



OAMG N2 SERIES

NITROGEN GENERATORS

EXPERTS IN COMPRESSED AIR AND NITROGEN SOLUTIONS



OAMG-N2

NITROGEN GENERATORS

Ozen Air Technology OAMG-N2 Series Nitrogen Generators use Serial Pressure Swing Adsorption technology to isolate nitrogen molecules from other molecules in compressed air. The result is high purity nitrogen gas at the outlet of the generator. The OAMG-N2 series is the most cost-efficient source of nitrogen used in various industries like laser cutting, production industry, and many others.

How does PSA Generators Works?

Air contains 21% Oxygen, 78% Nitrogen, 0.9% Argon, and 0.1% other trace gases. Ozen OAMG-N2 Nitrogen Generation Systems separate this nitrogen from Compressed Air through a unique process called Pressure Swing Adsorption (PSA).

The Pressure Swing Adsorption process for the generation of enriched nitrogen gas from ambient air utilizes the ability of a synthetic Carbon Molecular Sieve to absorb mainly oxygen. While oxygen concentrates in the pore system of the Carbon Molecular Sieve, Nitrogen is produced as a product gas.

Ozen's unique OAMG-N2 PSA technology

Ozen's OAMG-N2 Technology represents a significant improvement in PSA technology and facilitates the lossless and efficient cleaning of compressed air. This feature sets our technology apart from other PSA nitrogen-generating technologies.

Compressed air often contains various impurities that can compromise the separation process. Therefore, it's imperative to purify and separate the pressurized air completely from contaminants before the separation process begins. Our S-PSA technology comprises two-stage PSA cycles. The first stage cycle involves purifying compressed air from all impurities and unwanted gases, while the second stage cycle separates nitrogen gas from other gases. The process ensures that all impurities and unwanted gases are removed from the nitrogen gas, which is then stored in its pure form. Ozen Air Technology has developed this process to produce high purity nitrogen separation with an extended lifespan.

NITROGEN APPLICATIONS

- Food & Beverage Industry
- Electronics Manufacturing
- Laser Cutting
- Pharmaceutical & Biotechnology
- Chemical Industry
- Metallurgy & Heat Treatment
- Oil & Gas / Petrochemical
- Aerospace & Automotive
- Research & Laboratory



STANDARDS COMPLIANCE

- EN ISO 7386-1
- 93/42 EEC
- ISO 9001:2015
- ISO 13485:2016
- ISO 10002:2018
- ISO 14001:2015
- ISO45001:2018
- ISO27001:2013
- CE
- ASME
- UL

Advantages of Ozen OAMG-N2 Series



Plug & Play Single Skid Design

Ozen OAMG-N2 Nitrogen Generators have their own Nitrogen Generation System, Integrated Air Dryer, Integrated Line/Medical Filters, Integrated PLC with Touch Screen Monitoring Panel.



Product Gas Quality

Ozen OAMG-N2 Nitrogen Generators provide you with product quality certified by national and international organizations. Product quality can be continuously monitored and proven accurate.



Cost Reduction

Nitrogen production from compressed air with Ozen OAMG-N2 Nitrogen Generators eliminates the cost of the unabated tube or liquid gas, rent, filling costs, purchase procedure.



Safety

Ozen OAMG-N2 Nitrogen Generators eliminate the storing hazards, transporting, and handling heavy and high-pressure tubes.



