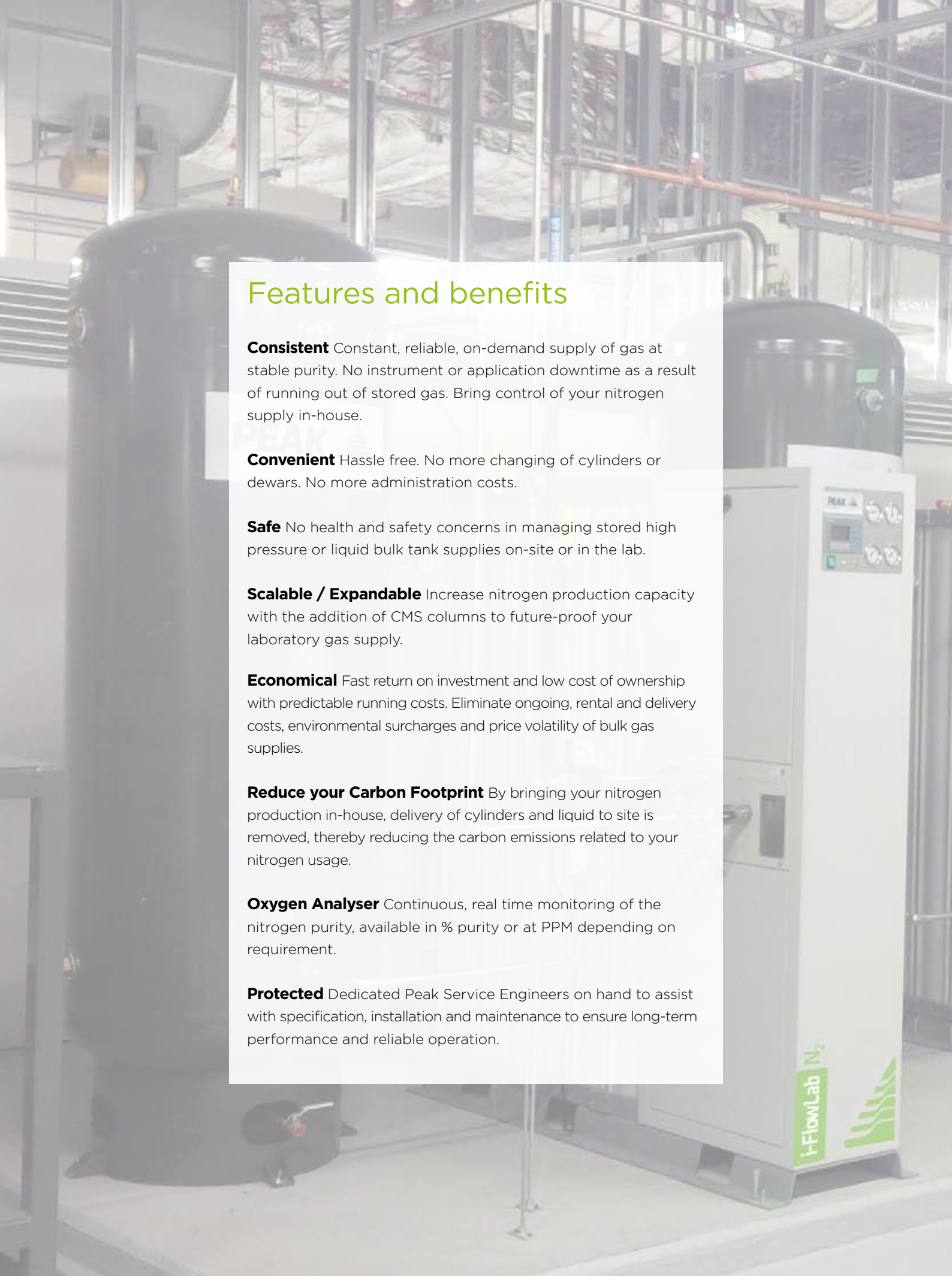
PEAK SCIENTIFIC

*Your local **gas generation** partner*

i-FlowLab

Scalable, high-flow, high-purity nitrogen solution for laboratories



Features and benefits

Consistent Constant, reliable, on-demand supply of gas at stable purity. No instrument or application downtime as a result of running out of stored gas. Bring control of your nitrogen supply in-house.

