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Gas Separation and Filtration Division EMEA



ANALYTICAL GAS SYSTEMS

CATALOGUE

ENGINEERING YOUR SUCCESS.

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Gas Chromatography

The science of separation, gas chromatography is an important technique used for drug, arson, toxicology and other organic compound analysis. It is carried out in laboratories across a range of areas, including quality control, R&D, pharmaceuticals and forensics.

In order to obtain accurate and meaningful results, Parker understand that your gas management system has to deliver a consistent and high-purity gas stream - from your source to your instrumentation - without risk of introducing contaminants.



Installation Example

- Nitrogen
- Hydrogen
- Zero Air
- Compressed Air



Hydrogen Generators

For GC combustion detector applications



Technical Data

Ambient Temperature Range	5 - 40°C (41 - 104°F)
Water Supply Pressure*	0.1 bar g (1.45 psi g)
Water Supply Flow Rate*	1 L/min
Water Quality	Deionised. ASTM II, >1MΩ, <1μs, filtered to <100μm
Supply Voltage Range	90 - 264V 50/60Hz
Port Connections	Hydrogen Outlet Water Drain Water Fill*
	1/8" Compression Fitting Quick Release Push in Fitting Quick Release Push in Fitting

*With optional AWF

Product Selection

Model	Flow Rate	Purity*	Water Consumption (24/7, full flow)	Delivery Pressure		Optional Auto Water Fill (AWF)
	ml/min	%	L/week	bar g	psi g	
20H-Fuel	160	>99.9995	1.25	0.3-6.89	5-100	YES
40H-Fuel	250	>99.9995	2	0.3-6.89	5-100	YES
60H-Fuel	500	>99.9995	4	0.3-6.89	5-100	YES

*With respect to oxygen

Note: For auto water fill option add suffix AWF ie 20H-AWF

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight (Empty)		Weight (Full of Water)	
	mm	in	mm	in	mm	in	kg	lb	kg	lb
20H-Fuel	456	17.9	342	13.5	437	17.2	19	41.9	23	50.7
40H-Fuel	456	17.9	342	13.5	437	17.2	19	41.9	23	50.7
60H-Fuel	456	17.9	342	13.5	437	17.2	19	41.9	23	50.7

Preventative Maintenance

Preventative Maintenance Kit	Part Number	Change Frequency
Replacement desiccant cartridge	MKH2PEM-D	As required*
6 month kit	MKH2PEM-6M	6 months
24 month kit	MKH2PEM-24M	24 months

* 20H Continuous operation approx 6 to 7 months

* 40H Continuous operation approx 4 to 5 months

* 60H Continuous operation approx 2 to 3 months

Optional Extras

Description	Part Number	Required for
Remote Networking Module	H2-REMOTE-NET-DH 604971530	Allows cascading of two generators
Remote Networking Expansion Module	H2-REMOTE-EXP-DH 6049711540	Required to cascade each additional generator

Hydrogen Generators

For GC and GC/MS carrier gas applications



Technical Data

Ambient Temperature Range	5 - 40°C 41 - 104°F	
Water Supply Pressure*	0.1 bar g 1.45 psi g	
Water Supply Flow Rate*	1 L/min	
Water Quality	Deionised. ASTM II, >1MΩ, <1µs, filtered to <100µm	
Supply Voltage Range	90V - 264V 50/60Hz	
Port Connections	Hydrogen Outlet Water Drain Water Fill*	½" Compression Fitting Quick Release Push in Fitting Quick Release Push in Fitting

*With optional AWF

Product Selection

Model	Flow Rate	Purity*	Water Consumption (24/7, full flow)	Delivery Pressure		Optional Auto Water Fill (AWF)
	ml/min	%	L/week	bar g	psi g	
20H-MD-Carrier	160	>99.9999	1.69	0.69-6.89	10-100	YES
40H-MD-Carrier	250	>99.9999	2.41	0.69-6.89	10-100	YES
60H-MD-Carrier	500	>99.9999	4.82	0.69-6.89	10-100	YES
110H-MD-Carrier	1100	>99.9999	10.60	0.69-6.89	10-100	Standard

