air Requirements

Supply Pressure	10	bar(g)
	145	psig
Supply Temperature	5 to 45	°C
	41 to 113	°F
Min. Air Quality ⁽⁴⁾	Class 1.5.5 to ISO 8573.1	

(4) At inlet of external air filtration set. Improper feed air quality may cause damage to the oxygen concentrator not covered under warranty

Power Requirements

Power Supply	230 V / 1 / 50 Hz
Power Consumption	max. 7.7 kW

Installation Requirement

Well ventilated and weather protected environment with ambient temperature between +5 °C / +41 F and +45 °C / +113 F. Classified areas excluded.

Connections

Feed Air Inlet	G 1 1/4 "
Oxygen Outlet	G 1 " 1/2

Dimensions & Weights ⁽⁵⁾

L	W	H	Weight
3145	2000	2375 mm	3215 kg
124	79	95 in.	7085 lb

(5) May vary according to series