

MPP250 Series Multi-Purifier Panels for Ultra High Purity Pipelines

Key Features

Convenient Valving Configuration

Allows Filter Replacements Without Interruption of Gas Supply and Without the Introduction of Airborne Contaminants into the Pipeline When Putting the Traps Back In Service

Diffusion Resistant Diaphragm Valves

Minimizes the Diffusion of Air Into the System, Thus Maintaining the Purity of the Gas

From 99.999% Pure to 99.9999% + Research Grade Purity!

Oxygen Trap

Can Easily Filter as Many as 60 Standard 300 cu.ft. Inert Gas Cylinders with 3.5 ppm of Oxygen in Them (Efficiency Rate: 5 ppb)

Moisture Trap

Removes over 145 grams of Water With an Efficiency Rate of 15-20 ppb

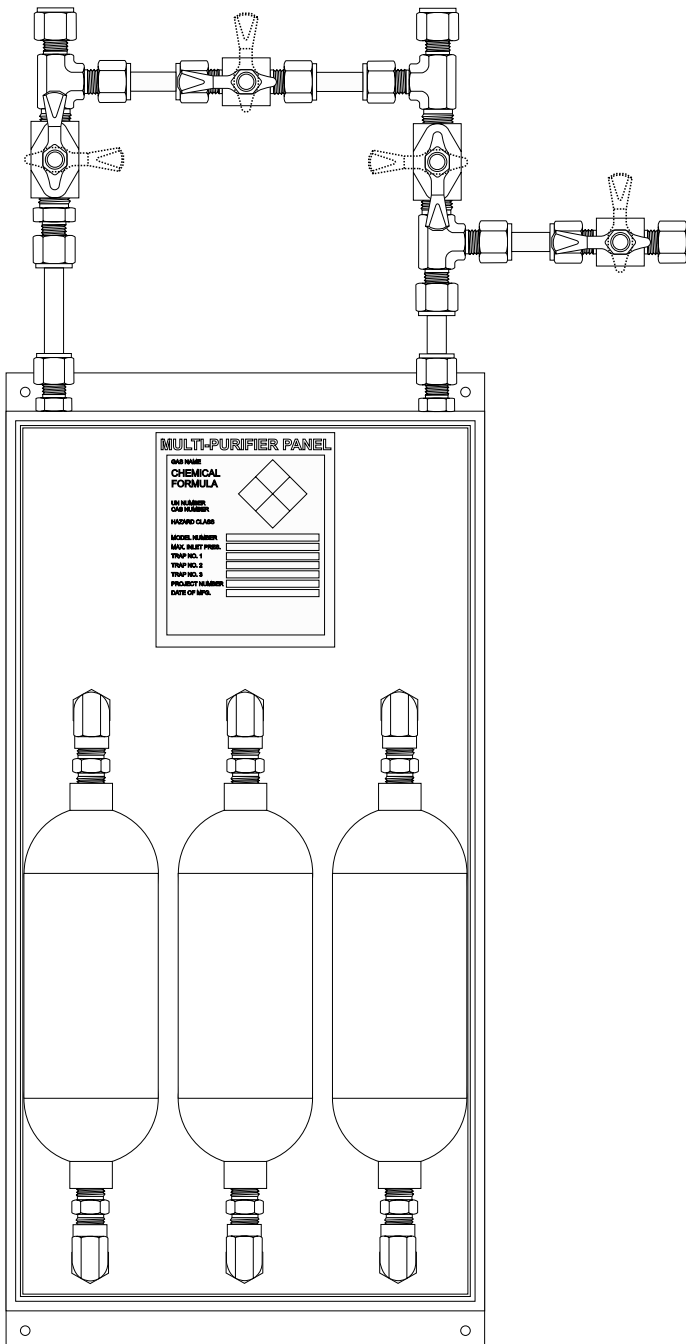
Hydrocarbons Trap

Removes over 110 grams of Hydrocarbons With an Efficiency Rate of less than 20 ppb

High Flow

Nominal Flow: 53 lpm of Helium (115 scfh)
Maximum Flow: 265 lpm of Helium (575 scfh)

