

# PEAK Scientific Gas Generatoren



JETZT NEU VON CP-ANALYTICA

## Service

Wir sind für Sie da, warten Ihre bestehenden Generatoren und sorgen für den reibungslosen Betrieb.

## Neue Generatoren

Wasserstoff, Stickstoff, Luft - kontaktieren Sie uns - wir liefern die besten Generatoren für Ihre Anwendung.

### Nitrogen Generators for LCMSMS

NM18L	18L/min Nitrogen
N118LA	18L/min Nitrogen (incl air supply)
NM32L	32L/min Nitrogen
NM30LA	30L/min Nitrogen (incl air supply)
NM32LA	32L/min (incl air supply)
N110DR	30L/min Nitrogen (Dual Redundancy), for clinical apps
N110DR- HiFlo	30L/min Nitrogen (Dual Redundancy), for clinical apps
Genius 1021	design suitable for Zoex ZX1 & ZX2 cryogenic modulators
VARN2ZA	Design for specific Varian LCMS Models
NM60L	60L/min Nitrogen
Genius <sup>2</sup> 3010	64L/min Nitrogen
Genius <sup>2</sup> 3020	2 x 32L/min Nitrogen
NM120L	120L/min Nitrogen
NM180L	180L/min Nitrogen
NM240L	240L/min Nitrogen
NM300L	300L/min Nitrogen
NM360L	360L/min Nitrogen
NM420L	420L/min Nitrogen

### Nitrogen Generators for TurboVap Applications

CNMG34L	34L/min Nitrogen
CNMG140L	140L/min Nitrogen
CNMG280L	280L/min Nitrogen
CNMG420L	420L/min Nitrogen
CNMG560L	560L/min Nitrogen
CNMG700L	700L/min Nitrogen
CNMG840L	840L/min Nitrogen
CNMG980L	980L/min Nitrogen

### Nitrogen Generators for AB Sciex LCMSMS

NM20Z	design for single API LCMS
NM20ZL	design for single API LCMS & Photospray Application
NM40Z	design for 2 API LCMS
NM60Z	design for 3 API LCMS
NM80Z	design for 4 or more API LCMS
ABN2ZA	design for single API LCMS (incl air supply)
AB-3G	design for single API LCMS - 3rd Generation
Genius <sup>2</sup> 3030	design for 2 API LCMS (incl air supply)

### Purge Gas Generators for FT-IR Applications

PG14L	14L/min of Purge Gas
PG28L	28L/min of Purge Gas
PG85L	85L/min of Purge Gas

### Hydrogen Generators for GC Applications

PH200	200cc/min Hydrogen
PH300	300cc/min Hydrogen
PH600	600cc/min Hydrogen

### Zero Air Generators for GC Applications

ZA015	1,500cc/min Zero Air
ZA035	3,500cc/min Zero Air
ZA035A	3,500cc/min Zero Air, incl air supply
ZA070	7,000cc/min Zero Air
ZA070A	7,000cc/min Zero Air, incl air supply
ZA180	18,000cc/min Zero Air
ZA180A	18,000cc/min Zero Air, incl air supply
ZA300	30,000cc/min of Zero Air

### Ultra High Purity Nitrogen Generators

NG250A	250cc/min Nitrogen, incl air supply
NG600A	600cc/min Nitrogen, incl air supply
NG1000A	1,000cc/min Nitrogen, incl air supply
NG2000A	2,000cc/min Nitrogen, incl air supply
NG3000A	3,000cc/min Nitrogen, incl air supply
NG4000A	4,000cc/min Nitrogen, incl air supply
NG10L-HP	10,000cc/min Nitrogen

### Combination Units: UHP Nitrogen & Air for GC Applications

ANG250A	250cc/min Nitrogen, 1,200cc/min Air, incl air supply
ANG600A	600cc/min Nitrogen, 1,500cc/min Air, incl air supply
ANG1000A	1,000cc/min Nitrogen, 3,000cc/min Air, incl air supply
ANG3000A	3,000cc/min Nitrogen, 3,000cc/min Air, incl air supply
Fusion 1010	600cc/min Zero Nitrogen, 1.5L/min Zero Air, incl air supply

### Generators for TOC Applications

TOC1500	1,500cc/min TOC Gas for NPOC
TOC1500HP	1,500cc/min TOC Gas for NPOC & TC-IC
SCTOCA	300cc/min TOC Gas for Shimadzu TOC, incl air supply

### Calibration Gas Generators for CO<sub>2</sub> Analysers

CG15L	15L/min Calibration Gas
CG22L	22L/min Calibration Gas

### Compressed Air Dryers/ Purifiers

AD70L-70	70L/min air @70°C DP (80psig)
AD140L-70	140L/min air @70°C DP (80psig)
AD302L-70	302L/min air @70°C DP (80psig)
AD1010L-70	1010L/min air @70°C DP (80psig)

## Membrane Nitrogen Generators

### Features & Benefits:

#### Quick Return On Investment

The high nitrogen consumption of today's Mass Specs make nitrogen gas generators a more cost effective source of gas in your laboratory. Already using a generator for 4 hours per weekday makes a saving.

#### Convenience

Cylinders may need to be changed once or twice a day. A generator will free up valuable time that could be used more efficiently.

#### Immediate Performance

Once installed, the generator will simply do its job - just one maintenance visit per year and it should never let you down.

#### Space Saving Design

Most of our membrane generators fit nimbly under the average lab-bench whilst smaller units are wall mountable.

#### Very Quiet In Operation

To make sure you are not being distracted by any noise, we offer absolutely silent generators with no internal compressors. Our stand-alone units operate their internal compressors quietly in separate insulated compartments. You will hardly hear a thing.

#### Reliable & Durable

Our generators are designed to ensure you have a constant supply of nitrogen in your lab-achieved with only a single maintenance visit per annum.

#### Ingenious Little Touches

Our 'Genius' Range of Nitrogen Generators (ABNZZA, AB-3G & NM32LA) are our latest product developments. Safeguard features, such as alarms, service indicators and in the case of AB-3G our fail-safe compressor technology ensures that your nitrogen supply truly is as reliable as possible.