*With respect to oxygen

Note: For auto water fill option add suffix AWF ie 20H-MD-AWF

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight (Empty)		Weight (Full of Water)	
	mm	in	mm	in	mm	in	kg	lb	kg	lb
20H-MD-Carrier	456	17.9	342	13.5	470	18.5	20.5	45.2	25	55.1
40H-MD-Carrier	456	17.9	342	13.5	470	18.5	20.5	45.2	25	55.1
60H-MD-Carrier	456	17.9	342	13.5	470	18.5	20.5	45.2	25	55.1
110H-MD-Carrier	456	17.9	342	13.5	470	18.5	23.6	51.8	28	61.7

Preventative Maintenance

Preventative Maintenance Kit	Part Number	Change Frequency
6 Month Kit	M06.HMD.0001	6 Months
24 Month Kit	M24.HMD.0001	24 Months
60 month kit	M60.HMD.0001	60 months

Optional Extras

Description	Part Number	Required for
Remote Networking Module	H2-REMOTE-NET-DH 604971530	Allows cascading of two generators
Remote Networking Expansion Module	H2-REMOTE-EXP-DH 6049711540	Required to cascade each additional generator

Ultra High Purity Nitrogen Generators

For GC and other critical analytical applications



Technical Data

Ambient Temperature Range		15 - 25°C (59 - 77°F)
Inlet Air Quality*		Clean dry compressed air ISO8573-1:2001 Class 2.-.1
Supply Voltage Range		103 - 126V 60Hz / 207 - 253V 50/60Hz
Port Connections	Inlet*	¼" Compression Fitting
	Outlet UHPN2 750	⅛" Compression Fitting
	Outlet UHPN2 3000	¼" Compression Fitting

*Non compressor models only

Product Selection

Model	Flow Rate	Purity*	Inlet Air 8 to 9.9 bar (116 to 143 psi)	Outlet Pressure		Integral Compressor
	L/min		%	L/min	bar g	
UHPN2-750C	0.75	>99.9995	n/a	5	72.5	YES
UHPN2-3000C	3.0	>99.9995	n/a	5	72.5	YES

*Purity with respect to oxygen

Note: Add suffix 'E' for 207-253V 50/60Hz ie. UHPN2-750-E
Add suffix 'W' for 103 -126V 60Hz ie. UHPN2-750-W

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight (with compressor)		Weight (without compressor)	
	mm	in	mm	in	mm	in	kg	lb	kg	lb
UHPN2-750, 750C	869	34.2	345	13.6	417	16.4	50	110	44	97
UHPN2-3000, 3000C	869	34.2	345	13.6	667	667	93	205	84	185

Preventative Maintenance

Preventative Maintenance Kit UHPN2-750, 750C	Part Number	Change Frequency
Filter kit non compressor models	606272551	12 Months
Filter kit - compressor models	606272553	12 Months
Compressor kit 230V	606272577	8,000 hours or 24 months (whichever comes first)
Compressor kit 120V	606272579	8,000 hours or 24 months (whichever comes first)

Preventative Maintenance Kit UHPN2-1500, 3000, 3000C	Part Number	Change Frequency
Filter Kit non compressor option	606272551	12 Months
Filter Kit compressor option	606272555	12 Months
Compressor Kit 230V	606272581	8,000 hours or 24 months (whichever comes first)
Compressor Kit 120V	606272583	8,000 hours or 24 months (whichever comes first)

Optional Extras

Description	Part Number	Required for
Installation kit	IK7694	Suitable for all UHP nitrogen generators

High Purity Nitrogen and Dry Air Generators

Analytical instrumentation



Technical Data

Ambient Temperature Range	5 - 45°C (41 - 113°F)
Supply Voltage Range	103 - 126V 60Hz 207 - 253V 50/60Hz
Port Connections Outlet (G6010)	1/8" Compression Fitting