Non-Stop Gas Supply

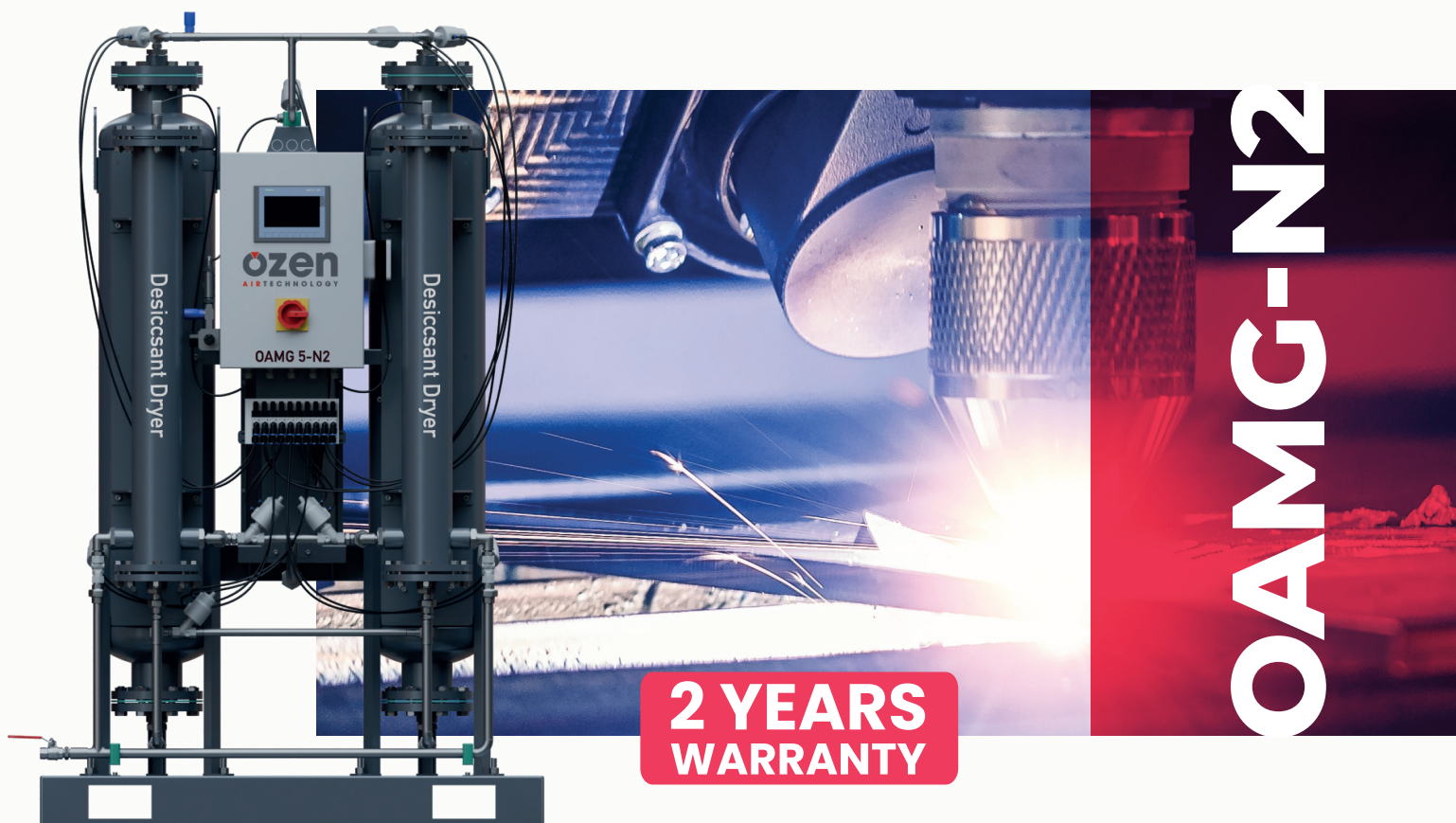
Ozen OAMG-N2 Nitrogen Generators produce 24 hours of continuous nitrogen gas as long as it is needed wherever you want.



True & Reliable Purity

Ozen OAMG-N2 Nitrogen Generators can produce nitrogen gas according to the purity required by your application. Don't pay more for high purity.