Membrane Technology has been around for many years and is commonly used to filter compressed air for the purpose of generating Nitrogen. Ever since Peak Scientific developed their first Membrane Nitrogen Generator we have been working with the manufacturers of Mass Specs and other laboratory applications to ensure a pure, dry and phthalate free source of nitrogen in the lab.

We have taken huge steps in improving quality and functionality of our Generators; including ingenious little touches which are unique in the market place.

Whether you need a system that connects seamlessly to your internal air supply or you prefer an independent boxed solution - you can be sure that your application gets what it needs.

**Applications // LCMS // LCMSMS // Turbovap // ELSD // NMR**



NM32LA

# Nitrogen for LCMSMS

// Designed in close cooperation with Waters, Thermo, Dionex, Agilent

// Models: NM18L, NX18LA, NM32L, NM32LA, N110DR, NM60L- NM420L

	NM18L	NX18LA	NM32L	NM32LA	N110DR (HiFlo)	NM60- 420L
<b>Application</b>	Thermo/ Dionex MSQ/ MSQ+	Thermo/ Dionex MSQ/ MSQ+/ ELSD	All LCMS Models (Agilent Jetstream)	All LCMS Models	All LCMS Models (Agilent Jetstream)	Multiple LCMS – All Models NMR
<b>Nitrogen</b>	18 L/min	18 L/min	32 L/min	32 L/min	30 L/min	60 – 420 L/min
<b>Internal Air Compressor</b>	No	Yes/ 1	No	Yes/ 2	Yes/ 4 (Dual Redundancy)	No
<b>Min Air Inlet Flow Rate</b>	50 L/min	n/a	92 L/min	n/a	n/a	180 – 1260 (depending on model)
<b>Min - Max Air Inlet Pressure</b>	120 - 145 psi 8.5 - 10 bar	n/a	120 - 145 psi 8.5 - 10 bar	n/a	n/a	125 - 145 psi 8.6 - 10 bar
<b>Max Outlet Pressure</b>	Input Dependent	100 psi	Input Dependent	100 psi	100 psi	Input Dependent
<b>Pressure Dewpoint</b>	-40°C / -40°F	-40°C / -40°F	-40°C / -40°F	-40°C / -40°F	-40°C / -40°F	-40°C / -40°F
<b>Min/ Max Operating Temperature</b>	5°C - 30°C 41°F - 86°F	5°C - 25°C 41°F - 77°F	5°C - 30°C 41°F - 86°F	5°C - 35°C 41°F - 95°F	5°C - 25°C 41°F - 77°F	5°C - 30°C 41°F - 86°F
<b>Max Relative Humidity</b>	70%	70%	70%	80%	70%	70%
<b>Max Altitude</b>	n/a	2000 Meters	n/a	2000 Meters	2000 Meters	n/a
<b>Particles</b>	< 0.1µm	< 0.1µm	< 0.1µm	< 0.1µm	< 0.1µm	< 0.1µm
<b>Phthalates</b>	None	None	None	None	None	None
<b>Suspended Liquids</b>	None	None	None	None	None	None
<b>Noise Level</b>	10 dB(A) @1m	< 54 dB(A) @1m	10 dB(A) @1m	54 dB(A) @1m	57 dB(A) @1m	10 dB(A) @1m
<b>Electrical Requirements</b>	None	230v 50/60Hz 3.6A	None	230v 50/60Hz 7.0A	230v 50/60Hz 8.4A	110- 240v 50/60Hz
<b>Power Consumption</b>	None	828 watts	None	1610 watts	1932 watts	depending on model
<b>Dimensions (cm/ ins) WxDxH</b>	47 x 17 x 76 19 x 7 x 30	40 x 70 x 71 15.7 x 27.5 x 28	47 x 17 x 76 19 x 7 x 30	60 x 75 x 71.2 23.6 x 29.5 x 28	95 x 59 x 71 37 x 23 x 28	61 x 67 x 140 24 x 26 x 55
<b>Weight (kg/ lbs)</b>	13/29	60/133	13/29	95/209	145/319	96 – 112 / 212 – 247 (depending on model)