Product Selection

Model	Flow Rate		Purity*		Delivery Pressure		Integral Compressor
	Nitrogen	Dry Air	Nitrogen	Dry Air	bar g	psi g	
	L/min	L/min	%	°C (dew point)			
G6010	0.60	1.5	>99.999	-40	5	72.5	YES

*Purity with respect to oxygen

Note: Add suffix 'E' for 207-253V 50/60Hz ie G6010-E
Add suffix 'W' for 103 -126V 60Hz ie G6010-W

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight	
	mm	in	mm	in	mm	in	kg	lb
G6010	842	33.1	345	13.6	413	16.3	58	127.9

Preventative Maintenance

Preventative Maintenance Kit G6	Part Number	Change Frequency
Filter Kit - G6 option 1 (compressor)	606272351	12 Months
Compressor Kit 230V - G6 option 1	606272336	12 Months
Compressor Kit 120V - G6 option 1	606272337	12 Months

Optional Extras

Description	Part Number	Required for
Installation kit	IK7694	Suitable for all HP nitrogen/air generators

High Purity Nitrogen Generators

For analytical instruments including ICP



Technical Data

Ambient Temperature Range	15 - 25°C (55 - 77°F)
Inlet Air Quality *	Clean dry compressed air ISO 8573-1:2001 Class 2.-.1
Supply Voltage Range	103 - 126V 60Hz / 207 - 253V 50/60Hz
Port Connections	Outlet Inlet *
	¼" Compression Fitting ¼" Compression Fitting

*Non compressor models only

Product Selection

Model	Flow Rate		Purity*	Inlet air @ 8 to 9.9 bar (116 to 143 psi) **	Outlet Pressure		Integral Compressor
	L/min	%			bar g	psi g	
HPN2-5000	5	>99.999		110	5	72.5	No
HPN2-5000C	5	>99.999		n/a	5	72.5	Yes
HPN2-12500	12.5	>99.5%		129	5	72.5	No
HPN2-12500C	12.5	>99.5%		n/a	5	72.5	Yes

*Purity with respect to oxygen

** Model HPN2-12500 min inlet 9 bar (130 psi)

Note: Add suffix 'E' for 207-253V 50/60Hz ie. HPN2-7000-E

Add suffix 'W' for 103 - 126V 60Hz ie. HPN2-7000-W

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight (with compressor)		Weight (without compressor)	
	mm	in	mm	in	mm	in	kg	lb	kg	lb
HPN2 range	869	34.2	345	13.6	667	26.3	95	189.6	86	209.4

Preventative Maintenance

Preventative Maintenance Kit - all models	Part Number	Change Frequency
Filter kit - non compressor models	606272557	12 Months
Filter kits - compressor models	606272559	12 Months
Compressor Kit 230V models	606272581	8,000 hours or 24 months (which ever comes first)
Compressor Kit 120V models	606272583	8,000 hours or 24 months (which ever comes first)

Optional Extras

Description	Part Number	Required for
Installation kit	IK7694	Suitable for all HP nitrogen generators

Ultra High Purity Zero Nitrogen Generators

For GC makeup gas and carrier gas applications

Technical Data

Ambient Temperature Range	15 - 25°C (59 - 77°F)
Inlet Air Quality*	Clean dry compressed air ISO8573-1:2001 Class 2.-.1
Supply Voltage Range	103 - 126V 60Hz 207 - 253V 50/60Hz
Port Connections Inlet*	¼" Compression Fitting
Outlet	⅜" Compression Fitting

* Non compressor models only



Product Selection

Model	Flow Rate L/min	Purity*		Inlet Air @ 9 to 9.9 bar (131 to 143 psi) L/min	Delivery Pressure		Integral Compressor
		ppm organic impurity	%		bar g	psi	
UHPZN2-1000	1	<0.1 Total Hydrocarbons	>99.9995%	n/a	5	72.5	NO
UHPZN2-3000	3	<0.1 Total Hydrocarbons	>99.9995%	n/a	5	72.5	NO
UHPZN2-1000C	1	<0.1 Total Hydrocarbons	>99.9995%	n/a	5	72.5	YES
UHPZN2-3000C	3	<0.1 Total Hydrocarbons	>99.9995%	n/a	5	72.5	YES