FLOW CHART OF NITROGEN GENERATORS																						
MODEL	95%		96%		97%		98%		99%		99,5%		99,9%		99,95%		99,99%		99,995%		99,999%	
	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM
OAMG 5-N2	79,4	49,2	73,1	45,3	65,4	40,5	58,0	36,0	45,7	28,3	40,2	24,9	33,0	20,5	27,8	17,2	19,1	11,8	14,2	8,8	9,8	6,1
OAMG 10-N2	154,8	96,0	142,5	88,4	127,5	79,1	113,1	70,1	89,1	55,3	78,4	48,6	64,4	39,9	54,2	33,6	37,2	23,1	27,7	17,2	19,2	11,9
OAMG 15-N2	192,1	119,1	176,9	109,7	158,3	98,1	140,4	87,0	110,6	68,6	97,3	60,3	79,9	49,5	67,3	41,7	46,2	28,7	34,4	21,3	23,8	14,8
OAMG 20-N2	270,0	167,4	248,5	154,1	222,4	137,9	197,2	122,3	155,4	96,3	136,7	84,7	112,2	69,6	94,5	58,6	64,9	40,3	48,3	29,9	33,5	20,7
OAMG 30-N2	381,1	236,3	350,9	217,5	313,9	194,6	278,4	172,6	219,4	136,0	193,0	119,6	158,4	98,2	133,4	82,7	91,7	56,8	68,2	42,3	47,2	29,3
OAMG 40-N2	460,5	285,5	424,0	262,9	379,3	235,2	336,4	208,6	265,1	164,3	233,2	144,6	191,4	118,7	161,2	100,0	110,8	68,7	82,4	51,1	57,1	35,4
OAMG-50-N2	595,5	369,2	548,3	339,9	490,5	304,1	435,0	269,7	342,8	212,5	301,5	186,9	240,0	148,8	208,5	129,3	144,0	89,3	106,5	66,0	73,8	45,8
OAMG-60-N2	714,6	443,1	657,9	407,9	588,6	364,9	522,0	323,6	411,3	255,0	361,8	224,3	288,0	178,6	250,2	155,1	172,8	107,1	127,8	79,2	88,6	54,9
OAMG-70-N2	873,4	541,5	804,1	498,5	719,4	446,0	638,0	395,6	502,7	311,7	442,2	274,2	352,0	218,2	305,8	189,6	211,2	130,9	156,2	96,8	108,2	67,1
OAMG-80-N2	1032,2	640,0	950,3	589,2	850,2	527,1	754,0	467,5	594,1	368,3	522,6	324,0	416,0	257,9	361,4	224,1	249,6	154,8	184,6	114,5	127,9	79,3
OAMG-90-N2	1191,0	738,4	1096,5	679,8	981,0	608,2	870,0	539,4	685,5	425,0	603,0	373,9	480,0	297,6	417,0	258,5	288,0	178,6	213,0	132,1	147,6	91,5
OAMG-100-N2	1310,1	812,3	1206,2	747,8	1079,1	669,0	957,0	593,3	754,1	467,5	663,3	411,2	528,0	327,4	458,7	284,4	316,8	196,4	234,3	145,3	162,4	100,7
OXYGEN RATE	5,0%		4,0%		3,0%		2,0%		1,0%		0,5%		1000 ppm		100 ppm		10 ppm		5 ppm		1 ppm	
AIR/N2 RATIO	1,95		2		2,1		2,3		2,6		2,9		3,25		3,8		4,5		5,5		6,3	

For larger capacities, please contact us. We are also able to provide high-capacity solutions tailored to your request.

INLET PRESSURE	4-10 bar (g)	4-10 bar (g)	4-10 bar (g)	4-10 bar (g)	4-10 bar (g)	4-10 bar (g)	4-10 bar (g)	4-10 bar (g)	4-10 bar (g)	4-10 bar (g)
OUTLET PRESSURE	0-9 bar(g)	0-9 bar(g)	0-9 bar(g)	0-9 bar(g)	0-9 bar(g)	0-9 bar(g)	0-9 bar(g)	0-9 bar(g)	0-9 bar(g)	0-9 bar(g)
PERFORMANCE:	The listed performance and air factor are for 25 ambient temperature and 8 Bar(g) inlet pressure.									
AIR QUALITY:	Required clean, dry, compressed air specifications: ISO 8573 Class 1.4.1 or better									
POWER:	100 - 230V - 1ph - 50/60 Hz - max 120W									

OAMG-N2 Series Pressure Swing Adsorption (PSA) nitrogen generators are designed to be the most efficient, reliable and durable nitrogen generator available.

CORRECTION FACTORS									
Inlet Pressure (PSI)	73	80	87	94	100	110	116	123	131
F1	0,68	0,73	0,79	0,88	0,9	1	1,04	1,08	1,15
Ambient Temp (F)	41	50	59	68	77	86	95	104	113
F2	0,85	1	1	1	1	0,91	0,82	0,74	0,6

To determine the nitrogen generator model in the reference conditions divide the nitrogen flow rate to the factors mentioned in the correction table