Convenient Hassle free. No more changing of cylinders or dewars. No more administration costs.

Safe No health and safety concerns in managing stored high pressure or liquid bulk tank supplies on-site or in the lab.

Scalable / Expandable Increase nitrogen production capacity with the addition of CMS columns to future-proof your laboratory gas supply.

Economical Fast return on investment and low cost of ownership with predictable running costs. Eliminate ongoing, rental and delivery costs, environmental surcharges and price volatility of bulk gas supplies.

Reduce your Carbon Footprint By bringing your nitrogen production in-house, delivery of cylinders and liquid to site is removed, thereby reducing the carbon emissions related to your nitrogen usage.

Oxygen Analyser Continuous, real time monitoring of the nitrogen purity, available in % purity or at PPM depending on requirement.

Protected Dedicated Peak Service Engineers on hand to assist with specification, installation and maintenance to ensure long-term performance and reliable operation.

The expandable on-demand nitrogen solution

i-FlowLab from Peak Scientific provides a total laboratory solution for on-site generation of nitrogen gas, delivering a continuous and consistent supply of high-purity nitrogen at the required pressure and flow rates to meet the full and varying demands of your laboratory or research facility.

Engineered around PSA technology, i-FlowLab is available in various pre-configured specifications to suit specific flow and purity demands. A single i-FlowLab generator installation can provide nitrogen at flow rates from 40LPM-3402LPM. Purities are specified at time of system design to meet the needs of the application up to 99.999%*.

