









# **Analytical Gas Accessories**

Product Brochure





# **Purity & Performance**

Offering a wide range of advantages over traditional cylinder gas supply, gas generators have become the popular choice in many laboratories.

#### Consistent, reliable purity

A steady, safe supply of high-purity gases is essential to guarantee precise results in analytical techniques such as chromatography, spectroscopy, and spectrometry. Gas purity can vary significantly from cylinder to cylinder, and impurities can be introduced via pipework during a changeover. In contrast, on-site gas generators supply consistently high-purity gas, prevent variations and ensure ultra-sensitive analysis, every time.

Supported by proven, advanced technologies you can trust, Parker gas generators deliver the reliability and consistency you depend on.

#### A safer choice

High-pressure cylinders are inherently linked to safety issues - from the chance of injury through manual handling to the risk of gas leaks, which can make the atmosphere potentially explosive or deficient in oxygen. Parker gas generators are equipped with standard leak detection technology 'auto shut off' and integral alarm. Operating at a fraction of pressure with low volumes of stored gas, they are a safer alternative to cylinders and further reduce potential for harm.

#### Cost-efficient with the lowest lifetime cost

Energy-efficient technologies combined with minimal required maintenance keep operational costs down, and often payback can be realized just one year after purchase. On-demand gas generation eliminates unexpected charges, delivery costs, cylinder rental or storage fees.

#### Global support for your peace of mind

We know that business continuity is vital to success. That's why Parker offers a comprehensive package of expert service, care, and maintenance across our complete analytical gas systems range, worldwide. From installation to scheduled maintenance, and even emergency assistance, you can rely on Parker for total peace of mind.

#### Continuous supply, available on-demand

Parker gas generators are engineered to transform standard compressed air into high-quality analytical gas at safe, regulated pressures, on-demand, without operator attention. Designed for easy installation, operation, long-term performance, and permanent point-of-use installation, an on-site generator provides direct access to an unlimited supply of gas. Always at the correct pressure, flow, pressure and purity, Parker gas generators improve the stability of instruments and the accuracy of results.



# **Extended Support Programs**

## **PM Service Programs**

Let us take care of your gas generator for you with a preventative maintenance plan. Our factory certified technicians will guarantee that your generators are performing to their optimal specification within your application, minimizing unplanned downtime.

#### What's Included?

- · Professional semi-annual or annual site technician visit
- Installation inspection
- 100% genuine Parker parts
- · Environmentally friendly disposal of replaced parts
- · Cosmetic cleaning
- Restart activities

- Multi-point inspection to identify correction areas needed
- Inspection service sticker and report
- 100% certified factory trained technicians
- · Generator functionality training as requested
- · Service reminder when next is due

## **Installation Programs**

Invariably, equipment that has been installed incorrectly and commissioned by inexperienced personnel has proven to be unreliable and inefficient in operation, thereby increasing the cost of ownership over its lifetime. Our factory trained technicians will ensure your equipment is fully operational and at optimum performance right from startup. Equipped with knowledge of both the products and applications, they will ensure your equipment is properly installed and meets your requirements, yielding maximum energy efficiency, reduced downtime, and lower operational costs.

#### What's Included?

- Review of laboratory setup and expectations
- · Site technician visit
- · Installation of generator
- · Standard "connectivity" parts

- · 100% genuine Parker parts
- · Verification of flow and pressure
- · 100% certified factory trained technician

## **Warranty Programs**

Parker's equipment is world renown for their reliability, dependability, and longevity. Since commercializing our first laboratory scale analytical gas generator in 1984, we now serve an install base of over 50,000 gas generator users globally. Our experience shows that with regularly scheduled maintenance, generators and analytical instruments continue to consistently perform precisely and accurately for decades.

# Express No Hassle Service Warranty Program What's Included?

- Loaner unit if applicable (<150lbs)</li>
- 24-48-hour turnaround service for technician on site
- 100% genuine Parker parts
- · All parts, labor and travel included

- Packaging materials and shipping charges included
- Dedicated hot line to our technical team
- 3500 sqft factory service center
- 100% certified factory trained technicians

#### **ULTIMATE Bundle Protection**

Our exclusive ULTIMATE program combines a "no hassle" warranty with a preventative maintenance program that offers you our best protection. It provides complete coverage for your generators and compressors, giving you total peace of mind. Keeping your laboratory gas generators running at optimum speed allows you remain focused on science instead of unexpected equipment downtime.