# Nitrogen / Dry Air for AB SCIEX LCMSMS

// Designed in close cooperation with AB SCIEX

// Models: NM20ZL, NM20Z, ABN2ZA, AB-3G, NM40Z, NM60Z, NM80Z

	NM20ZL	NM20Z	ABN2ZA	AB-3G	NM40Z	NM60Z	NM80Z
<b>Application</b>	AB SCIEX LCMS with Photospray	All AB SCIEX LCMS Models	All AB SCIEX LCMS Models	All AB SCIEX LCMS Models	Up to 2 AB SCIEX LCMS	Up to 3 AB SCIEX LCMS	Up to 4 AB SCIEX LCMS
<b>Curtain Gas (Nitrogen)</b>	12 L/min @ 80 psi	12 L/min @ 80 psi	12 L/min @ 80 psi	12 L/min @ 80 psi	24 L/min @ 80 psi	36 L/min @ 80 psi	48 L/min @ 80 psi
<b>Source Gas (Dry Air)</b>	26 L/min @ 110 psi	26 L/min @ 110 psi	24 L/min @ 110 psi	24 L/min @ 110 psi	52 L/min @ 110 psi	78 L/min @ 110 psi	104 L/min @ 110 psi
<b>Exhaust Gas (Dry Air)</b>	8 L/min @ 60 psi	8 L/min @ 60 psi	8 L/min @ 60 psi	8 L/min @ 60 psi	16 L/min @ 60 psi	24 L/min @ 60 psi	32 L/min @ 60 psi
<b>Internal Air Compressor</b>	No	No	Yes/ 2	Yes/ 3 Fail-Safe Technology	No	No	No
<b>Min Air Inlet Flow Rate</b>	90 L/min	90 L/min	n/a	n/a	180 L/min	270 L/min	380 L/min
<b>Min - Max Air Inlet Pressure</b>	120 - 145 psi 8.3 - 10 bar	120 - 140 psi 8.3 - 10 bar	n/a	n/a	120 - 145 psi 8.3 - 10.2 bar	120 - 145 psi 8.3 - 10.2 bar	120 - 145 psi 8.3 - 10.2 bar
<b>Max Pressure Drop</b>	8 psi	8 psi	n/a	n/a	8 psi	8 psi	8 psi
<b>Min/ Max Operating Temperature</b>	5°C - 30°C 41°F - 86°F	5°C - 30°C 41°F - 86°F	5°C - 35°C 41°F - 95°F	5°C - 30°C 41°F - 86°F	5°C - 30°C 41°F - 86°F	5°C - 30°C 41°F - 86°F	5°C - 30°C 41°F - 86°F
<b>Max Relative Humidity</b>	70%	70%	80%	70%	70%	70%	70%
<b>Max Altitude</b>	n/a	n/a	2000 Meters	2000 Meters	n/a	n/a	n/a
<b>Particles</b>	< 0.1µm	< 0.1µm	< 0.1µm	< 0.1µm	< 0.1µm	< 0.1µm	< 0.1µm
<b>Phthalates</b>	None	None	None	None	None	None	None
<b>Suspended Liquids</b>	None	None	None	None	None	None	None
<b>Noise Level</b>	10 dB(A) @1m	10 dB(A) @1m	54 dB(A) @1m	54 dB(A) @1m	10 dB(A) @1m	10 dB(A) @1m	10 dB(A) @1m
<b>Electrical Requirements</b>	None	None	230v 50/60Hz 7.0A	230v 50/60Hz 9.5A	None	None	None
<b>Power Consumption</b>	None	None	1610 watts	2185 watts	None	None	None
<b>Dimensions (cm/ ins) WxDxH</b>	27 x 20 x 76 10.6 x 8 x 30	25 x 20 x 76 10 x 8 x 30	60 x 75 x 71.2 23.6 x 29.5 x 28	90 x 73 x 75.3 35.4 x 28.7 x 29.6	25 x 25 x 69 10 x 10 x 28	31 x 25 x 73 13 x 10 x 29	25 x 25 x 120 10 x 10 x 44
<b>Weight (kg/ lbs)</b>	14/31	13/29	95/209	145/316	15/33	16/35	17/37

## Nitrogen for TurboVaps

// Established in cooperation with Caliper/ Zymark

// Models: CNMG Range

	CNMG34L	CNMG140L
<b>Application</b>	Caliper TurboVap II	Caliper TurboVap LV
<b>Nitrogen</b>	34 L/min	140 L/min
<b>Internal Air Compressor</b>	No	No
<b>Min Air Inlet Flow Rate</b>	95 L/min	290 L/min
<b>Min - Max Air Inlet Pressure</b>	110 - 145 psi 7.6 - 10 bar	125 - 145 psi 8.5 - 10 bar
<b>Max Outlet Pressure</b>	Input Dependent	Input Dependent
<b>Min/ Max Operating Temperature</b>	5°C - 30°C 41°F - 86°F	5°C - 30°C 41°F - 86°F
<b>Electrical Requirements</b>	None	110v - 240v 50/60Hz
<b>Dimensions WxDxH (cm/ ins)</b>	25 x 17 x 76 10 x 7 x 30	61 x 67 x 140 24 x 26 x 55
<b>Weight (kg/ lbs)</b>	13/29	96/212

Peak Scientific also offers Nitrogen Generators with higher flow rates to cater for the requirements of multiple TurboVap applications. For more details, please contact your local Peak representative.



ABN2ZA

## PSA Nitrogen Generators

### Features & Benefits:

They just work, and work, and work, and work ...

Regenerative PSA Technology makes this possible: the purity of nitrogen generators is always as stated and does not decrease over time - not to mention Peak's long record of reliability.

### Purity

Although PSA generated nitrogen may still contain traces of argon, the output purity exceeds UHP cylinder gas specifications - and it is more cost effective as well!

### Single Source Solution

One generator can cater for the requirements of multiple applications.

### Simple but Effective

They are easy to install, easy to maintain, easy to use and easy on the eye as they are small enough to be placed anywhere in your lab.

### A Real Cost Saver

No more reordering, storing and changing of cylinder gas - saving you money all along the way.

Pressure Swing Adsorption (PSA) has been employed for decades and is the preferred choice for generating Ultra High Purity Nitrogen at low flow rates. The technology is self-regenerating, offering you a reliable and durable source of Ultra High Purity Nitrogen with little need for attention.

Peak Scientific also produces a range of combi-systems, which supply you with a source of dry, clean Air, as well as UHP Nitrogen.

In addition, we can make our systems available with or without an internal air compressor.

**Applications** // GC (make-up and carrier gas) // ICP // DSC // TGA // TOD // DMA // TMA // Circular Dichroism



NG Nitrogen Generator Range



“Innovative developments to our Nitrogen Range make it unique to the marketplace.”