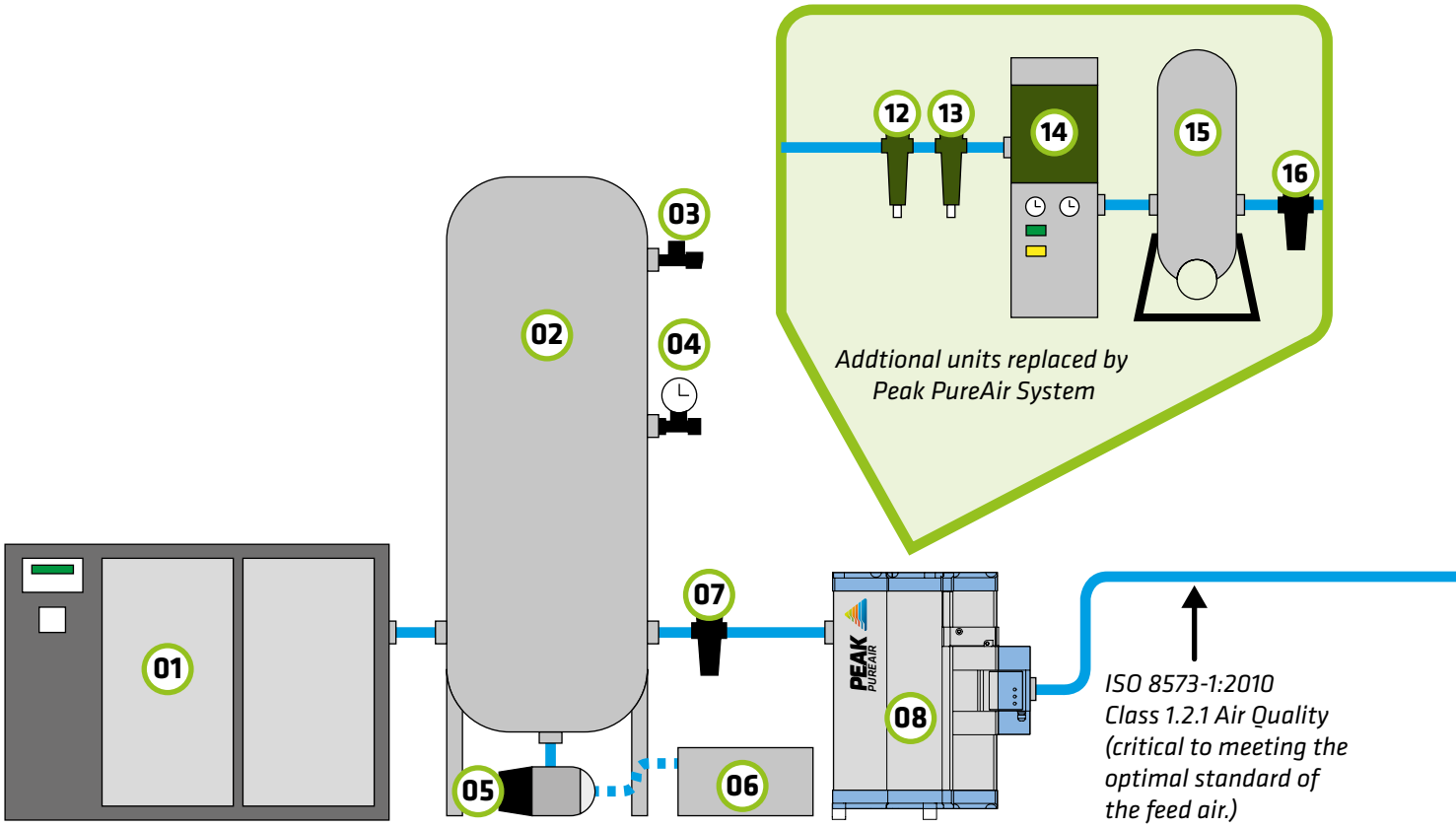
Thanks to the expandable design, additional CMS columns can be added to each i-FlowLab generator after installation to increase the maximum flow rate.**

* Model and variant dependant, higher flow rates are available using multiple i-FlowLab generator systems
** Each model is based on banks of paired CMS columns, ranging from single pair in 6010 to 10 pairs in 6100

Total solution

In addition to the i-FlowLab generator, Peak Scientific also provides a complete self-contained pre-filtration package, in the form of Peak PureAir, along with necessary ancillary tanks tailored specifically to meet the requirement of your facility. All that's required is the provision of a suitably powered air compressor, which can be specified separately if not already available on-site. Peak's team can fully project manage a solution for your lab inclusive of design, installation and commissioning, ensuring maximum efficiency in nitrogen supply and energy.

