

Accessories | ZPure™ PolyGas

Pure gas is a critical requirement in gas chromatography, spectroscopy, optics, lithography, and numerous other applications in manufacturing and analytical laboratories. The ZPure™ PolyGas purifiers remove a wide range of contaminants to trace levels.

Features and benefits

- High efficiency in-line traps with outstanding capacity.
- High quality activated absorbents for long purifier life and efficient contaminant removal.
- Various size and fitting configurations to fit existing installations.
- Filter lifetime is dependent on quality of incoming gas, and the flow rate.
- Individually leak-tested.

Recommended applications

It can be used to purify inert gases, He, Ar, N₂, and H₂, making it ideal for use with GC and GC/MS carrier gas lines. It is also recommended for any application requiring ultra-pure gas free from oxygen, water and hydrocarbons (heavier than butane).



Product specifications

PolyGas I							
Volume	Function	Capacity (nominal-max)	Outlet concentration at nominal flow rate	Flow rate (nominal-max)	Max pressure	Dimensions	Fittings
130 cc	Removes oxygen, water, CO ₂ , CO, halogenated compounds, siloxanes, hydrocarbons heavier than butane, sulfur-containing molecules, ammonia and other gases	178 - 301 cc oxygen 2.8 - 4.3 g water 3.75 - 12.5 g hydrocarbons	Oxygen < 5 ppb Moisture < 20 ppb	320 cc/min - 1 SLPM	68.9 bar / 1000 psi	3.2 cm x 28 cm	1/8" and 1/4" brass and stainless steel compression
475 cc		649 - 1100 cc oxygen 10.3 - 15.7 g water 13.7 - 45.7 g hydrocarbons		1 - 3.7 SLPM		3.8 cm x 57 cm	
500 cc		683 - 1158 cc oxygen 10.9 - 16.5 g water 14.4 - 48.1 g hydrocarbons	Organics < 5 ppb	1.2 - 3.9 SLPM	13.8 bar / 200 psi	5 cm x 35 cm	
750 cc		1024 - 1737 cc oxygen 16.3 - 24.8 g water 21.6 - 72.1 g hydrocarbons		1.9 - 5.8 SLPM		5 cm x 50 cm	

PolyGas II							
Volume	Function	Capacity (nominal-max)	Outlet concentration at nominal flow rate	Flow rate (nominal-max)	Max pressure	Dimensions	Fittings
130 cc	Removes water, CO ₂ , CO, halogenated compounds, siloxanes, hydrocarbons heavier than butane, sulfur-containing molecules, ammonia and other gases	6.2 - 9.45 g water 5.4 - 17.86 g hydrocarbons	Moisture < 20 ppb	1 - 5 SLPM	68.9 bar / 1000 psi	3.2 cm x 28 cm	1/8" and 1/4" brass and stainless steel compression
475 cc		22.7 - 34.5 g water 19.6 - 65.3 g hydrocarbons		3.7 - 18 SLPM		3.8 cm x 57 cm	
500 cc		23.9 - 36.3 g water 20.6 - 68.7 g hydrocarbons	Organics < 5 ppb	3.8 - 19 SLPM	13.8 bar / 200 psi	5 cm x 35 cm	
750 cc		35.9 - 54.5 g water 30.9 - 103 g hydrocarbons		5.8 - 29 SLPM		5 cm x 50 cm	

- 1) Oxygen capacity is a function of flow rate - the nominal oxygen capacity is determined using the nominal flow rate. The maximum oxygen capacity is determined using 30% of the nominal flow rate.
- 2) The nominal water capacity is determined for an inlet impurity level of 200 ppm H₂O. The maximum water capacity is determined for an inlet impurity level of 10000 ppm H₂O.
- 3) The nominal hydrocarbon capacity is determined for an inlet impurity level of 500 ppm pentane. The maximum hydrocarbon capacity is determined for an inlet impurity level of 2300 ppm pentane.
- 4) Nominal flow rate is the recommended flow rate for an estimated gas purifier life of 1 year. This assumes the following inlet impurities: 1 ppm O₂, 1 ppm H₂O, and 1 ppm HC (C5 and heavier).
- 5) The maximum recommended flow rate is recommended for intermittent use only.

For more information about this product visit www.trajanscimed.com or contact techsupport@trajanscimed.com