# High Purity Nitrogen Generators

// Ideal as Make-Up and (packed) Carrier Gas for GC FID, GC NPD, GC ECD, GC AED

// Also suitable for ICP, DSC, TGA, TOD, DMA, TMA

	NG250(A)	NG600(A)	NG1000(A)	NG2000(A)	NG3000(A)	NG4000(A)
<b>Application</b>	GC, TGA, TMA	GC, TGA, TMA, TOD	GC, TGA, TMA	GC, TGA, TMA, TOD	GC, TGA, TMA, TOD	GC, TGA, TMA, TOD, ICP
<b>UHP Nitrogen</b>	250 cc/min	600 cc/min	1,000 cc/min	2,000 cc/min	3,000 cc/min	4,000 cc/min
<b>Max Outlet Pressure</b>	80 psi / 5.5 bar	80 psi / 5.5 bar	80 psi / 5.5 bar	80 psi / 5.5 bar	80 psi / 5.5 bar	80 psi / 5.5 bar
<b>Nitrogen Purity*</b>	99.9995%	99.9995%	99.9995%	99.9995%	99.9995%	99.9995%
<b>Pressure Dewpoint</b>	-70°C / -94°F	-70°C / -94°F	-70°C / -94°F	-70°C / -94°F	-70°C / -94°F	-70°C / -94°F
<b>Min/ Max Operating Temperature</b>	5°C - 35°C 41°F - 95°F	5°C - 35°C 41°F - 95°F	5°C - 35°C 41°F - 95°F	5°C - 35°C 41°F - 95°F	5°C - 35°C 41°F - 95°F	5°C - 35°C 41°F - 95°F
<b>Electrical Requirements</b>						
<b>- units without internal compressor</b>	230v 50Hz 0.5A 110v 60Hz 1.2A	230v 50Hz 0.5A 110v 60Hz 1.2A	230v 50Hz 0.5A 110v 60Hz 1.2A	230v 50Hz 0.5A 110v 60Hz 1.2A	230v 50Hz 0.5A 110v 60Hz 1.2A	230v 50Hz 0.5A 110v 60Hz 1.2A
<b>- units with internal compressor</b>	230v 50Hz 2.2A 110v 60Hz 5.2A	230v 50Hz 2.2A 110v 60Hz 5.2A	230v 50Hz 2.2A 110v 60Hz 5.2A	230v 50Hz 3.6A 110v 60Hz 8.0A	230v 50Hz 3.6A 110v 60Hz 8.0A	230v 50Hz 3.6A 110v 60Hz 8.0A
<b>Power Consumption</b>						
<b>- units without internal compressor</b>	230v - 115 watts 110v - 132 watts	230v - 115 watts 110v - 132 watts	230v - 115 watts 110v - 132 watts	230v - 115 watts 110v - 132 watts	230v - 115 watts 110v - 132 watts	230v - 115 watts 110v - 132 watts
<b>- units with internal compressor</b>	230v - 506 watts 110v - 572 watts	230v - 506 watts 110v 572 watts	230v - 506 watts 110v 572 watts	230v - 828 watts 110v - 880 watts	230v - 828 watts 110v - 880 watts	230v - 828 watts 110v - 880 watts
<b>Dimensions (cm/ ins) WxDxH</b>	43 x 41 x 62 17 x 16 x 25	43 x 41 x 62 17 x 16 x 25	43 x 41 x 62 17 x 16 x 25	56 x 67 x 136 22 x 26 x 54	56 x 67 x 136 22 x 26 x 54	56 x 67 x 136 22 x 26 x 54
<b>Weight (kg/lbs)</b>						
<b>- units without internal compressor</b>	21/46	21/46	21/46	59/130	68/150	68/150
<b>- units with internal compressor</b>	33/73	33/73	33/73	71/156	80/176	80/176

\*Based on residual oxygen content.

## High Purity Nitrogen & Dry Air Combi-Systems

// Ideal as Make-Up and (packed) Carrier Gas for GC FID, GC NPD, GC ECD, GC AED

// Also suitable for ICP, DSC, TGA, TOD, DMA, TMA

	ANG250(A)	ANG600(A)	ANG1000(A)	ANG3000(A)
<b>Application</b>	GC, TGA, TMA, DSC	GC, TGA, TMA, TOD, DSC	GC, TGA, TMA, DSC	GC, TGA, TMA, TOD, DSC
<b>UHP Nitrogen</b>	250 cc/min	600 cc/min	1,000 cc/min	3,000 cc/min
<b>Dry Air</b>	1,200 cc/min	1,500 cc/min	1,500 cc/min	3,000 cc/min
<b>Max Outlet Pressure</b>	80 psi / 5.5 bar	80 psi / 5.5 bar	80 psi / 5.5 bar	80 psi / 5.5 bar
<b>Nitrogen Purity*</b>	99.9995%	99.9995%	99.9995%	99.9995%
<b>Pressure Dewpoint</b>	-70°C / -94°F	-70°C / -94°F	-70°C / -94°F	-70°C / -94°F
<b>Electrical Requirements</b>	230v 50Hz 3A 110v 60Hz 5.0A	230v 50Hz 3A 110v 60Hz 5.0A	230v 50Hz 3A 110v 60Hz 5.0A	230v 50Hz 3A 110v 60Hz 6A
<b>Power Consumption</b>	230v – 575 watts 110v – 550 watts	230v – 575 watts 110v – 550 watts	230v – 575 watts 110v – 550 watts	230v – 690 watts 110v – 660 watts
<b>Dimensions (cm/ ins) WxDxH</b>	43 x 41 x 88 17 x 16 x 35	43 x 41 x 88 17 x 16 x 35	43 x 41 x 88 17 x 16 x 35	43 x 41 x 136 17 x 16 x 54
<b>Weight (kg/ lbs)</b>	40/88	40/88	40/88	87/192

\*Based on residual oxygen content.

## Large High Purity Nitrogen Generators

// Ideal as Make-Up and (packed) Carrier Gas for GC FID, GC NPD, GC ECD, GC AED

// Also suitable for ICP, DSC, TGA, TOD, DMA, TMA, Circular Dichroism

	NG10L-HP
<b>Application</b>	GC, TGA, TMA, TOD, Circular Dichroism
<b>UHP Nitrogen</b>	10 L/min
<b>Nitrogen Purity*</b>	99.9995%
<b>Internal Compressor</b>	No
<b>Min Inlet Air Flow</b>	65 L/min
<b>Min/ Max Inlet Pressure</b>	120 - 130 psi / 8.2 - 8.96 bar
<b>Max Outlet Pressure</b>	80 psi / 5.5 bar
<b>Min/ Max Operating Temperature</b>	5°C - 35°C 41°F - 95°F
<b>Pressure Dewpoint</b>	-70°C / -94°F
<b>Particles</b>	< 0.01 µm
<b>Electrical Requirements</b>	110- 230v 1.0A
<b>Dimensions (cm/ ins) WxDxH</b>	60 x 67 x 138 24 x 27 x 55
<b>Shipping Weight (kg/ lbs)</b>	166/365

\*Based on residual oxygen content.