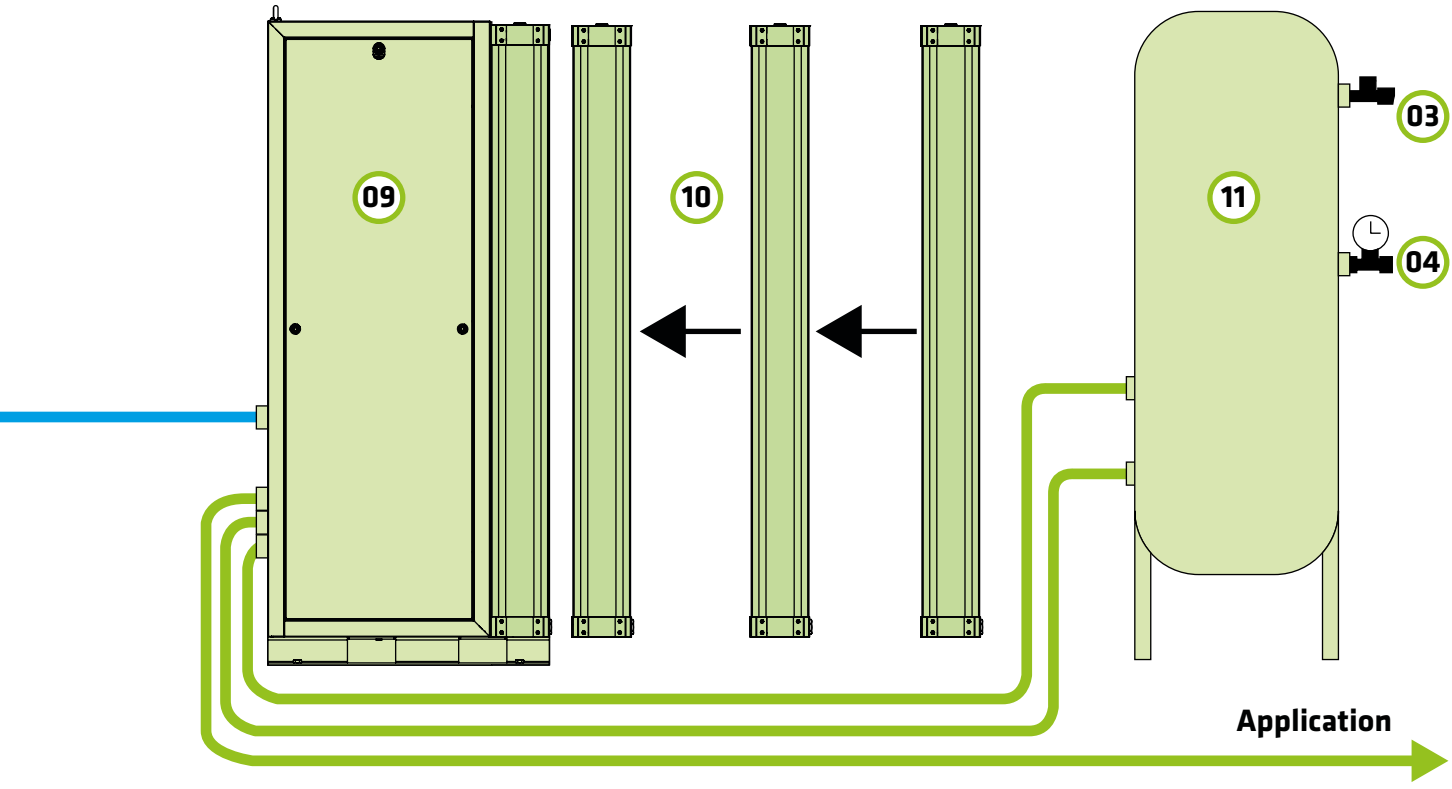
Example installation



Expand to meet demand

i-FlowLab benefits from an innovative, expandable design that gives you the flexibility to continually increase nitrogen production capacity at a later date (after initial purchase and installation), allowing for system expansion as your laboratory's demands grow. This makes i-FlowLab a versatile and future-proof solution for lab facilities looking for a sustainable alternative to bulk delivered gas, but concerned about being restrained by a fixed capacity solution. i-FlowLab delivers the best of both worlds: flexibility and versatility on one hand, sustainability and cost stability on the other.

Ref	Description	Ref	Description		Ref	Description
1	Compressor	7	Bulk Water Separator (Optional)	Optical To Peak Pure Air System	12	1 µm Coalescing Filter
2	Wet Air Receiver	8	Peak PureAir System		13	0.01 µmCoalescing Filter
3	Pressure Release Valve	9	Peak i-FlowLab Nitrogen Generator		14	Desiccant Dryer (-40° Cpdp)
4	Pressure Gauge	10	Peak i-FlowLab Expandable Capacity		15	Carbon Bed
5	Auto Condensate Drain	11	Nitrogen Process Tank		16	Post F ilter
6	Oil/Water Separator (Optional)					



Technological innovation

The streamlined, compact footprint design of the i-FlowLab generator system allows far more efficient use of available space, in comparison to bulk tanks, large quantities of dewars or pressurized cylinders. Additionally it eradicates the uncertainties, administrative hassle and volatile ongoing costs associated with delivered gas supply. As well as being safe and practical, i-FlowLab will also assist in minimizing potential health & safety concerns as the full supply solution is brought 'in-house'.

