PS2-GC50-R/N

PS2-GC50 Series Rare Gas Purifier, 200 sccm

General Description

The PS2-GC50 purifier is a getter-based purification unit designed for the purification of carrier gases for gas chromatography (GC) and other analytical applications. Outlet impurity levels for O_2, H_2O, CO, CO_2, H2, CH4 and N_2 are reduced to low parts per billion (ppb) levels or below.

The patented getter alloy operated at elevated temperatures, removes impurities by forming irreversible chemical bonds. Impurities will not be released under any circumstances when the purifier is operated within specification.

Standard Features

- **Deep blue anodized exterior maintains a 45º C surface temperature**
- **Efficient ceramic fiber insulation with encapsulated heater coil**
- **20 µm sintered filter on inlet and outlet**
- **1/8" Compression fittings (Optional 1/4" VCR)**

Process Gas Specifications	
Specification	**SPG Standard**
Max Flow Rate (maximum purified gas delivered)	200 sccm (0.2 slpm)
Nominal Flow Rate	200 sccm (0.2 slpm)
Minimum Flow Rate*	20 sccm
Maximum Inlet Pressure	10.3 barg (~150 psig)
Maximum Pressure Drop @ 6.2 barg (90 psig) inlet pressure and maximum rated flow	< 1.0 psid
Inlet Gas Temperature (min – max)	0° – 35°C (32° – 95°F)
Outlet Gas Temperature (maximum)	< 50º C (122º F)

* The minimum flow is the lowest flowrate at which SAES will guarantee that outlet gas purity will be met as well as the minimum flow that must be available from the supply to support regeneration.

Facilities Requirements – Electrical	
Specification	**SPG Standard**
Installed Power (Customer to specify voltage at time of order)	50 W (120 AND 220 options)
Plug Style (Customer to specify which power plug is required in their area at time of order)	USA (120 VAC) EU (220 VAC) UK (220 VAC)

Facilities Requirements – General	
Specification	**SPG Standard**
Indoor Installation, Ambient Temperature (min – max)	0° – 35°C (32° – 95°F)

Analytical Specifications	**Nitrogen**		**Rare Gas**	
Impurities	**Inlet (ppb)**	**Outlet (ppb)**	**Inlet (ppb)**	**Outlet (ppb)**
O_2	< 3000	< 10	< 2000	< 10
H_2O	< 2000	< 10	< 2000	< 10
CO	< 1000	< 10	< 500	< 10
CO_2	< 1000	< 10	< 500	< 10
H_2	< 1000	< 10	< 100	< 10
CH_4	< 500	< 50	< 300	< 10
N_2	N/A	N/A	< 5000	< 10

General Purifier Specifications	
Purifier Height (envelope)	230 mm (~9 in)
Purifier Width (envelope)	102 mm (~4 in)
Purifier Weight	1.8 Kg (~4 lbs)
Feed Gas Inlet	1/8” Compression fittings (Optional 1/4” VCR)
Purified Gas Outlet	1/8” Compression fittings (Optional 1/4” VCR)
Getter Bed Operating Temperature	350 ~ 400°C (662 ~ 752°F)
Heater Power Consumption	< 50 W Nominal/Maximum
Particle Filter	20 µm sintered filter on inlet and outlet
Gas Wetted Surface Finish	Up and downstream of Getter Vessels = 304L SST, all welded construction