NITROGEN GENERATOR AIR DEMAND																						
MODEL	95%		96%		97%		98%		99%		99,5%		99,9%		99,95%		99,99%		99,995%		99,999%	
	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM	Nm³/hr	SCFM
OAMG 5-N2	154,8	96,0	146,2	90,6	137,3	85,2	133,4	82,7	118,8	73,7	116,6	72,3	107,3	66,5	105,6	65,5	86,0	53,3	78,1	48,4	62,0	38,4
OAMG 10-N2	301,9	187,2	285,1	176,8	267,8	166,0	260,1	161,3	231,7	143,7	227,3	140,9	209,1	129,7	206,0	127,7	167,6	103,9	152,3	94,4	120,9	74,9
OAMG 15-N2	374,7	232,3	353,8	219,4	332,4	206,1	322,8	200,2	287,5	178,3	282,1	174,9	259,5	160,9	255,6	158,5	208,0	129,0	189,0	117,2	150,0	93,0
OAMG 20-N2	526,4	326,4	497,1	308,2	467,0	289,5	453,6	281,2	404,0	250,5	396,4	245,8	364,7	226,1	359,2	222,7	292,2	181,2	265,5	164,6	210,8	130,7
OAMG 30-N2	743,2	460,8	701,8	435,1	659,2	408,7	640,3	397,0	570,3	353,6	559,6	346,9	514,8	319,2	507,1	314,4	412,6	255,8	374,9	232,4	297,6	184,5
OAMG 40-N2	898,0	556,8	848,0	525,7	796,6	493,9	773,7	479,7	689,2	427,3	676,2	419,2	622,1	385,7	612,7	379,9	498,5	309,1	453,0	280,8	359,6	222,9
OAMG-50-N2	1161,2	720,0	1096,5	679,8	1030,1	638,6	1000,5	620,3	891,2	552,5	874,4	542,1	780,0	483,6	792,3	491,2	648,0	401,8	585,8	363,2	464,9	288,3
OAMG-60-N2	1393,5	864,0	1315,8	815,8	1236,1	766,4	1200,6	744,4	1069,4	663,0	1049,2	650,5	936,0	580,3	950,8	589,5	777,6	482,1	702,9	435,8	557,9	345,9
OAMG-70-N2	1703,1	1055,9	1608,2	997,1	1510,7	936,7	1467,4	909,8	1307,0	810,4	1282,4	795,1	1144,0	709,3	1162,0	720,5	950,4	589,2	859,1	532,6	681,9	422,8
OAMG-80-N2	2012,8	1247,9	1900,6	1178,4	1785,4	1107,0	1734,2	1075,2	1544,7	957,7	1515,5	939,6	1352,0	838,2	1373,3	851,5	1123,2	696,4	1015,3	629,5	805,9	499,7
OAMG-90-N2	2322,5	1439,9	2193,0	1359,7	2060,1	1277,3	2001,0	1240,6	1782,3	1105,0	1748,7	1084,2	1560,0	967,2	1584,6	982,5	1296,0	803,5	1171,5	726,3	929,9	576,5
OAMG-100-N2	2554,7	1583,9	2412,3	1495,6	2266,1	1405,0	2201,1	1364,7	1960,5	1215,5	1923,6	1192,6	1716,0	1063,9	1743,1	1080,7	1425,6	883,9	1288,7	799,0	1022,9	634,2

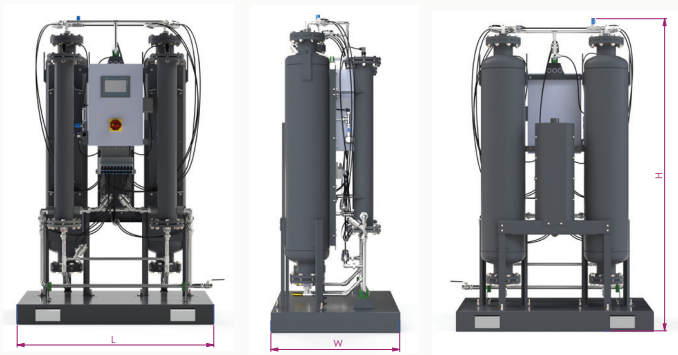
RECOMMENDED AIR RECEIVERS																						
MODEL	95%		96%		97%		98%		99%		99,5%		99,9%		99,95%		99,99%		99,995%		99,999%	
	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons
OAMG 5-N2	1000	240	1000	240	1000	240	1000	240	750	200	750	200	750	200	750	200	500	120	500	120	500	120
OAMG 10-N2	1000	240	1000	240	1000	240	1000	240	750	200	750	200	750	200	750	200	500	120	500	120	500	120
OAMG 15-N2	1500	400	1500	400	1500	400	1500	400	1000	240	1000	240	1000	240	1000	240	750	200	750	200	750	200
OAMG 20-N2	1500	400	1500	400	1500	400	1500	400	1000	240	1000	240	1000	240	1000	240	750	200	750	200	750	200
OAMG 30-N2	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500	2000	500	1500	400	1500	400	1500	400
OAMG 40-N2	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500	2000	500	1500	400	1500	400	1500	400
OAMG-50-N2	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500	2000	500	1500	400	1500	400	1500	400
OAMG-60-N2	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500	2000	500	1500	400	1500	400	1500	400
OAMG-70-N2	4000	1000	4000	1000	4000	1000	4000	1000	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500
OAMG-80-N2	4000	1000	4000	1000	4000	1000	4000	1000	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500
OAMG-90-N2	5000	1550	5000	1550	5000	1550	5000	1550	4000	1000	4000	1000	4000	1000	4000	1000	3000	660	3000	660	3000	660
OAMG-100-N2	5000	1550	5000	1550	5000	1550	5000	1550	4000	1000	4000	1000	4000	1000	4000	1000	3000	660	3000	660	3000	660