NG10L - HP

A close-up photograph of a person's hands using a screwdriver to work on a piece of electronic equipment. The equipment is housed in a black plastic rack with multiple slots. The person is using a black-handled screwdriver to adjust a component on a circuit board. The background is blurred, showing other parts of the equipment and a large circular component with orange and yellow markings. The text is overlaid in the upper right quadrant of the image.

“We source robust, high performance parts to ensure safety and reliability in the Lab.”

## Hydrogen Generators

### Features & Benefits:

#### You will never run out of Hydrogen

Changing cylinders will become a thing of the past and our product's reliability records show that it is the most reliable hydrogen generator on the market today.

#### Availability

As long as there is water, you will be able to generate hydrogen- unlike helium it does not need to be mined and you no longer have to worry about rising costs as the helium resources are depleting.

#### It's safe

Forced air ventilation, self- checks for leaks and automatic shut- down should the system reach critical pressure make sure that there are no safety concerns at all.

#### Ingenious simplicity

As part of the 'Genius' Range of gas generators, the Hydrogen Generator offers easy installation and very little maintenance- thanks to ingenious controls it is also very easy to use.

#### Space saving

It nicely sits right next to your GC on your lab bench and hardly takes up any space. Also it can supply hydrogen to more than just one application, so no need to make room for multiple units.

Hydrogen has always been regarded suspiciously - it is a combustible gas after all. However, in actual fact, you need 4% of Hydrogen in the atmospheric environment before you run the risk of witnessing a big bang.

Peak Scientific Hydrogen Generators offer leak detection. This is paired with an alarm and control system to give you that extra peace of mind. Even in a smaller GC atmosphere it would therefore be difficult to achieve 4% Hydrogen content.

The Generators only produce Hydrogen on demand - all you need to do is switch it on and it will serve you for many years to come.

### Applications // GC (fuel and carrier gas)



PH

# Hydrogen Generators

// Ideal as Fuel and Carrier Gas for GC Applications

// Applications: FID, FPD, NPD, TCD

	PH200	PH300	PH600
<b>Application</b>	GC Fuel & Carrier Gas	GC Fuel & Carrier Gas	GC Fuel & Carrier Gas
<b>Hydrogen</b>	200 cc/min	300 cc/min	600 cc/min
<b>Outlet Pressure</b>	0 – 100 psi / 0 – 6.9 bar	0 – 100 psi / 0 – 6.9 bar	0 – 100 psi / 0 – 6.9 bar
<b>Hydrogen Purity</b>	99.9995%	99.9995%	99.9995%
<b>Water Purity Required</b>	< 1.0 $\mu$ S-cm Conductivity > 1.0M Ohm-cm Resistivity	< 1.0 $\mu$ S-cm Conductivity > 1.0M Ohm-cm Resistivity	< 1.0 $\mu$ S-cm Conductivity > 1.0M Ohm-cm Resistivity
<b>Gas Flow Indicator</b>	Yes	Yes	Yes
<b>Dual Pressure Safety</b>	Yes	Yes	Yes
<b>System Check</b>	Yes	Yes	Yes
<b>Leak Detection</b>	Yes	Yes	Yes
<b>Electrical Requirements</b>	230v 50Hz vA300 110v 60Hz vA300	230v 50Hz vA300 110v 60Hz vA300	230v 50Hz vA300 110v 60Hz vA300
<b>Power Consumption</b>	230v – 2300 watts 110v – 1150 watts	230v – 2300 watts 110v – 1150 watts	230v – 2300 watts 110v – 1150 watts
<b>Dimensions (cm/ ins) WxDxH</b>	31 x 49 x 42 12.2 x 19.3 x 16.5	31 x 49 x 42 12.2 x 19.3 x 16.5	31 x 49 x 42 12.2 x 19.3 x 16.5
<b>Weight (kg/ lbs)</b>	25/55	25/55	25/55

## Zero Air Generators

### Features & Benefits:

A system to meet your specific needs

Whether you need as little as 1.5L/min of zero air or as much as 30L/min, we have a suitable generator for you. Most of the models are also available with an internal air compressor providing you with a wider choice.

### Complete Convenience

No more changing cylinders! Save not only the time and money, but also the need to recalibrate your instrument.

### So much more than an Air Purifier

Our zero air generators produce air with a total hydrocarbon concentration of less than 0.1 ppm.

### Plug & Play

The generator is very easy to install and does what you want it to do - with minimum maintenance requirements.

### Compact

Most of our zero air generators are very compact in size and nicely fit anywhere in your laboratory. Others are so small and light they can be attached to the lab wall, not taking any laboratory space.

The catalyst chambers inside our Zero Air Generators make sure compressed air is stripped of all hydrocarbons before it is fed into your application. Available in different shapes and sizes, dependent or independent from external air supplies, Peak Zero Air Generators can fulfill all of your requirements.

Of course, minimal maintenance and a long, trouble-free Generator life come as a Peak Standard.