*Purity with respect to oxygen

Note: Add suffix 'E' for 207-253V 50/60Hz ie. UHPZN2-1000-E
Add suffix 'W' for 103-126V 60Hz ie. UHPZN2-1000-W

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight (with compressor)		Weight (without compressor)	
	mm	in	mm	in	mm	in	kg	lb	kg	lb
UHPZN2 range	869	34.2	345	13.6	667	26.3	96	211.6	86	189.5

Preventative Maintenance

Preventative Maintenance Kit	Part Number	Change Frequency
Filter Kit - non compressor option	606272561	12 months
Filter Kit - compressor option	606272563	12 months
Compressor Kit 230V	606272581	8,000 hours or 24 months (whichever comes first)
Compressor Kit 120V	606272583	8,000 hours or 24 months (whichever comes first)

Optional Extras

Description	Part Number	Required for
Installation kit	IK7694	Suitable for all zero nitrogen generators

Zero Air Generators

For GC combustion detector applications



Technical Data

Ambient Temperature Range		5 - 40°C (41 - 104°F)
Inlet Air Quality		Clean dry compressed air ISO8573-1:2001 Class 3.2.1
Supply Voltage Range		103 - 126V 60Hz 207 - 253V 50/60Hz
Port Connections	Outlet (UHP-10ZA-S & UHP-35ZA-S)	1/8" Compression Fitting
	Inlet (UHP-10ZA-S & UHP-35ZA-S)	1/8" Compression Fitting
	Outlet (UHP-50ZA-S - UHP-300ZA-S)	1/4" Compression Fitting
	Inlet (UHP-50ZA-S - UHP-300ZA-S)	1/4" Compression Fitting

Product Selection

Model	Flow Rate	Organic Impurity	Air Inlet @ 4 - 10 bar g (58-145 psi g)	Delivery Pressure		Integral Compressor
	L/min		ppm	L/min	bar g	
UHP-10ZA-S	1	<0.1	1.2	4-10	58-145	NO
UHP-35ZA-S	3.5	<0.1	4.2	4-10	58-145	NO
UHP-50ZA-S	5.0	<0.1	6.0	4-10	58-145	NO
UHP-75ZA-S	7.5	<0.1	9.0	4-10	58-145	NO
UHP-300ZA-S	30	<0.1	35	4-10	58-145	NO

Note: Add suffix 'E' for 207-253V 50/60Hz ie. UHP-10ZA-S-E
Add suffix 'W' for 103 -126V 60Hz ie. UHP-10ZA-S-W

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight	
	mm	in	mm	in	mm	in	kg	lb
UHP-10ZA-S	325	12.8	340	13.4	425	16.7	10.2	22.5
UHP-35ZA-S	455	17.9	340	13.4	425	16.7	14.2	31.3
UHP-50ZA-S	455	17.9	340	13.4	425	16.7	14.2	31.3
UHP-75ZA-S	455	17.9	340	13.4	425	16.7	14.2	31.3
UHP-300ZA-S	455	17.9	340	13.4	425	16.7	15.2	33.5

Preventative Maintenance

Preventative Maintenance Kit	Part Number	Change Frequency
Inlet Filter PM Kit - all models (Up to S/N 22Z0138)	005A0	12 Months
Outlet Filter PM Kit - all models (Up to S/N 22Z0138)	005AA	12 Months
Inlet Filter PM Kit - all models (From S/N 22Z0139)	P010A0	12 Months
Outlet Filter PM Kit - all models (From S/N 22Z0139)	P010AA	12 Months
Fan PM Kit, 230V - all models	606272525	24 Months
Fan PM Kit, 120V - all models	606272526	24 Months

Optional Extras

Description	Part Number	Required for
Installation kit	IK76803	Suitable for all zero air generators

Liquid Chromatography Mass Spectrometry

Liquid chromatography mass spectrometry (LC/MS) is used in a range of scientific sectors in applications including drug development, environmental analysis and drug discovery. But LC/MS systems require a consistent, high purity supply of inert or unreactive gas to effectively separate liquid mixtures and accurately identify the components by their mass – tasks that can be complicated by traditional means of supply.