NITROGEN BUFFER TANK																						
MODEL	95%		96%		97%		98%		99%		99,5%		99,9%		99,95%		99,99%		99,995%		99,999%	
	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons	Liters	Gallons
OAMG 5-N2	1000	240	1000	240	1000	240	1000	240	750	200	750	200	750	200	750	200	500	120	500	120	500	120
OAMG 10-N2	1000	240	1000	240	1000	240	1000	240	750	200	750	200	750	200	750	200	500	120	500	120	500	120
OAMG 15-N2	1500	400	1500	400	1500	400	1500	400	1000	240	1000	240	1000	240	1000	240	750	200	750	200	750	200
OAMG 20-N2	1500	400	1500	400	1500	400	1500	400	1000	240	1000	240	1000	240	1000	240	750	200	750	200	750	200
OAMG 30-N2	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500	2000	500	1500	400	1500	400	1500	400
OAMG 40-N2	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500	2000	500	1500	400	1500	400	1500	400
OAMG-50-N2	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500	2000	500	1500	400	1500	400	1500	400
OAMG-60-N2	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500	2000	500	1500	400	1500	400	1500	400
OAMG-70-N2	4000	1000	4000	1000	4000	1000	4000	1000	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500
OAMG-80-N2	4000	1000	4000	1000	4000	1000	4000	1000	3000	660	3000	660	3000	660	3000	660	2000	500	2000	500	2000	500
OAMG-90-N2	5000	1550	5000	1550	5000	1550	5000	1550	4000	1000	4000	1000	4000	1000	4000	1000	3000	660	3000	660	3000	660
OAMG-100-N2	5000	1550	5000	1550	5000	1550	5000	1550	4000	1000	4000	1000	4000	1000	4000	1000	3000	660	3000	660	3000	660

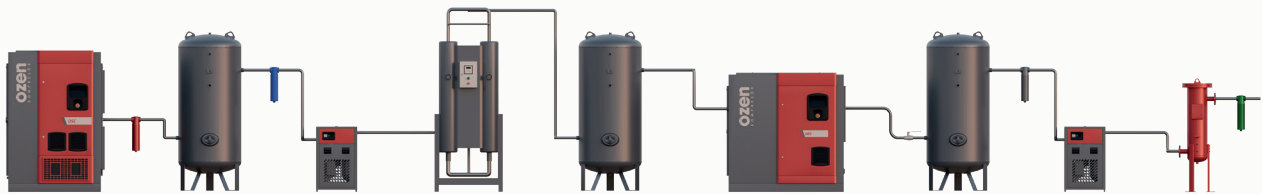
For larger capacities, please contact us. We are also able to provide high-capacity solutions tailored to your request.

DIMENSIONS

Model	Length		Width		Height		Weight		Connection	
	inch	cm	inch	cm	inch	cm	lbs	kg	Inlet	Outlet
OAMG 5-N2	53,1	135,0	37,4	95,0	82,7	210,0	1653,5	750,0	3/4"	1/2"
OAMG 10-N2	53,1	135,0	37,4	95,0	94,5	240,0	2094,4	950,0	3/4"	1/2"
OAMG 15-N2	53,1	135,0	37,4	95,0	98,4	250,0	2601,5	1180,0	1"	3/4"
OAMG 20-N2	53,1	135,0	37,4	95,0	104,3	265,0	3064,4	1390,0	1"	3/4"
OAMG 30-N2	65,0	165,0	49,2	125,0	106,3	270,0	4078,6	1850,0	1 1/4"	1"
OAMG 40-N2	65,0	165,0	49,2	125,0	112,2	285,0	4365,2	1980,0	1 1/4"	1"
OAMG 50-N2	70,9	180,0	49,2	125,0	129,9	330,0	4960,4	2250,0	1 1/2"	1 1/4"
OAMG 60-N2	70,9	180,0	49,2	125,0	133,9	340,0	5996,6	2720,0	1 1/2"	1 1/4"
OAMG 70-N2	78,7	200,0	55,1	140,0	141,7	360,0	6503,6	2950,0	2"	1 1/2"
OAMG 80-N2	78,7	200,0	55,1	140,0	153,5	390,0	8135,1	3690,0	2"	1 1/2"
OAMG 90-N2	94,5	240,0	70,9	180,0	169,2	429,8	8935,6	4053,1	3"	2"
OAMG 100-N2	94,5	240,0	70,9	180,0	173,2	440,0	9369,6	4250,0	3"	2"