#### What's Included?

- · Multi-year express warranty coverage
- Scheduled PM service visit
- 100% genuine Parker parts
- Environmentally friendly disposal of replaced parts
- Loaner unit if applicable (<150lbs)</li>
- 100% certified trained technician

- 24-48-hour turnaround service for technician on site
- All parts, labor, and travel included
- · Packaging materials and shipping charges included
- · Dedicated hotline to our technical team
- · 3500 sqft factory service center
- 100% certified factory trained technician

# **Basic Lab Compressor**

# Gast® Model 2HAH-92T-M200X

The Gast® Compressor is for locations without a compressed air supply or low pressure supply.

- · Ideal for Parker gas generators
- · Pressure switch
- · Manual drain
- Pressure safety valve (ASME)
- · Pressure gauge
- Unloading capability
- · Globe valve
- 100% oil-less operation
- · Only minutes to install

This product is in stock and available for delivery along with your Parker gas generator. It is fully supported and serviced exclusively by Gast® Manufacturing Corporation, and is ideal for use with smaller gas generators only.



## **Principal Specifications**

Model 2	HAH-92T-M200X
Tank Size 2 Gallons (7.5 liters)	
Output Pressure	Output Flow
0 psig	1.65 CFM
10 psig	1.55 CFM
30 psig	1.30 CFM
50 psig	1.15 CFM
70 psig	1.00 CFM
90 psig	.90 CFM
Noise Level @ Full Flow	65 dBa @ 3 ft.
Standard Pressure Settings - ON/OFF	70/90 psig
Pressurization Time (0 psig to set pressure)	1 min, 30 sec.
Recovery Time (to set pressure)	24 sec.
Motor Specifications	115 VAC/60 Hz, 1/4 hp
Dimensions	18" w x 18" h x 5" d (46 cm x 46 cm x 13 cm)
Shipping Weight	56 lbs (25 kg)

Description	Model
Gast Compressor	2HAH-92T-M200X
Automatic Drain Valve	20-440

# **High Output Oil-Free Piston Compressor**

# Model 811541093

The 8115 Series compressor offers a quiet, compact, high quality source of oil-free compressed air.

Parker has teamed up with Atlas Copco to offer the latest innovation in high-output piston compression technology. The 8115 Series compressor is totally pre-piped and wired for easy installation. It is quiet, simple to use, low vibration and requires little to no preventative maintenance. Each compressor includes standard Atlas Copco "Certified Start-up Assistance Service" and includes full service and warranty exclusively from Atlas Copco.

- 100% oil-free air
- Air to air heat exchanger
- Integral 50 liter receiver tank & electronic tank drain
- Single stage motor
- · Power cord included
- Quiet operation
- 24-hour continuous duty applications
- Approved for smaller Parker gas generators



# **Principal Specifications**

• •		
Model 8115410931		
Flow and Pressure (1)	up to 5.06 CFM and to 116 psig	
Sound Level (dBA) (2)	62	
Motor HP (3)	1.5	
Standard Voltage (4)	115 VAC/60 Hz, 20 Amp	
Dimensions	33" w x 36" h x 14" d (84 cm x 91 cm x 36 cm)	
Net Weight	t Weight 143 lbs (65 kg)	

- 1. Unit performance measured according to Pneurop/CAGIPN2CPTCTC2
- 2. Maximum noise level measured at a distance of 3 ft. according to Pneurop/CAGIPN8NTC2 test code
- 3. Unit includes 3' power cord with NEMA class plug
- 4. Use Model 8115410196 for 230 VAC 50 Hz locations

Description	Use on Gas Generators
8115410931	64-01, 75-45, 75-52, N2-04, HPN2-1100, UHPN2-1100, HPN2-2000, TOC-625, TOC-1250, HPZA-3500, HPZA-7000, HPZA-18000, HPZA-30000, MGG-400, MGG-2500

# **Rotary Scroll Compressors**

# SE Series

The SE Series compressors offer a lubrication free compression chamber that eliminates the possibility of oil carryover into the compressed air.

- · 100% oil free air
- 35-39°F external refrigerant air dryer
- · Air cooled, fully packaged
- · Single stage motor
- · High efficiency
- · Whisper quiet operation
- · 24-hour continuous duty applications
- · Approved for all Parker gas generators

Parker has partnered with Powerex<sup>™</sup> to offer the latest innovation in scroll compressor technology. Each compressor configuration is carefully matched for easy installation and includes standard Powerex<sup>™</sup> "Certified Start-up Assistance Service\*. Simply select your desired compressor and place your order with Parker.



