#### **PUR-Gas<sup>™</sup> Cartridge Purifier Systems** 334





Easy to change cartridge. No tools required.

#### Description

Point-of-use, high-performance gas purifier system designed to provide superior contaminant reduction and utilizes removable purifier cartridges to produce 99.9999% purity. The basic system consists of a purifier cartridge installed on a compatible baseplate. The purifiers can be installed and replaced without interrupting the operating and analytical performance of the system. The metal and glass construction of the purifier cartridges eliminates diffusion of potential contaminants into the gas stream. During replacement of the purifier cartridges, check valves automatically close off the system to the atmosphere, further minimizing the introduction of contaminants.

#### Applications

- · Point-of-use purification of all gases utilized with the operation of an FID equipped GC.
- Ideal for purification of carrier gases used with GC/MS, ECD, PID and NPD detectors.
- Removal of hydrocarbons and moisture from FID fuel gases.
- Purification of Nitrogen for LC/MS instruments.

#### **Design Features/Components**

- · Easy installation enables "no tools required" purifier changeout.
- Multiple purifier baseplates allow customization of the system for specific applications.
- Replacement purifiers can be installed within seconds, minimizing instrument downtime.
- Check valves in baseplate design prevent diffusion of contaminants.
- Removal of hydrocarbons, oxygen and moisture can be performed with a single filter.
- Visual indicator on Moisture and Oxygen cartridges signals changeout to maintain uninterrupted service.



Several baseplate designs allow multiple purifier configurations to customize a specific system for your application



Triple Kit for MS-ECD-NPD a.o. riple purifier on 1-position basepla



1-position baseplate www.mathesontrigas.com

•	sign & Selection Materials <u>Baseplate</u>	<b>Purifier Cartridge</b>
Body:	Aluminum (Anodized)	Internal Structure:
5	· · · · ·	Borosilicate Glass
		External Housing:
		Polycarbonate Sleev
Fittings:	Standard -1/8" Brass	,
0	Compression	_
	Optional - 1/4" Brass,	
	1/8" or 1/4" SS	
Locking Ring:	Chrome Plated Aluminum	_
O-Rings:	Viton	_

specifications	
Maximum Operating Pressure:	150 psig
Maximum Flow Rate:	GCMS Systems: 3 L/min
	LCMS Systems: 20 L/min
Dimensions & Weight (L x W x H):	
1-position baseplate	3.125" x 3.56" x 1.12" (1.65 lbs)
2-position baseplate	3.125" x 7.87" x 1.12" (3.4 lbs)
3-position baseplate	3.125" x 11.81" x 1.12" (5 lbs)
Purifier Cartridge (new)	1.5" dia. x 10" H (0.60 lbs)
Purifier Cartridge Capacity:	(see table below)

Type of Purifier	Outlet Gas Quality	Usable for	Indicator Color Change		Capacity O2 (ml)	Hydrocarbons
Moisture	> 6.0	Inert carrier gas, air, hydrogen	Brown to white	7.2		
Oxygen	> 6.0	Inert carrier gas	Green to grey		1000	
Hydrocarbon	> 6.0	Inert carrier gas, air, hydrogen	No indicator			Not specified
<b>Combi</b> (moisture/ hydrocarbon)	> 6.0	Inert carrier gas, air, hydrogen	Brown to white	3.6		Not specified
Triple (moisture/oxygen/ hydrocarbon)	> 6.0	Inert carrier gas	Brown to white Green to grey	1.8	500	Not specified

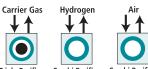
#### Purifier System Configurations (refer to illustration below)

The PUR-Gas™ Purifier Systems are available in several baseplate configurations to address a wide variety of analytical applications. The baseplates can be permanently mounted to lab bench surfaces and are available in 1, 2 or 3 purifier positions, allowing the enduser to custom design a gas purifier system for a specific application; or provide the same purifier in a multiple system arrangement to prevent uninterrupted service and changeout convenience.





2-position baseplate



Combi Purifier Triple Purifier **Combi Purifier** Moisture/Oxygen/ HydroCarb Moisture/HvdroCarb

Complete Purification Kit I for FID High Capacity: Triple + 2x Combi purifier on 3-position baseplate



3-position baseplate

# **Filters & Purifiers**



Cartridge Changeouts are Easy as 1, 2, 3!





