# **NITROSource**

Advanced technology nitrogen gas generator for industry leading performance; a source of increased productivity, sustainability and profitability.



With unique design and advanced energy saving technology at its core the market leading NITROSource nitrogen gas generator requires less compressed air to generate more nitrogen.

Together with substantially lower servicing costs, reduced downtime and a longer working life, it adds up to the most cost-efficient nitrogen supply available; significantly more affordable than traditional sources, and delivering huge savings over the lifetime of the generator.

With over 20 years experience in the market, and over 50,000 units installed globally, Parker domnick hunter is first choice for innovative and reliable gas generation technology.



#### **Features and Benefits:**

- · Energy saving technology Matches compressed air flow to the nitrogen outlet flow and purity, reducing compressed air use, and saving energy and money.
- · Lower cost maintenance, extensive working life

The Carbon Molecular Sieve, the 'engine' of the generator delivers nitrogen more efficiently, leading to a very long working life - and major savings on maintenance.

Five year warranty

Free through Parker extended warranty, offering the assurance of no unexpected maintenance costs and maximised factory up-time.\*

· Industry compliance

Food and pharmaceutical safe, in line with European statute (EIGA) and the USA Food & Drugs Administration (FDA Article 21) and Pharmacopeia compliance.

- · Gas quality control
  - Mass Flow Controller ensuring correct set pressure and flow

- Integral Oxygen Analyser constantly measures gas purity
- Off-Gas-By-Pass automatically vents off out-ofspecification gas ensuring product quality by ensuring gas quality
- Inlet and Outlet Pressure Regulation preventing damage to the generator or application
- Electronic Control System -100% management of all critical generator functions
- Remote monitoring

Enabling connection to proprietary remote management and the generator control systems to control and track gas parameters from a central location

· Easily upgradable supply Simply add extra generators as the application requirement grows.

\*Subject to terms and conditions. Please contact your local authorised Parker distributor.



ENGINEERING YOUR SUCCESS.

#### **Product Selection**

Performance data is based on 7 bar g air inlet pressure and 20°C - 25°C ambient temperature. Consult Parker for performance under specific conditions.

| Model  | Nitrogen flow rates m³/hr vs Purity (oxygen content) |       |       |        |        |        |       |       |       |      |       |       |       |       |
|--------|--|-------|-------|--------|--------|--------|-------|-------|-------|------|-------|-------|-------|-------|
|        | 5 ppm  | 10ppm | 50ppm | 100ppm | 250ppm | 500ppm | 0.10% | 0.40% | 0.50% | 1%   | 2%    | 3%    | 4%    | 5%    |
| N2-20P | 3.5  | 4.5   | 6.7   | 8.0    | 9.7    | 11.1   | 12.4  | 16.7  | 17.7  | 21.3 | 25.3  | 29.8  | 30.9  | 33.7  |
| N2-25P | 5.3  | 6.8   | 10.1  | 12.0   | 14.6   | 16.7   | 18.6  | 25.1  | 26.6  | 32.0 | 38.0  | 44.7  | 46.4  | 50.6  |
| N2-35P | 7.0  | 9.0   | 13.4  | 16.0   | 19.4   | 22.2   | 24.8  | 33.4  | 35.4  | 42.6 | 50.6  | 59.6  | 61.8  | 67.4  |
| N2-45P | 8.8  | 11.3  | 16.8  | 20.0   | 24.3   | 27.8   | 31.0  | 41.8  | 44.3  | 53.3 | 63.3  | 74.5  | 77.3  | 84.3  |
| N2-55P | 10.5   | 13.5  | 20.1  | 24.0   | 29.1   | 33.3   | 37.2  | 50.1  | 53.1  | 63.9 | 75.9  | 89.4  | 92.7  | 101.1 |
| N2-60P | 11.6   | 15.0  | 22.3  | 26.6   | 32.3   | 36.9   | 41.2  | 55.5  | 58.9  | 70.8 | 84.1  | 99.1  | 102.7 | 112.1 |
| N2-65P | 13.3   | 17.1  | 25.5  | 30.4   | 36.9   | 42.2   | 47.1  | 63.5  | 67.3  | 80.9 | 96.1  | 113.2 | 117.4 | 128.1 |
| N2-75P | 14.5   | 18.6  | 27.7  | 33.1   | 40.2   | 46.0   | 51.3  | 69.1  | 73.3  | 88.2 | 104.7 | 123.4 | 127.9 | 139.5 |
| N2-80P | 16.1   | 20.7  | 30.8  | 36.8   | 44.6   | 51.1   | 57.0  | 76.8  | 81.4  | 98.0 | 116.4 | 137.1 | 142.1 | 155.0 |