### Applications // GC (flame gas)



Zero Air with internal compressor

# Zero Air Generators

// Ideal as Flame Gas

// Applications: FID, FPD, ECD, THA

	ZA015	ZA035(A)	ZA070(A)	ZA180(A)	ZA300
<b>Application</b>	FID, FPD, ECD, THA	GC, TGA, TMA, TOD	GC, TGA, TMA	GC, TGA, TMA, TOD	GC, TGA, TMA, TOD
<b>Zero Air</b>	1,500 cc/min	3,500 cc/min	7,000 cc/min	18,000 cc/min	30,000 cc/min
<b>Outlet CH<sub>4</sub> Concentration</b>	< 0.1 ppm	< 0.1 ppm	< 0.1 ppm	< 0.1 ppm	< 0.1 ppm
<b>Max Inlet CH<sub>4</sub> Concentration</b>	100 ppm	100 ppm	100 ppm	100 ppm	100 ppm
<b>Particles</b>	< 0.01 µm	< 0.01 µm	< 0.01 µm	< 0.01 µm	< 0.01 µm
<b>Max Outlet Pressure</b>					
- units without internal compressor	125 psi / 8.6 bar	125 psi / 8.6 bar	125 psi / 8.6 bar	125 psi / 8.6 bar	125 psi / 8.6 bar
- units with internal compressor	80 psi / 5.5 bar	80 psi / 5.5 bar	80 psi / 5.5 bar	80 psi / 5.5 bar	80 psi / 5.5 bar
<b>Electrical Requirements</b>					
- units without internal compressor	230v 1.2A 110v 2.3A	230v 1.2A 110v 2.3A	230v 1.2A 110v 2.3A	230v 2A 110v 4.5A	230v 8.9A
- units with internal compressor	n/a	230v 3.1A 110v 6.9A	230v 3.1A 110v 6.9A	230v 4.9A 110v 8.8A	n/a
<b>Power Consumption</b>					
- units without internal compressor	230v – 276 watts 110v – 253 watts	230v – 276 watts 110v – 253 watts	230v – 276 watts 110v – 253 watts	230v – 460 watts 110v – 495 watts	2047 watts
- units with internal compressor	n/a	230v – 713 watts 110v – 759 watts	230v – 713 watts 110v – 759 watts	230v – 1127 watts 110v – 968 watts	n/a
<b>Dimensions (cm/ ins) WxDxH</b>					
- units without internal compressor	25 x 16 x 51 10 x 6 x 20	25 x 16 x 51 10 x 6 x 20	25 x 16 x 51 10 x 6 x 20	25 x 16 x 71 10 x 6 x 30	43 x 41 x 88 17 x 16 x 35
- units with internal compressor	n/a	43 x 41 x 88 17 x 16 x 39	43 x 41 x 88 17 x 16 x 39	43 x 41 x 88 17 x 16 x 39	n/a
- 19" Rack Versions	18 x 48 x 43 7 x 19 x 17	18 x 48 x 43 7 x 19 x 17	18 x 48 x 43 7 x 19 x 17	18 x 48 x 43 7 x 19 x 17	n/a
<b>Weight (kg/ lbs)</b>					
- units without internal compressor	10/22	10/22	10/22	10/22	64/141
- units with internal compressor	n/a	62/136	62/136	62/136	n/a
- 19" Rack Versions	n/a	13/29	13/29	13/29	n/a

# Purge Gas Generators

## Features & Benefits:

### It's simply the best

Gas from our purge gas generators improves signal to noise ratio of your FT-IR, offers cleaner backgrounds in a shorter period of time and allows for more accurate analysis!

### Convenient

No more purchasing of cylinders, no transport or storage issues but best of all no need to change them either. Simply connect the purge gas generator and it will offer you carbon dioxide free gas on demand - it's that easy.

### Fast Return on Investment

High Flow demands of FT-IR Spectrometers make on demand purge gas a much more cost effective solution. Minimal maintenance requirements and a very good reliability track-record mean low ongoing running costs.

### So Small

All models are small, some so small and light-weight they can be mounted on your lab wall, making sure they do not take up valuable lab space.

Operating an FT-IR with no clean reference can be a bit of a challenge. Peak Scientific Purge Gas Generators give you gas that is free of organic contaminants, such as Carbon Dioxide.

A series of high performance filters further ensure maximum reduction of moisture.

## Applications // FT-IR Analyzers

// Improve signal to noise ratio and offer cleaner backgrounds in a shorter period of time

	PG14L	PG28L	PG85L
<b>Application</b>	FT-IR	FT-IR	FT-IR
<b>Purge Gas</b>	14 L/min	28 L/min	85 L/min
<b>CO<sub>2</sub> Content</b>	< 1.0 ppm	< 1.0 ppm	< 1.0 ppm
<b>Particles</b>	< 0.01 µm	< 0.01 µm	< 0.01 µm
<b>Pressure Dewpoint</b>	-70°C / -94°F	-70°C / -94°F	-70°C / -94°F
<b>Min/ Max Inlet Pressure</b>	100 – 120 psi / 6.9 – 8.2 bar	100 – 120 psi / 6.9 – 8.2 bar	100 – 120 psi / 6.9 – 8.2 bar
<b>Inlet Air Requirement</b>	26 L/min	51 L/min	155 L/min
<b>Max Inlet Air Temperature</b>	25°C / 77°F	25°C / 77°F	25°C / 77°F
<b>Max Outlet Pressure</b>	100 psi / 6.9 bar	100 psi / 6.9 bar	100 psi / 6.9 bar
<b>Electrical Requirements</b>	100-240v 80mA	100-240v 80mA	110v 50/60Hz 100mA 230v 50/60Hz 100mA
<b>Dimensions (cm/ ins) WxDxH</b>	25 x 16 x 66 9.8 x 6.3 x 26	25 x 16 x 90 9.8 x 6.3 x 35.4	32 x 22 x 103 13 x 9 x 40
<b>Weight (kg/ lbs)</b>	18.5/41	20.5/45.1	41.5/91.5

“We work as a team to ensure the best solution for our customers.”



# Calibration Gas Generators

## Features & Benefits:

### Approved

Meets the requirements for emissions testing as per Federal Register Specification 40CFR 86.114-79.

### Cost Effective

Flow requirements of up to 22 L/min catered for by a single generator, no more recurring cylinder costs.

### Convenient

Generates gas when you need it - just connect the generator and it will produce calibration gas when the CO<sub>2</sub> Analyzers demands it. It could not be easier.

### Durable

A simple but effective design with just a few moving parts mean that the generator needs little in terms of maintenance- and still it will last!