**Protects Sensitive Instruments from
Moisture, Oxygen and Hydrocarbons**



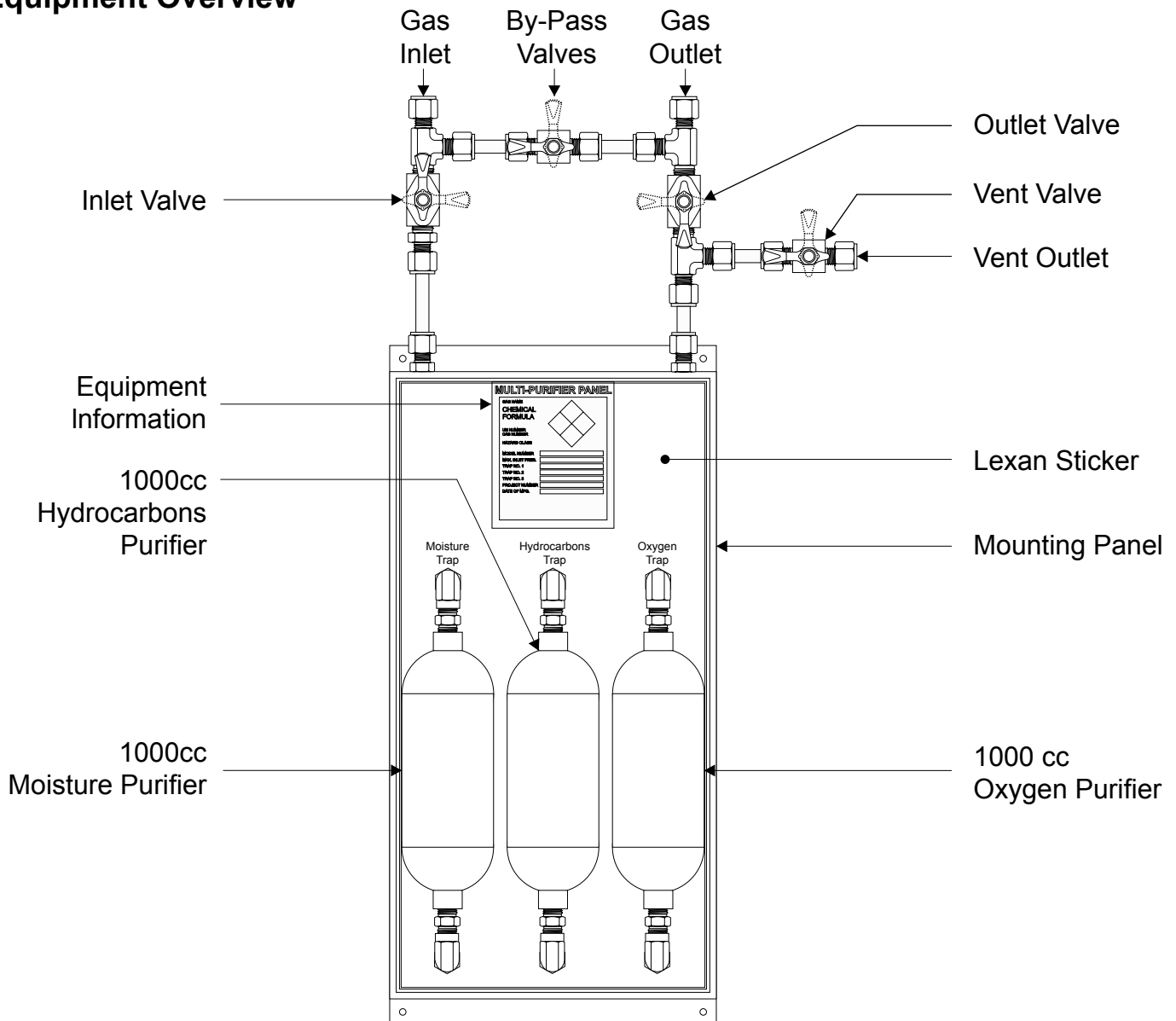
Multi-Purifier Panels for Ultra High Purity Pipelines

Description

The MPP Series Multi-Purifier Panels protect sensitive instruments from moisture, oxygen and hydrocarbon contamination, resulting in more accurate and reproducible test results while extending the instrument's service life. The four-valve configuration allows for trap replacements without interrupting the gas supply and without introducing airborne contaminants into the pipeline when putting the traps back into service. Service life of these traps will vary depending on the incoming gas contamination level.

Each complete panel is pre-purged and pressure tested with ultra high purity helium to insure integrity. The all metal construction of this equipment eliminates potential contamination from outgassing or diffusion (a phenomena commonly associated with plastic body traps). The tubing & fittings are acid cleaned, rinsed with de-ionized water and dried with UHP nitrogen.