m³ reference standard 20°C, 1013 millibar(a), 0% relative water vapour pressure.

## **Inlet Parameters**

| Inlet Air Quality        | ISO 8573-1: 2010 Class 2.2.2 (2.2.1 with high oil vapour content) |
|--------------------------|---|
| Inlet Air Pressure Range | 5-13 bar g  |

#### **Environmental Parameters**

| Ambient Temperature   | 5-50°C                        |  |  |  |  |
|-----------------------|-------------------------------|--|--|--|--|
| Humidity              | 50% @ 40°C (80% @ MAX @ 31°C) |  |  |  |  |
| IP Rating             | IP20 / NEMA 1                 |  |  |  |  |
| Pollution Degree      | 2                             |  |  |  |  |
| Installation Category | II                            |  |  |  |  |
| Altitude              | < 2000 m                      |  |  |  |  |
| Noise                 | <80 dB (A)                    |  |  |  |  |

#### **Electrical Parameters**

| Generator Supply | 100 - 240 +/- 10% Vac 50/60Hz   |
|------------------|---|
| Generator Power  | 55 W  |
| Fuse             | 3.15 A<br>(Anti Surge (T), 250v, 5 x 20mm HBC, Breaking<br>Capacity 1500A @ 250v, IEC 60127, UL R/C Fuse) |

#### **Port Connections**

| Air Inlet            | G1                            |
|----------------------|-------------------------------|
| N2 Outlet to Buffer  | G1                            |
| N2 Inlet from Buffer | G <sup>1</sup> / <sub>2</sub> |
| N2 Outlet            | G <sup>1</sup> / <sub>2</sub> |

## **Weights and Dimensions**

| Model  | Height (mm) | Width (mm) | Depth (mm) | Weight (Kg) |
|--------|-------------|------------|------------|-------------|
| N2-20P |             |            | 881        | 299         |
| N2-25P | 1894        | 550        | 1050       | 384         |
| N2-35P |             |            | 1219       | 469         |
| N2-45P |             |            | 1388       | 553         |
| N2-55P |             |            | 1557       | 638         |
| N2-60P |             |            | 1726       | 722         |
| N2-65P |             |            | 1895       | 807         |
| N2-75P |             |            | 2064       | 892         |
| N2-80P |             |            | 2233       | 976         |

### **Packed Weights and Dimensions**

| Model  | Height (mm) | Width (mm) | Depth (mm) | Weight (Kg) |
|--------|-------------|------------|------------|-------------|
| N2-20P |             |            | 1090       | 398.4       |
| N2-25P | 729         | 2000       | 1260       | 495.4       |
| N2-35P |             |            | 1430       | 580.4       |
| N2-45P |             |            | 1600       | 686.4       |
| N2-55P | 832         |            | 1770       | 782.4       |
| N2-60P |             |            | 1935       | 897.4       |
| N2-65P |             |            | 2100       | 997.4       |
| N2-75P |             |            | 2275       | 1093.4      |
| N2-80P |             |            | 2445       | 1186.4      |

Parker has a continuous policy of product development and although the company reserves the right to changes specifications, it attempts to keep customers informed of any alterations.

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