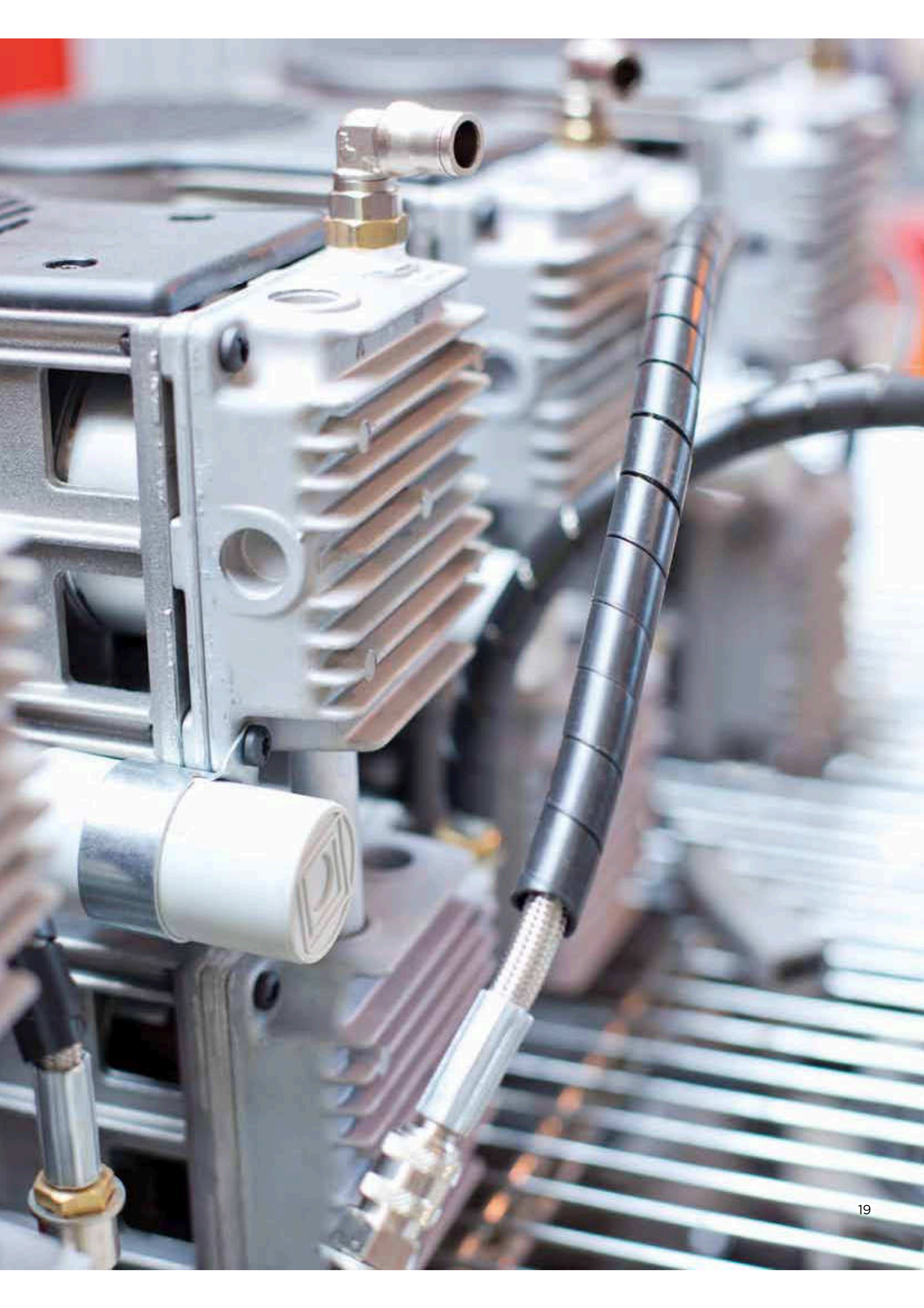
Global Warming. Rising Oceans. Food and Water Shortages. The list is endless when it comes to predictions for the future. It is therefore very important that emissions are being measured, monitored and analyzed, hopefully leading to steps being taken to reduce the risk of permanent climate change.

This task requires the purest source of Calibration Gas for your CO<sub>2</sub> Analyzer. Peak Scientific is proud to offer you our Calibration Gas Generators to ensure the cleanest possible starting point for your analysis.

## Applications // CO<sub>2</sub> Analyzers

// Low CO<sub>2</sub> content in calibration gas for more effective CO<sub>2</sub> measurement

	CG15L	CG22L
<b>Application</b>	CO <sub>2</sub> Analyzers	CO <sub>2</sub> Analyzers
<b>Calibration Gas</b>	15 L/min	22 L/min
<b>CO<sub>2</sub> Content</b>	< 1.0 ppm	< 1.0 ppm
<b>CO Content</b>	< 1.0 ppm	< 1.0 ppm
<b>THC Content</b>	< 0.1 ppm	< 0.1 ppm
<b>Pressure Dewpoint</b>	-75°C / -103°F	-75°C / -103°F
<b>Min/ Max Inlet Pressure</b>	100 – 125 psi / 6.9 – 8.6 bar	100 – 125 psi / 6.9 – 8.6 bar
<b>Inlet Air Requirement</b>	28 L/min	37 L/min
<b>Warm Up Time for specified THC Content</b>	45 mins	45 mins
<b>Electrical Requirements</b>	230v 2.6A 115v 5.2A	230v 8.7A 115v 8.7A
<b>Power Consumption</b>	230v 598 w 115v 598 w	230v 2000 w 115v 1000 w
<b>Dimensions (cm/ ins) WxDxH</b>	43 x 41 x 62 17 x 16 x 20	43 x 41 x 88 17 x 16 x 35
<b>Weight (kg/ lbs)</b>	29/64	37/81



## TOC Gas Generators

### Features & Benefits:

#### Just right for your application

With so many different TOC analyzers on the market, we have developed a number of systems to make sure that your requirements can be met. NPOC Analysis can be carried out with the basic TOC1500 whereas the highly demanding TC-IC Analysis can be carried out with a TOC1500HP.

#### Absolutely Unique

Our high purity SCTOCA is the only TOC generator on today's market that comes as a stand-alone solution with an internal air compressor. What can be better than total independence from other sources?

#### It's never been easier

TOC generators are so very convenient; you never need to change cylinders. They are also easy to install and are virtually maintenance free. You will never run out of gas again.

Testing water is important, whether you are analyzing waste water, natural water sources or water for injectables. To enable you to detect the slightest contamination, our TOC Generators offer pure, hydrocarbon and carbon dioxide free gas that ensure a baseline free of any spikes.

