

NITROSource Plus - NSP-110



PSA Nitrogen Gas Generator

Nitrogen Outlet Flow Rates

Inlet Pressure		Purity (Remaining Oxygen Content) vs Nitrogen Outlet Flow (m ³ /hr)*										
bar(g)	psi(g)	5ppm	10ppm	50ppm	100ppm	250ppm	500ppm	0.1%	0.5%	1.0%	2.0%	3.0%
5.0	72.5	22.3	25.3	37.2	40.6	47.2	53.0	59.9	84.6	99.3	121.2	141.3
6.0	87.0	29.8	33.9	47.5	51.9	60.3	67.7	76.5	104.9	123.0	150.1	168.8
7.0	101.5	37.7	43.0	57.2	62.5	72.7	81.5	92.2	126.3	148.2	180.9	196.2
8.0	116.0	43.4	49.4	64.0	70.0	81.4	91.3	103.2	140.2	161.5	197.2	213.9
9.0	130.5	49.1	55.9	70.9	77.5	90.1	101.1	114.3	154.1	176.3	215.3	-
10.0	145.0	54.7	62.3	78.3	85.6	99.5	111.7	126.3	166.8	189.6	231.5	
11.0	159.5	58.1	66.2	81.2	88.7	103.2	115.8	130.9	174.3	197.0	240.6	
12.0	174.0	61.5	70.0	84.6	92.5	107.5	120.6	136.4	180.6	204.4	248.6	
13.0	188.5	64.9	73.9	87.5	95.6	111.2	124.7	141.0	188.2	210.4	256.9	

Performance data is based on 7.0 bar(g) (101.5 psi(g)) inlet and 20°C (68°F) ambient temperature.

*m³ reference to standard conditions, 20°C, 1013 mbar(a) and 0% relative water vapour pressure.

Part Number Breakdown

		N	S	P	-	1	1	0	-						-	0	0	A
Purity	Prefix																	
5ppm / 10ppm / 50ppm	U																	
100ppm / 250ppm / 500ppm / 0.1%	H																	
0.5% / 1.0% / 2.0% / 3.0%	L																	
Oxygen Analyser Technology	Prefix																	
Electrochemical	E																	
Zirconia	Z																	
Energy Saving Technology ⁽¹⁾	Prefix																	
Not Fitted	N																	
Fitted	Y																	
Nitrogen Outlet Flow Range ⁽²⁾	Prefix																	
High Flow	H																	
Low Flow	L																	
Dew point Monitoring	Prefix																	
Not Fitted	N																	
Inlet PDP Monitoring	I																	
Outlet PDP Monitoring	O																	
Both Inlet & Outlet Monitoring	B																	

⁽¹⁾ Energy Saving Technology not available on 50ppm, 10ppm or 5ppm generators.

⁽²⁾ See 'Mass Flow Controller Flow Breaks' chart for sizing information.

Mass Flow Controller Flow Breaks

Outlet Pressure	bar(g)	5	6	7	8	9	10	11	12	13
	psi(g)	72.5	87	101.5	116	130.5	145	159.5	174	188.5
High Flow	m ³ /hr*	190.0	205.0	219.0	232.0	245.0	257.0	268.0	279.0	290.0
Low Flow		61.0	66.0	70.0	74.0	78.0	82.0	86.0	89.0	93.0

*m³ reference to standard conditions, 20°C, 1013 mbar(a) and 0% relative water vapour pressure.

Operation Parameters

Minimum Inlet Air Quality	ISO 8573-1: 2010 Class 2.4.1	
Minimum Operating Pressure	5.0 bar(g)	72.5 psi(g)
Maximum Operating Pressure	13.0 bar(g)	188.5 psi(g)
Design Pressure	15.0 bar(g)	217.5 psi(g)
Minimum Operating Temperature	5.0°C	41.0°F
Maximum Operating Temperature	50.0°C	122.0°F
Recommended Operating Temperature	20.0°C	68.0°F
Supply Voltage	100-240V AC (±10%) 50/60Hz	
Power Consumption	100W	
IP Rating	IP32	NEMA 2
Noise	<75 dB (A)	

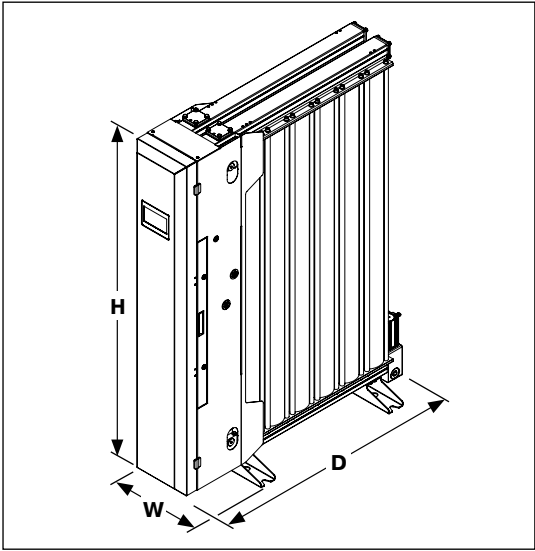
Pipe Connections & Buffer Vessel Sizes

Model	Pipe Connections				Buffer Vessel	
	Compressed Air Inlet	Nitrogen Outlet	To Buffer	From Buffer	Minimum* Capacity	
NSP-110	1½" BSPP	1" BSPP	1½" BSPP	1" BSPP	1500 Litres	396 Gallon

***Important Note:**
Recommended minimum buffer vessel size to guarantee maximum outlet pressure.
Utilisation of smaller buffer vessels may result in lower outlet pressures and fluctuations in purity.

Weights & Dimensions

Height (H)	2063mm	81.2"
Width (W)	550mm	21.7"
Depth (D)	2360mm	92.9"
Weight	1197 kg	2639 lbs



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