With technological innovation also comes industry-leading consultation, project delivery, ongoing global and local technical service and support. Peak Scientific defines the benchmark for customer service and product support. Our highly trained and dedicated specialists will be happy to guide you through specification and delivery of the i-FlowLab solution best suited to meet your demands.

For a safer, more reliable and hassle-free nitrogen supply for your laboratory that makes long-term economic sense, i-FlowLab from Peak Scientific is the perfect solution.

Applications

Providing high purity nitrogen for multiple LC-MS instruments

High flow nitrogen supply for Sample Concentrators

Whole of laboratory, whole of facility solution

Other laboratory instruments requiring nitrogen – eg. FT-IR, TOC, Glove Boxes and more

Meets instrumentation manufacturers specifications

Technical specifications

	LPM *									
Oxygen Content (PPM)	**601X**	**602X**	**603X**	**604X**	**605X**	**606X**	**607X**	**608X**	**609X**	**610X**
10ppm	40	80	120	150	188	235	265	300	330	370
100ppm	69	138	207	270	335	405	462	532	591	644
500ppm	102	195	280	362	452	549	634	724	812	905
0.10%	118	212	318	406	508	620	710	812	890	989
0.50%	150	300	450	585	737	874	1015	1168	1314	1460
1%	190	370	530	708	885	1062	1238	1415	1574	1748
2%	245	490	665	858	1065	1287	1507	1720	1930	2145
3%	295	578	810	1045	1278	1574	1828	2090	2352	2612
4%	355	645	915	1136	1420	1704	1988	2272	2556	2840
5%	390	715	1070	1416	1649	2045	2478	2778	3145	3402
Voltage	100 - 230 VAC ±10%									
Frequency	50/60 Hz									
Current	2.0 Amp									
Input Connection	C20 Plug									
Electrical Requirements	110 - 230 VAC / 50 / 60Hz									
Power Cord (Supplied)	C19 Socket to local connection									
Power Consumption	250 Watts									
Operating Temperature	5°C - 50°C / 41°F - 122°F									
Heat Output	Air Output 5-10°C Above Ambient									
Pollution Degree	2									
Installation Category	II									
Dimensions										
Width mm (inch)	500 (19.68)									
Height mm (inch)	1738 (68.42)									
Depth mm (inch)	760 (29.92)	920 (36.22)	1080 (42.52)	1240 (42.52)	1400 (55.12)	1560 (61.42)	1720 (67.72)	1880 (74.02)	2040 (80.31)	2200 (86.61)
Weight kg (lbs)	197 (433)	282 (620)	367 (807)	452 (994)	537 (1181)	622 (1368)	707 (1555)	792 (1742)	877 (1929)	962 (2116)
Shipping weight kg (lbs)	277 (609)	364 (801)	452 (992)	538 (1184)	625 (1375)	712 (1566)	799 (1758)	886 (1949)	973 (2141)	1060 (2333)
Noise Level	59dBa @ 1m									

**Performance data is based on 7 bar (G) inlet air pressure and 20 - 25 deg C ambient temperature.*
(Flow reference conditions, 20 deg C, 1013 millibar (a), 0% Relative Humidity)

[PEAK Protected]

Peak Scientific has highly trained, fully certified Field Service Engineers located in over 20 countries across every continent around the world. This allows us to provide an industry-leading rapid response service to our customers. With **[Peak Protected]**, your laboratory's productivity becomes our top priority.

To discuss our different coverage levels and payment options speak to your local Peak Representative or for further information contact: **protected@peakscientific.com**.

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