If you work in a lab where compressed air is difficult to come by, our stand-alone TOC Generator will not let you down.

### Applications // TOC Analyzers



SCTOCA

# TOC Gas Generators

// Ideal for stable baselines

// Applications: TOC Analyzers

	TOC1500	TOC1500HP	SCTOCA
<b>Application</b>	TOC- NPOC	TOC- NPOC, TOC- TC-IC	TOC- NPOC, TOC- TC-IC
<b>TOC</b>	1,500 cc/min	1,500 cc/min	300 cc/min
<b>CH<sub>4</sub> Content (as Methane)</b>	< 2.0 ppm	< 0.1 ppm	< 0.1 ppm
<b>CO<sub>2</sub> Content</b>	< 1.0 ppm	< 1.0 ppm	< 1.0 ppm
<b>CO Content</b>	n/a	n/a	< 1.0 ppm
<b>SOX Content</b>	n/a	n/a	< 1.0 ppm
<b>Pressure Dewpoint</b>	-70°C / -94°F	-70°C / -94°F	-70°C / -94°F
<b>Min/ Max Inlet Pressure</b>	100 – 120 psi / 6.9 – 8.2 bar	100 – 120 psi / 6.9 – 8.2 bar	n/a
<b>Inlet Air Requirement</b>	6 L/min	9.5 L/min	n/a
<b>Max Inlet THC Content</b>	100 ppm	100 ppm	n/a
<b>Max Inlet Air Temperature</b>	25°C / 77°F	25°C / 77°F	n/a
<b>Max Outlet Pressure</b>	input dependent	input dependent	80 psi / 5.5 bar
<b>Electrical Requirements</b>	100v - 240v 50/60 Hz 80HA	100 - 240v 50/60 Hz 4.5A	230v 50/60Hz 4.0A
<b>Power Consumption</b>	240v – 19.2 w 100v – 8 w	240v – 1080 w 100v – 450 w	920 watts
<b>Dimensions (cm/ ins) WxDxH</b>	25 x 16 x 66 9.8 x 6.3 x 26	43 x 41 x 62 17 x 16 x 20	49.7 x 36.4 x 91 19.6 x 14.3 x 35.8
<b>Weight (kg/ lbs)</b>	6/13	21/46	48/106

# Air Dryers

## Features & Benefits:

### Cost Effective

Air dryers allow you to produce instrument grade air from your existing in-house air supply - no purchase of a new compressor required!

### It's simple

The generator just needs to be installed in line between your air source and your instrument and you are ready to rumble.

### Same Shapes & Sizes

Get up to 1,010 L/min of dry air from a generator that can be attached to your wall - it is not taking any more of your precious laboratory space.

### Durable

A simple but effective design with just a few moving parts mean that the generator needs little in terms of maintenance - and still it will last!

Attachable to any compressed air source, Peak Scientific Air Dryers deliver Dry Air for your applications. Compact and lightweight, these Air Dryers are a must-have for any modern laboratory. The Air Dryers come with just a few moving parts and are very sturdy products - ideal to prevent moisture contamination in any of your applications. A match made in heaven indeed.

// Pure, dry, instrument grade air

// Various applications

	AD70L	AD140L	AD302L	AD1010L
<b>Dry Air</b>	70 L/min	140 L/min	302 L/min	1010 L/min
<b>Min/ Max Inlet Pressure</b>	100 - 120 psi / 6.9 - 8.2 bar	100 - 120 psi / 6.9 - 8.2 bar	100 - 120 psi / 6.9 - 8.2 bar	100 - 120 psi / 6.9 - 8.2 bar
<b>Max Inlet Air Temperature</b>	25°C / 77°F	25°C / 77°F	25°C / 77°F	25°C / 77°F
<b>Max Inlet CH<sub>4</sub> Concentration</b>	100 ppm	100 ppm	100 ppm	100 ppm
<b>Air loss for regeneration</b>	15 L/min	31 L/min	66 L/min	202 L/min
<b>Pressure Drop</b>	5 psi	5 psi	5 psi	5 psi
<b>Electrical Requirements</b>	100v - 240v 50/60Hz 80mA	100v - 240v 50/60Hz 80mA	100v - 240v 50/60Hz 80mA	110v 50/60Hz 100mA 230v 50/60Hz 100mA
<b>Power Consumption</b>	100v - 8w 240v - 19.2w	100v - 8w 240v - 19.2w	100v - 8w 240v - 19.2w	110v - 11w 230v - 23w
<b>Dimensions WxDxH (cm/ ins)</b>	25 x 16 x 66 10 x 6 x 26	25 x 16 x 66 10 x 6 x 26	25 x 16 x 90 10 x 6 x 36	30 x 20 x 103 13 x 9 x 40
<b>Weight (kg/ lbs)</b>	18.5/41	19/42	21/46	42/92



# Peak Scientific Service Plans

Our Service & Support Team is known for its excellence. We are there for you - wherever you are - making sure you experience maximum uptime of your Generator.

Because our products are well designed, our Generators rarely need attention; however, to maintain their performance, regular maintenance is essential.

No doubt, in your lab you already have enough to worry about, so just take it easy. Relax. It's time you let us take the strain in the lab and ensure that your generator offers 'Peak' performance throughout its lifetime with a Peak Scientific Service Plan.

We offer 2 different types of cover: Standard and Complete. The names of our plans really say it all, but here are some more details:

	Standard	Complete
<b>PM Visits</b>		
Call- out, labor, travel	Yes	Yes
Service Parts	Yes	Yes
Function Check	Yes	Yes
Additional Spare Parts (if required)	No	Yes
Compressor Refits/ Replacements (if applicable)	No	Yes
<b>Breakdowns</b>		
Call- out, labor, travel	No	Yes
Spare Parts	No	Yes
Full Breakdown Cover	No	Yes
All on- site breakdown visits included	No	Yes
Guaranteed Response Time	No	Yes
System Upgrades (if applicable)	No	Yes
Flexible Payment	No	Yes