Installation Example

■ Nitrogen



Nitrogen Generators

For LC/MS applications - with optional economy mode

Technical Data

Ambient Temperature Range	5 - 40°C (41 - 104°F)
Inlet Air Quality*	Clean dry compressed air ISO8573-1:2001 Class 2.-.1
Supply Voltage Range	103 - 126V 60Hz 207 - 253V 50/60Hz
Port Connections Nitrogen Outlet / Air Inlet*	¼" Compression Fitting

*Non compressor models only



Product Selection

Model	Flow Rate		Purity*	Air Inlet @ 8.5 bar g (123.3 psi g)		Delivery Pressure		Integral Compressor
	L/min	%		L/min	bar g	psi g		
LCMS20-0	20	>99	70	7	101.5	NO		
LCMS20-1	20	>99	n/a	7	101.5	YES		
LCMS30-0	30	>99	130	7	101.5	NO		
LCMS30-1	30	>99	n/a	7	101.5	YES		

*Purity with respect to oxygen **Note: Add suffix 'E' for 207-253V 50/60Hz ie LCMS20-0-E**
Add suffix 'W' for 103 - 126V 60Hz ie LCMS20-0-W

LCMS-ECOMax Add-on-Module (Optional Extra)

Product	Description	Compatibility	Installation	Height (H)		Width (W)		Depth (D)		Weight	
				mm	in	mm	in	mm	in	Kg	lb
LCMS-ECOMax-230V	Enables economy mode cycle supplying nitrogen gas only when required, whilst maintaining constant purity	LCMS20-50 models with and without integral compressor	All required fittings supplied with ECOMax module	103	4.06	303	11.93	408	16.06	7.8	17.2

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight (with compressor)	
	mm	in	mm	in	mm	in	kg	lb
LCMS 20-1	705	27.8	510	20.1	826	32.5	129	284
LCMS 30-1	705	27.8	510	20.1	826	32.5	129	284

Model	Height (H)		Width (W)		Depth (D)		Weight (without compressor)	
	mm	in	mm	in	mm	in	kg	lb
LCMS 20-0	705	27.8	510	20.1	559	22.0	89	196
LCMS 30-0	705	27.8	510	20.1	760	22.9	135	298

Preventative Maintenance

Preventative Maintenance Kit	Part Number	Change Frequency
Filter Kit - all models	606272251	12 months
Compressor Kit 230V - Option 1 models	606272253	8,000 hours or 24 months (whichever comes first)
Compressor Kit 120V - Option 1 models	606272261	8,000 hours or 24 months (whichever comes first)

Optional Extras

Description	Part Number	Required for
Installation kit	IK7572	Suitable for all LCMS nitrogen generators

NitroFlow Lab Nitrogen Generators

For LC/MS applications



Technical Data

Ambient Temperature Range	10 - 35°C 50 - 95°F
Electrical Requirements	230VAC- 50Hz
Port Connections Inlet Outlet	G¼

Product Selection

Model	Flow Rate	Purity*
	L/min	%
NitroFlow Lab	32	Up to 99.5 %

*Purity with respect to oxygen and is based on flow. Higher flow results in lower purity.
EU and UK chord model number 159.0003848

Weights and Dimensions

Model	Height (H)		Width (W)		Depth (D)		Weight	
	mm	in	mm	in	mm	in	kg	lb
NitroFlow Lab	700	28	310	12	900	35	93	205

Preventative Maintenance

Maintenance Kit Carbon Adsorber	Part Number as is	Frequency as is
Oxygen Sensor	159.005574	36 Months
Compressor 230v/50Hz	159.005575	8000H

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