

Atlas Copco

# Nitrogen generators PSA technology

NGP+ 160-360

## Guaranteed nitrogen purity at the lowest energy cost

When your production requires high-quality, high-flow nitrogen, there is no better solution than the Atlas Copco NGP+ 160-360. Our state-of-the-art PSA generator lets you produce your own, reliable supply of nitrogen with a purity of up to 99.999%. To ensure the integrity and continuity of your production, the NGP+ monitors the quality of your feed air and your gas output 24/7. It does this with superior efficiency to give you an industry-leading combination of peace of mind and the lowest cost of ownership.



### Cost savings

- On-site PSA gas generation with the lowest total cost of ownership.
- Minimal energy consumption per unit of  $N_2$ .
- Best-in-class adsorbent media utilization for maximum feed air efficiency, even in low-load conditions.



### Hands-off performance

- Easy nitrogen purity selection via the controller for maximum operational savings.
- Continuous gas purity measurement protects your  $N_2$  applications and products.
- Automated monitoring and routing of the feed air safeguard the integrity of the adsorbent.



### Reliability

- Continuous supply of  $N_2$  at a guaranteed purity.
- Self-protective design and operation ensure a long lifetime.
- Heavy-duty valves with a long service life for maximum uptime.
- Can be combined with a cylinder or bulk gas supply system.



## The complete high-flow nitrogen generator

- Digital zirconia gas purity sensor, flow meter, and pressure regulator included as standard.
- Advanced Elektronikon® Touch controller with large HD color touchscreen offers easy gas purity selection, purity alarm, feed air monitoring and interception, and connectivity options.
- Automatic start-up and stand-by mode allow for easy operation and avoid energy waste.
- Application protection system ensures only gas that meets the minimum purity requirement will reach your application.
- The generator and its software are designed to utilize the premium Carbon Molecular Sieve adsorbent with maximum efficiency.

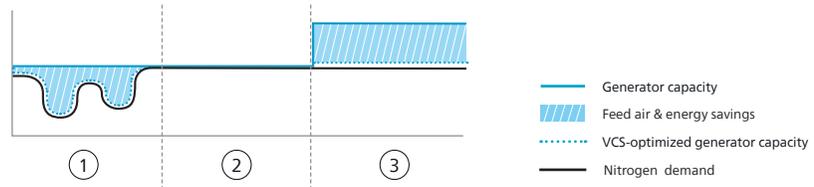


The valves of a PSA generator switch every minute on average. Because of their intensive use, these valves play an important role in the reliable operation of the generator and the continuity of your production. That is why the NGP+ features in-house qualified, heavy-duty valves with a long service life.

### Variable Cycle Saver

Most users don't need to utilize the maximum capacity of their nitrogen generator all the time. Our in-house developed Variable Cycle Saver (VCS) eliminates energy waste during lower demand and in colder temperatures, giving you up to 40% additional energy savings.

40%  
extra energy savings



- ① Low load: When there is less demand for nitrogen, VCS optimizes the PSA cycle to reduce the generator capacity and thus the feed air consumption to what is needed to generate the lower volume.
- ② Full load: The generator is sized for reliable production at full load in hot temperatures (if applicable). In these conditions, VCS is not needed.
- ③ Seasonal efficiency: At full load in cold conditions, a nitrogen generator works more efficiently, increasing its capacity. Here, the VCS of the NGP+ will also kick in to reduce feed air and energy costs.



## Technical specifications

Type		Nitrogen capacity											Dimensions (W x D x H)		Weight	
		95%	96%	97%	98%	99%	99.5%	99.9%	99.95%	99.99%	99.995%	99.999%	mm	in	kg	lbs
NGP 160+	Nm <sup>3</sup> /h	313	284	255	225	184	157	116	88	69	60	46	1830 x 1700 x 2055	72 x 67 x 81	2350	5181
	Scfm	184	167	150	132	108	93	68	52	40	35	27				
NGP 200+	Nm <sup>3</sup> /h	393	356	320	283	231	198	146	111	86	75	58	1830 x 1700 x 2370	72 x 67 x 93	2580	5688
	Scfm	231	210	189	166	136	116	86	65	51	44	34				
NGP 240+	Nm <sup>3</sup> /h	518	468	420	363	298	252	180	138	105	94	68	2296 x 1846 x 2620	90 x 73 x 103	3317	7313
	Scfm	305	276	247	214	175	148	106	81	62	55	40				
NGP 300+	Nm <sup>3</sup> /h	669	605	543	470	385	325	232	178	136	121	87	2380 x 1846 x 2633	94 x 73 x 104	3905	8609
	Scfm	394	356	320	276	226	191	137	105	80	72	51				
NGP 360+	Nm <sup>3</sup> /h	820	741	665	575	471	398	284	218	167	149	107	2496 x 1846 x 2620	98 x 73 x 103	4870	10737
	Scfm	482	436	391	338	277	234	167	128	98	88	63				

#### Performance reference conditions:

- Compressed air effective inlet pressure: 7 bar(g)/102 psi(g)
- Ambient/inlet air temperature: 20°C/68°F
- Inlet air quality [2:4:1] according to ISO 8573-1:2010

#### Flow unit reference conditions:

- Nm<sup>3</sup>/h: 20°C – 1 bar(a) – 0% RH
- Scfm: 68°F – 14.5 psi(a) – 0% RH

#### General notes:

- Nitrogen purity expressed as 100% minus oxygen content
- Nitrogen capacity can vary up to +/- 5%
- Outlet nitrogen quality [1:2:1] according to ISO 8573-1:2010

## Options

- Low ambient temperature settings (-10°C/14°F)
- Nitrogen quality (PDP) monitoring
- Ultra-low nitrogen PDP enabling (-70°C/-94°F)
- Electrical cabinet according to IP65/NEMA 4X
- Room oxygen alarm (wall mount)



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