## **Principal Specifications**

Description	SES03 (3)	SES05 (4)	SED10 (4)	SET15 (5)	SEQ20 (5)
Motor HP	3	5	10	15	20
Capacity CFM <sup>(1)</sup> @ 145 psig	7.1	12.5	24.2	36.3	48.4
Sound Level (dBA) (2)	49	51	53	53	53
Net Weight	309 lbs	359 lbs	582 lbs	970 lbs	1213 lbs

- 1. Unit performance measured according to Pneurop/CAGIPN2CPTC2
- 2. Max. noise level measured at a distance of 3 ft. according to Pneurop/CAGIPN8NTC2 test code
- 3. Unit includes comprehensive full-featured phenol coated external 30-gallon receiver tank
- 4. Unit includes comprehensive full-featured phenol coated external 60-gallon receiver tank
- $5.\ Unit\ includes\ comprehensive\ full-featured\ phenol\ coated\ external\ 80-gallon\ receiver\ tank$

Description	SES03	SES05	SED10	SET15	SEQ20
Dimensions	25" w x 39" h x 24" d		26" w x 47" h x 38" d		
Specify Desired Voltage*	200VAC, 230VA		AC, or 460VAC		
Use on Gas Generator	76-97, 76-98, 75-62, N2-14	N2-22	N2-35, N2-120	N2-160	N2-240

<sup>&</sup>quot;Certified Start-up Assistance" excludes electrical supply work, due to local code restrictions. Electrician may be required.

<sup>\*</sup> Contact Parker Technical Services or your local representative for exact part number suffix prior to ordering.

# **Gas Receiving Tanks**

# Models 72-007 & 72-012

Parker's gas receiving tanks are recommended for supplying gas to pressure-sensitive instrumentation, storage of compressed nitrogen from gas generators, and for other instruments requiring an occasional high-flow burst of compressed gas over the normal capacity of a Parker gas generator.

External powder-coat finish eliminates

rust and contamination

- Internal primer eliminates particle shedding and vapor out-gassing
- Convenient mounting brackets for floor or wall placement
- Smoothes out gas pressure fluctuations
- · Reduces duty cycle on compressors



## **Principal Specifications**

Description	Model 72-007	Model 72-012	72-030NST*
Material of Construction	3003 Aluminum	Carbon steel	Carbon steel
Capacity at Atmospheric Pressure	0.75 gallons (2.8 liters)	12 gallons (45 liters)	30 gallons (136 liters)
Maximum Capacity of Compressed Gas	1.7 SCF (50 liters)	15 SCF (430 liters)	38 SCF (1075 liters)
Maximum Temperature	130°F (54°C)	130°F (54°C)	130°F (54°C)
Maximum Pressure at Maximum Temperature	240 psig	125 psig	125 psig
Inlet/Outlet Port Size	1/8" NPT (female)	1/4" NPT (female)	3/8" Tubing Included
Dimensions	18" w x 5" h (45 cm x 12 cm)	26" w x 13" h (66 cm x 33 cm)	16" w x 40" h (41 cm x 102 cm)
Shipping Weight	4 lbs (1.8 kg)	42 lbs (19 kg)	109 lbs (49.4 kg)

<sup>\*</sup> Includes 30 gallon receiver, pressure regulator, gauge, and fittings.

Description	Model
Gas Receiving Tank	72-007, 72-012, 72-030NST*

# Flow Controllers

# Manifold Flow Controller

Parker Flow Controllers provide a convenient means for regulating and distributing the clean air output from a Parker compressed air dryer, FT-IR purge gas generator, or self-contained lab gas generator.

Two styles of flow controllers are available: manifold flow controllers or single flow controllers.

- 1. Manifold models 72-398, 72-400, 72-401, and 72-402: accept clean gas, at the regulated pressure, into the manifold where independently adjustable flow controls may be set to serve three separate instruments.
- 2. Single Flow Models 72-428, 72-430, 72-431, and 72-432: include a pressure regulator and a single flow controller.

Each flow controller is equipped with a triple scale pressure gauge (psig, bar, kg/cm2), a pressure regulator, and a flow meter mounted on a convenient bracket for wall or panel mount installations.



- Conveniently regulates and distributes clean air output and pressure
- Easy installation and operation
- Manifold and single flow versions available
- Immediate delivery from stock

#### **Principal Specifications**

	Manifold Flow Models 72-398, 400, 401, 402	Single Flow Models 72-428, 430, 431, 432	
Inlet Ports	1/4" NPT (female)	1/8" NPT (female)	
Maximum Pressure	125 psig		
<b>Pressure Gauge Range</b>	0-60 psig	0-100 psig	
Outlet Ports	1/8" tube fitting		
Dimensions	8" w x 7" h x 6" d (20 cm x 18 cm x 15 cm)	4" w x 7" h x 2" h (10 cm x 18 cm x 5 cm)	
Shipping Weight	5 lbs (2 kg)		