Snap cartridge onto base Replace locking ring



Tighten locking ring

#### **Ordering Information**

Analytical Instrument Gas Purification Systems (Cartridge(s) and Baseplate)

Model No.	•	Baseplate Type	Application
PUR-0229	GC/MS Carrier Gas Purification System (includes 1-position baseplate with 1/8" brass fittings and (1) triple purifier cartridge for carrier gas)	1-Position	Standard 1-Position System for purifying the carrier gas used in GC/MS, ECD and NPD detectors
PUR-0233	Same as above with 1/4" Brass fittings		
PUR-0237	Same as above with 1/8" SS fittings		
PUR-0241	Same as above with 1/4" SS fittings		
PUR-0230	GC/MS FID Fuel Gas Purification System (includes 2-position baseplate, with 1/8" brass fittings and (2) combi purifiers for both hydrogen and zero air gases)	2-Position	Standard 2-Position System for purifying both hydrogen and zero air fuel gases used in an FID operated GC
PUR-0234	Same as above with 1/4" Brass fittings		
PUR-0238	Same as above with 1/8" SS fittings		
PUR-0242	Same as above with 1/4" SS fittings		
PUR-0231	GC/MS FID Gas Purification System (includes a 3-position baseplate; with 1/8" brass fittings, (1) triple purifier cartridge for carrier gas and (2) combi purifiers for both hydrogen and zero air gases)	3-Position	Standard 3-Position System for purifying all gases used in an FID operated GC
PUR-0235	Same as above with 1/4" Brass fittings		
PUR-0239	Same as above with 1/8" SS fittings		
PUR-0243	Same as above with 1/4" SS fittings	-	
PUR-0232	LC/MS Gas Purification System (includes 2-position baseplate, with 1/4" brass fittings and (2) charcoal purifiers for nitrogen gas)	2-Position	Unique 2-Position System for purifying the nitrogen gas utilized in LC/MS instruments

# **Replacement Purifier Cartridges**

Model No.	Description
CTG-0050	Moisture Cartridge
CTG-0051	Oxygen Cartridge
CTG-0052	Hydrocarbon Cartridge
CTG-0053	Triple Cartridge (O <sub>2</sub> / H <sub>2</sub> O / HC)
CTG-0054	Combi Cartridge (H <sub>2</sub> O / HC)
CTG-0055	LC/MS Charcoal Cartridge Set (2)
CTG-0056	Moisture 2-Pack Bundle
CTG-0057	Oxygen 2-Pack Bundle
CTG-0058	Hydrocarbon 2-Pack Bundle
CTG-0059	Triple 2-Pack Bundle
CTG-0060	Combi 2-Pack Bundle
CTG-0061	GC/MS Total Gas Purifier Bundle; 1-Triple + 2-Combi Cartridges
CTG-0062	Triple Filter (Helium Packed)
CTG-0063	Triple Filter (Helium Packed), 2 Pack Bundle



Carrier Gas Purification System

FID Fuel Gas Purification System



FID Gas Purification System



LC/MS Nitrogen Gas Purification System

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# **336** PUR-Gas<sup>™</sup> Cartridge Purifier Systems (continued)

### Ordering Information

System Baseplates (No purifier cartridges included; customize your own design)		
Model No.	Description	
BAS-0014	1-Position Standard Baseplate with 1/8" Brass Fittings	
BAS-0015	2-Position Standard Baseplate with 1/8" Brass Fittings	
BAS-0016	3-Position Standard Baseplate with 1/8" Brass Fittings	
BAS-0017	2-Position LC/MS Baseplate with 1/4" Brass Fittings	
BAS-0018	1-Position Standard Baseplate with 1/4" Brass Fittings	
BAS-0019	2-Position Standard Baseplate with 1/4" Brass Fittings	
BAS-0020	3-Position Standard Baseplate with 1/4" Brass Fittings	
BAS-0022	1-Position Standard Baseplate with 1/8" SS Fittings	
BAS-0023	2-Position Standard Baseplate with 1/8" SS Fittings	
BAS-0024	3-Position Standard Baseplate with 1/8" SS Fittings	
BAS-0026	1-Position Standard Baseplate with 1/4" SS Fittings	
BAS-0027	2-Position Standard Baseplate with 1/4" SS Fittings	
BAS-0028	3-Position Standard Baseplate with 1/4" SS Fittings	
BAS-0029	2-Position LC/MS Baseplate with 1/4" SS Fittings	
Options		
Model No.	Description	
CON-0577	O-ring Replacement Set	
CON-0578	Wall-Mount Bracket Fixture	



Baseplate back indicating inlet and outlet