STANDARD INSTALLATION OF NITROGEN GENERATING PLANTS



Unmatched Industrial Performance

The wide product range and nitrogen flows up to 2000 CFM make the new OAMG-N2 series ideal for industrial applications. The ability to reach flow levels up to 2000 CFM not only guarantees efficiency but also provides flexibility to meet the needs of a wide variety of industries such as food packaging, electronics, automotive, and metal processing and more.



NITROGEN GENERATORS

✓ Ozen's Unique S-PSA Software for Nitrogen Generators

- With the unique software developed by Ozen, you can view nitrogen gas pressure, nitrogen gas purity, instant nitrogen consumption flow rate and nitrogen outlet gas dew point* on the Monitoring screen.
- In this way, you will be able to store and analyze whether the system is working properly, your consumption, past consumption, pressure, purity data.
- The system provides three operating modes. High Purity, High Flow, and Default to accommodate various performance requirements.
- In addition, this smart system will alert you for scheduled maintenance and prevent unforeseen maintenance and service costs.
- The software also offers the user a language interface in English, Turkish, Russian, Arabic and Spanish.

✓ Easy to Use

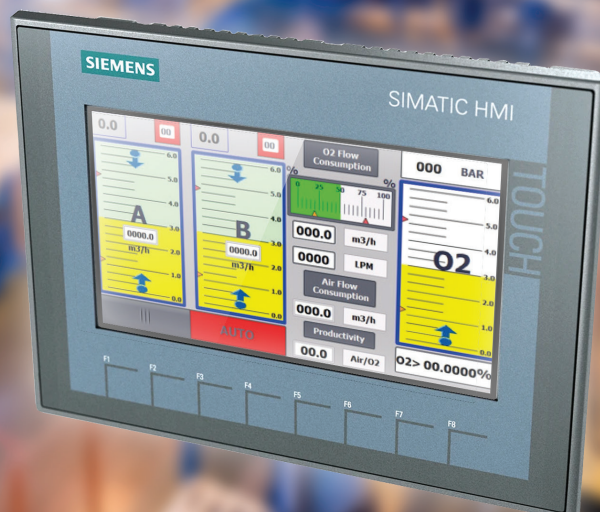
- Plug-and-play design
- No specialist installation or commissioning
- Fully automated and monitored including zirconia oxygen/nitrogen sensor as standard

✓ Desired Purity

- Nitrogen supply according to your need: from 90% to 99,9999% purity
- Easy to set up for other purity levels

✓ High Flow Capacity

- The wide product range and nitrogen flows up to 2000 CFM make the new OAMG-N2 series ideal for industrial applications



**MULTI
CONTROL**

STANDARD FEATURES

Plug and play design
Fully automatic operation
Purity from 95-99.999%
High quality Carbon Molecular Sieve from Kuraray (JAPAN)
Three operational modes: High Purity – High Flow – Default
On Display: Flow rate, Pressure and nitrogen purity
Mutiple laguages: English, Spanish, Turkish and others
Low footprint
Siemens PLC with 7" touch screen colored HMI
-40 °C Dew Point Nitrogen Output
Easy installation and low maintenance costs
Nitrogen costs reduction up to 90%
24/7 pressure, purity and consumption chart records
Zirconium type oxygen/nitrogen sensor for exact nitrogen purity
Integrated own desiccant Air Dryer System (Unique Patented)
Integrated inlet filtration 0.5 and 0.01 ppm
Integrated outlet filtration 5 microns
High quality components for long service life
Stainless steel valves and fittings (SS-316)
LAN / Ethernet connections
Automatic smart maintenance and service alarms

OPTIONAL FEATURES

-73°C Dew Point Nitrogen output
Remote monitoring and control via Ethernet connection
Dew point sensor
Inline flow meter sensor
Inlet carbon tower
Outlet Sterile Bacterium Filter
650W UPS Uninterruptable Power Supply
Skid package with buffer tank included