Equipment Overview



Multi-Purifier Panels for Ultra High Purity Pipelines

Materials

Mounting Panel	Material: Steel - Paint: Powder Coated - Color: Light Gray
Valves	Body: Stainless Steel 316 Barstock- Diaphragm: Stainless Steel316- Seat: PCTFE
Tubing	Stainless Steel 316
Fittings	Stainless Steel316
Traps	Cylinder: 304 Type Stainless Steel- Fittings: Brass ASTM 816

Molecular Sieves & Trap Sizes

	Filtration Media	Size
Moisture Trap	13-X + Q5	1000 cc
Oxygen Trap	13-X + Metal Oxides	1000 cc
Hydrocarbon Trap	Activated Charcoal	1000 cc

Specifications

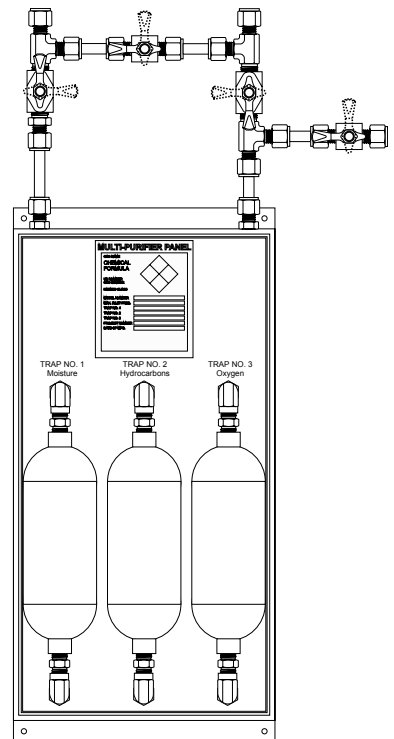
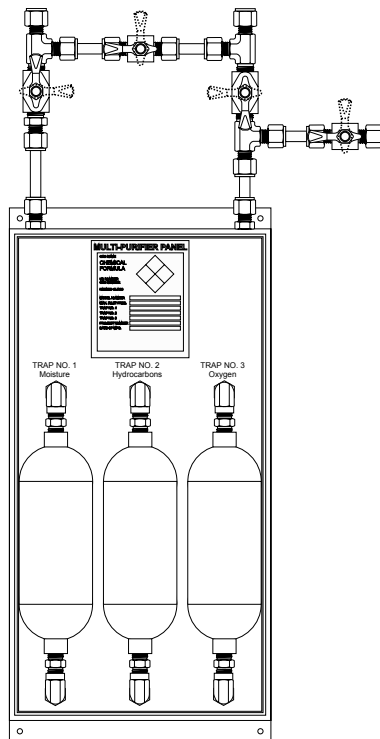
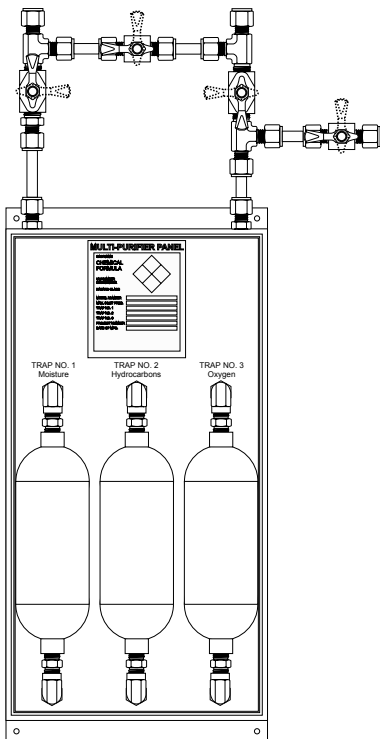
Gas	Refer to part number matrix
Maximum Inlet Pressure	250 psig
Inlet & Outlet Connections	1/2" Compression (SS)
Tube Diameter	1/2" Outside Diameter
Operating Temperature	32°F to 150°F