Manifold Flow Models	Single Flow Models	Flow Range
72-398	72-428	1-5 scfh (.5-2.5 lpm)
72-700	72-430	10-100 scfh (5-50 lpm)
72-401	72-431	5-50 scfh (2.5-25 lpm)
72-402	72-432	20-200 scfh (10-100 lpm)

# **Precision Control Flow Meters**

# WFM Series Flowmeters

Parker precision control flow meters are suitable with all Parker gas generators. These flow meters incorporate traditional variable area flow technology and are ideal for trace low flow and high flow control requirements. Leak integrity is tested using a stateof-the-art mass spectrometer and helium. The flow meters are constructed of rugged, inert materials. Low flow series meters include a flat surface tripod.

- · Rib-guided metering tubes assure accurate stable readings
- · Magnifier lens in front shield enhances reading resolution
- Non-rotating feature prevents turning of the flow tube
- Interchangeable flow tubes provide a simple upgrade for use with other applications as required
- Difficult flow calculations and conversions eliminated by matching the bottom table – select flow meter by generator model
- · Low flow series meters include flat surface tripod

# **Principal Specifications**

	Model 526
Maximum Inlet Pressure 200 psig (13.8 ba)	
Maximum Temperature	250°F (121°C)
Mater	ial of Construction
Float (gas specific)	Glass, Sapphire, or 316 SS
Flow Tube	Heavy walled Borosilicate glass
Side Panels	Aluminum, black anodized
Front Shields	Lexan® with magnifier lens
Back Plates	1/8" White acrylic
Calibrated Accuracy	±1% FS
Ports	1/8" convertible to 1/4" compression
Helium Leak Integrity	1*10-7 scc/sec
Repeatability	± 0.25% FS
Flat Surface Tripod	Acrylic with level adjust
Shipping Weight	5 lbs (2kg)

## **Ordering Information**

Ordering into	ormation
FT-IR Purge Gas Ger	nerators
Spectra 15	W-FM76807
Spectra 30	W-FM76830
75-62NA	W-FM7562
Membrane Air Dryers	s @ min. flow rate
64-01	W-FM76830
64-02	W-FM7562
64-10	W-FM6410
Membrane Air Dryers	s @ max. flow rate
64-01	W-FM7562
64-02	W-FM7562
64-10	W-FM6410HF
NMR Gas Generator	
UDA-300NA	W-FM6410
TOC Gas Generator	
TOC-625, TOC-1250	W-FM7583
<b>UHP Nitrogen Gas G</b>	enerators
UHPN2-1100	W-FM7696
76-97, 76-98	
Zero Air Gas Genera	tors
75-83	W-FM76807
HPZA-3500	W-FM7583
HPZA-7000	W-FM76830
HPZA-18000	
HPZA-30000	
111 Est 00000	

for assistance, call 800-343-4048

# **Installation Kits**

- · Provides clean tubing for commissioning of new gas generators
- · Eliminates the wait for materials for installation
- · Logical compliment to gas generator purchases

# Installation kit and tubing recommendations

Generator Model	Inlet	Outlet	Installation Kit	Inlet	Outlet
HPZA 3500	1/4"FNPT	1/4"FNPT	IK-0003	Α	Е
HPZA 7000	1/4"FNPT	1/4"FNPT	IK-0004	Α	F
HPZA 18000	1/4"FNPT	1/4"FNPT	IK-0004	Α	F
HPZA 30000	1/4"FNPT	1/4"FNPT	IK-0004	Α	F
75-83	1/4"FNPT	1/4"FNPT	IK-0003	Α	E
TOC-625	1/4"FNPT	1/4"FNPT	IK-0003	Α	E
TOC-1250	1/4"FNPT	1/4"FNPT	IK-0003	Α	E
UHPN-1100	1/4"FNPT	1/8"FNPT	IK-0003 & 11559	Α	E
Spectra 15, 30	1/4"FNPT	1/4"FNPT	IK-0001	Α	B or C <sup>3</sup>
75-26	1/4"FNPT	1/4"FNPT	IK-0002	Α	C or D <sup>3</sup>
UDA-300	1/4"FNPT	1/4"FNPT	IK-0002	Α	C or D <sup>3</sup>
N2-04, 14	1/4"FNPT	1/4"FNPT	IK-0001	Α	B or C <sup>3</sup>
N2-22,35	1/4"FNPT	1/4"FNPT	IK-0002	Α	C or D <sup>3</sup>
N2-120, 160, 240	1/2"FNPT	1/2"FNPT	Consult w	ith Parker	
64-01	1/4"FNPT	1/4"FNPT	IK-0001	Α	B or C <sup>3</sup>
64-02	1/4"FNPT	1/4"FNPT	IK-0002	Α	C or D <sup>3</sup>
64-10	1/2"FNPT	1/2"FNPT	Consult wi	ith Parker	
H2PEM-100/165/260/510	N/A	1/8" CPI	IK-0005	Е	F
H2PEMPD-510	N/A	1/8" CPI	IK-0005	Е	F
H2PEMPD-850/ H2PEMPD-1300	N/A	1/4" CPI	IK-0005	E	F
FID 1000 / 2500	1/4"FNPT	ZAG 1/4"FNPT + H2 1/4" CPI	IK-0003 & IK-0005	A & E	E&F
GCGS-7890 / FID-3500	1/4"FNPT	ZAG 1/4"FNPT + H2 1/4" CPI	IK-0003 & IK-0005	A & E	E&F

