

NITROGEN GENERATOR IMT-PN

> NITROGEN GENERATION WITH "PRESSURE SWING ADSORPTION" UP TO 99,9999% (6.0) / 1.0 ppm (RESIDUAL O₂)

The Pressure Swing Adsorption technology facilitates supplies of nitrogen at purities of up to 6.0 / 1.0 ppm (residual O₂) in capacities from 0,5 – to 10.000 Nm³/h.

Continuous supply of N₂

The quality of nitrogen ranging from high to premium purity is the distinguishing feature of our PSA range IMT-PN Nitrogen Generators.

These generators produce nitrogen from the compressed air available. The air is cleaned by pre-filtration which eliminates impurities, such as humidity, oil vapours, particles and hydrocarbons.

The filtrated compressed air stream is channelled into an activated carbon filter. While the air is passing through the filter, the oxygen and carbon dioxide molecules are removed and the pressure dew point is lowered. The generated nitrogen gas is clean, dry and of high purity so that it can be used for a wide variety of applications.

The parameters such as compressed air temperature, pressure, nitrogen purity and nitrogen pressure are all monitored continuously. The efficiency of INMATEC's nitrogen generators guarantees savings right from the start.

The standard model features a touchscreen panel and it can be remotely-controlled from any computer in the world.

> ONSITE IS OUR WORLD



Options:

- Pressure up to 300 bar
- Flow meter
- Voltage adaptor
- Pressure dew point indicator



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Calculation of air pressure requirements

Multiplying nitrogen capacity by the air factor listed below determines compressed air requirement

Nitrogen purity (%): 95,00 / 97,00 / 98,00 / 99,00 / 99,50 / 99,90 / 99,99 / 99,999 / 99,9999

Air factor: 1,9 / 2,1 / 2,3 / 2,5 / 2,9 / 3,9 / 5,5 / 8-10 / 10-12

Compressed air specification

Max. operating pressure: 13 bar
Temperature range: + 10 – + 50 °C
Air quality: according to ISO 8573.1
class 1 dirt and oil
class 4 water
Pressure dew point: + 3 °C

Ambient conditions

Temperature range: - 50 °C – + 60 °C

Special Design

Stainless steel, Ex-proof, ATEX, IP 65, ASME

Technical data and connections

Dimensions H x W x D (mm): 925 x 560 x 1285 (PN-1150 and PN-1250) / 1000 x 1000 x 1710 (PN-1350 and PN-1450) / 1000 x 1000 x 1900 (PN-1550), > PN-1650 special dimensions on request

Connections: according to type of unit (details on request)

Mains connection: 230 V / 50 Hz (earthing type plug)

Noise level: from 45 up to max. 75 dB(A)



Certified according to ISO 9001:2008

Capacity (Nm³/h)

| Nitrogen Purity (%) ppm | 95,0 | 97 | 98,0 | 99,0 2,0 | 99,5 2,5 | 99,9 3,0 | 99,99 4,0 | 99,995 4,5 | 99,999 5,0 | 99,9999 6,0 |
|----------------------------|---------|---------|--------|-------------|-------------|-------------|--------------|---------------|---------------|----------------|
| IMT-PN 1150 | 5,70 | 4,70 | 4,10 | 3,20 | 2,60 | 1,60 | 0,90 | 0,70 | 0,40 | |
| IMT-PN 1250 | 10,80 | 8,70 | 7,90 | 5,80 | 5,10 | 3,20 | 1,30 | 1,10 | 0,85 | |
| IMT-PN 1350 | 20,80 | 17,10 | 15,80 | 12,60 | 9,50 | 6,30 | 3,20 | 2,50 | 1,80 | |
| IMT-PN 1450 | 31,20 | 25,60 | 23,70 | 18,90 | 14,20 | 9,50 | 4,80 | 3,60 | 2,40 | |
| IMT-PN 1550 | 49,20 | 40,10 | 35,60 | 28,40 | 22,10 | 12,60 | 6,30 | 4,80 | 3,20 | |
| IMT-PN 1650 | 84,00 | 59,90 | 53,80 | 46,60 | 37,80 | 23,20 | 11,70 | 8,80 | 5,80 | |
| IMT-PN 1750 | 117,40 | 94,50 | 85,10 | 63,00 | 50,40 | 30,30 | 16,40 | 11,90 | 7,30 | |
| IMT-PN 2000 | 140,70 | 116,50 | 98,30 | 77,50 | 63,00 | 38,80 | 19,40 | 14,60 | 9,70 | |
| IMT-PN 2150 | 211,10 | 174,30 | 146,50 | 115,00 | 94,50 | 57,80 | 29,00 | 21,80 | 14,50 | |
| IMT-PN 2250 | 260,40 | 215,30 | 188,00 | 143,90 | 116,60 | 73,40 | 35,80 | 26,90 | 18,00 | |
| IMT-PN 3000 | 372,80 | 308,70 | 269,90 | 205,80 | 167,00 | 102,90 | 51,40 | 38,60 | 25,80 | |
| IMT-PN 4000 | 442,10 | 366,50 | 320,30 | 244,70 | 198,50 | 121,80 | 60,90 | 45,80 | 30,60 | |
| IMT-PN 5000 | 630,00 | 522,90 | 457,80 | 348,60 | 283,50 | 174,30 | 87,20 | 65,40 | 43,60 | |
| IMT-PN 6000 | 913,50 | 756,00 | 661,50 | 504,00 | 409,50 | 252,00 | 126,00 | 94,50 | 63,00 | |
| IMT-PN 8000 | 1370,30 | 1134,00 | 992,30 | 756,00 | 630,00 | 378,00 | 189,00 | 142,00 | 95,00 | |

All values are at 20 °C ambient temperature.

on request