Suggested Trap Configurations

Helium Service as a Carrier Gas
 Moisture Trap
 Hydrocarbon Trap
 Oxygen Trap

Hydrogen Service for FID
 Moisture Trap
 Hydrocarbon Trap

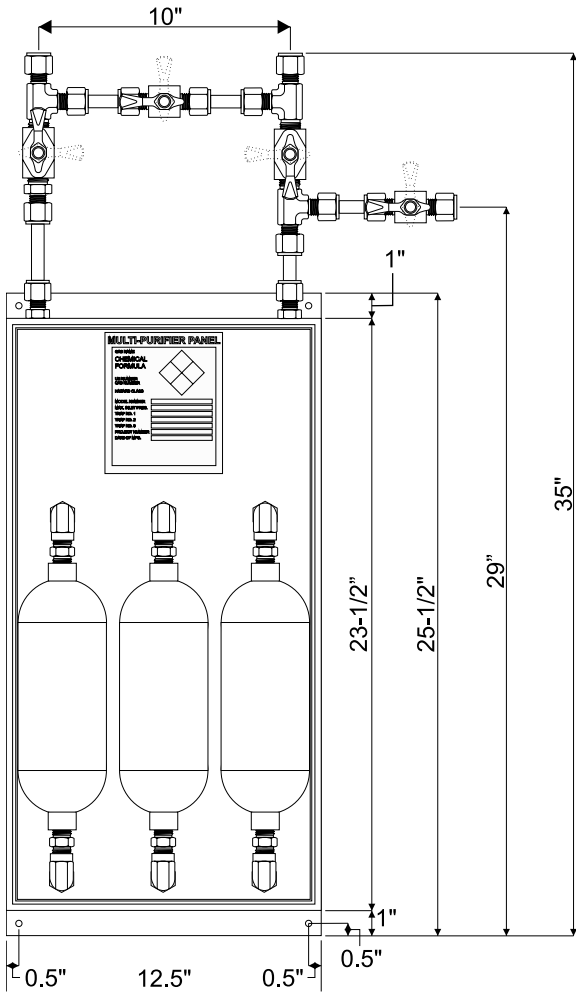
Air Service for FID
 Moisture Trap
 Hydrocarbon Trap



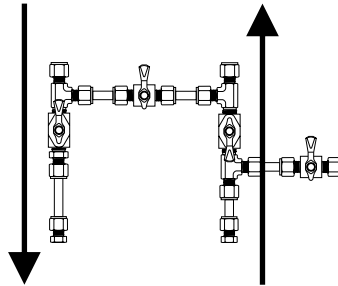
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Dimensions

TOTAL PANEL DEPTH IS 8-1/2" WITH FILTERS

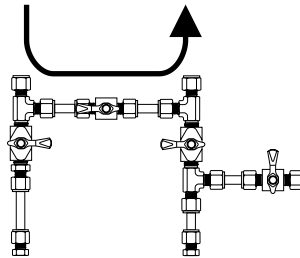


Valve Configurations



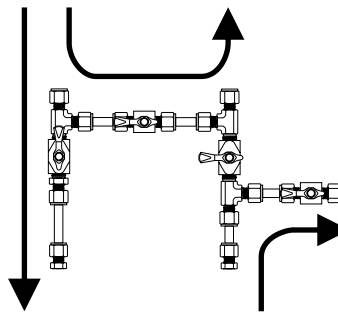
NORMAL CONFIGURATION

Both Inlet & Outlet valves are opened. The gas is purified by the traps. Both Vent & By-Pass valves are closed.



CHANGEOUT CONFIGURATION

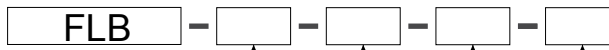
The By-Pass valve is opened while all of the other valves are closed. The process is being supplied with un-purified gas while the traps are being replaced.



VENT CONFIGURATION

All valves are opened with the exception of the Outlet valve. Airborne contaminants are being vented outside of the system while the process is being supplied by un-purified gas through the By-Pass valve.

Ordering Information



Gas	Inscribe
Air - compressed	CGA 346
Argon	CGA 580
Helium	CGA 580
Hydrogen	CGA 350
Nitrogen	CGA 580
Other gas: Provide CGA no.	

Trap # 1	Inscribe
Moisture Trap	H ₂ O
Leave Blank if None	

Trap # 3	Inscribe
Oxygen Trap	O ₂
Leave Blank if None	

Trap # 2	Inscribe
Hydrocarbons Trap	THC
Leave Blank if None	



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1800 Overview Drive, Rock Hill, SC 29730
 Tel.: (803) 817-5600 Fax: (803) 817-5750
 www.beaconmedaes.com

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