- $1. \ \ Refer to \ Table \ 2 \ for \ description \ of \ kit. \ Multiple \ kits \ may \ be \ needed \ for \ some \ installations.$
- 2. Refer to Table 3 for description of tubing. Tubing is ordered by the foot.
- 3. Select tubing appropriate for application

## **Installation Kit Selection**

Installation Kit Part #	Used On
IK-0001	Soft Low Flow Tubing Installation Kit
IK-0002	Soft Mid Flow Tubing Installation Kit
IK-0003	Low Flow Copper Installation Kit
K-0004	Mid Flow Copper Installation Kit
IK-0005 Plumb	Hydrogen / Outlet Hard Copper

# **Tubing Description and Part Number**

Installation Kit Part #	Used On	
Standard Tubing Nylon (black) 3/8"	11400-1	
Premium Tubing PFA 1/8"	A01-0304	
Premium Tubing PFA 1/4"	11426-1	
Premium Tubing PFA 3/8"	11425-1	
Premium Copper Tubing 1/8"	11417-1	
Premium Copper Tubing 1/4"	11412-1	

# **Installation Schematic**

TOC Gas Generator	Zero Air Generator	Ultra High Purity Nitrogen Generator	Hydrogen Generator	
8115 Series Compressor	8115 Series Compressor	8115 Series Compressor	72-230 DI Water Purifier	
Gate Valve	Gate Valve	Gate Valve	Parker Hydrogen Generator	
Regulator	Regulator	Regulator	Needle Valve	
Parker TOC Gas Generator	Zero Air Generator	UHP Nitrogen Generator	to Instrument	
Needle Valve	Needle Valve	Needle Valve		
WFM Series Flowmeter	WFM Series Flowmeter	WFM Series Flowmeter		
Gas Receiving Tank Model 72-007	to Instrument	to Instrument		
to Instrument			for assistance call 800-343-4048	

# Parker Filtration Group

Aerospace Filtration Division Greensboro, North Carolina 336 668 4444

Bioscience & Water Filtration Division Bioscience Filtration Oxnard, California 877 784 2234

Water Purification Carson, California 310 608 5600

Engine Mobile Aftermarket Division Kearney, Nebraska 308 234 1951

Engine Mobile Original Equipment Division Modesto, California 209 521 7860

**HVAC Filtration Division** Jeffersonville, Indiana 866 247 4827

Hydraulic & Fuel Filtration Division Metamora, Ohio 419 644 4311 Industrial Gas Filtration & Generation Division Lancaster, NY 800 343 4048

Industrial Process Filtration Division Mineral Wells, Texas 940 325 2575

Bioscience Engineering Filtration Division EMEA Birtley, United Kingdom +44 (0) 191 410 5121

Engine Mobile Filtration Division EMEA Dewsbury, United Kingdom +44 (0) 1924 487 037

Gas Separation & Filtration Division EMEA Team Valley, United Kingdom +44 (0) 191 402 9000

**Gas Turbine Filtration Division** Alton, United Kingdom +44 (0) 1420 541188

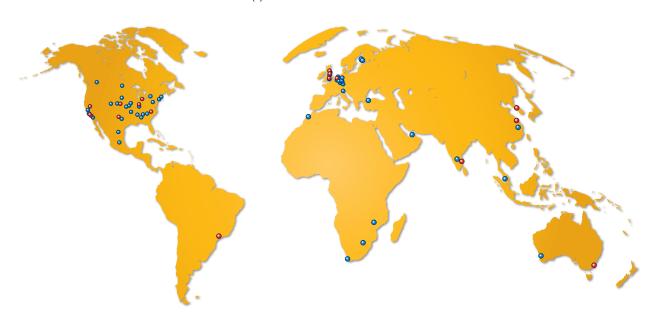
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