

### OMNI Point-of-Use Gas Purifier Systems



#### FEATURES

- ◆ Integral purifier, heater, insulation and electronics assembly
- ◆ Compact design
- ◆ Easy-to-use
- ◆ Sub-ppb removal of impurities from Inert Gases, Hydrogen, Acid Gases, and Oxygen
- ◆ Certified temperature control unit and electronics designed for simple operation, reliability and safety
- ◆ Continual heated operation or room temperature operation with convenient in-situ operation

#### APPLICATIONS

- ◆ Analyzers (Zero/Calibration Gases)
- ◆ Analytical Carts
- ◆ Process Tools
- ◆ Research and Development
- ◆ Semiconductor Industry

The NuPure™ Omni series of Point-of-Use purifier systems incorporate the UltraPure® PF series® purifier-filter or UltraPure® XL series purifier, reducing gaseous impurities, (see chart below) to sub-ppb levels from Inert Gases, Hydrogen and Hydrides, Acid Gases and Oxygen. The PF series® includes particle filtration to 0.003 µm. The NuPure™ Purifier Systems are available in a standard range of 0 - 100 slpm.

The NuPure™ Omni Series is available in a wall mounted configuration offering a low cost fully integrated system including manual inlet, outlet and bypass valves, and optional gas particle filter.

#### LISTING OF GASES PURIFIED / FILTERED

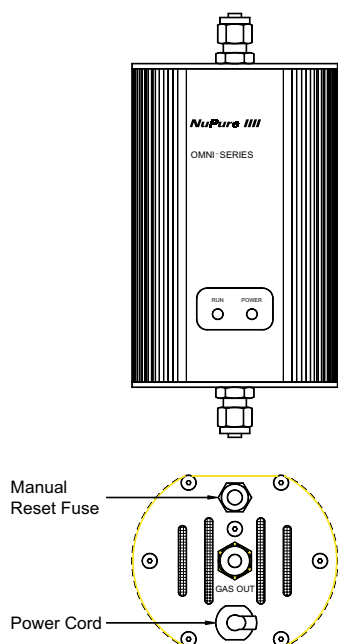
Inert Gases		Hydrogen / Hydrides		Acid Gases	Oxygen
Impurities Removed H <sub>2</sub> O, O <sub>2</sub> , CO, CO <sub>2</sub> , H <sub>2</sub> <sup>1</sup> (N <sub>2</sub> , CH <sub>4</sub> ) <sup>2</sup>		Impurities Removed H <sub>2</sub> O, O <sub>2</sub> , CO <sub>2</sub> , CO, (N <sub>2</sub> ) <sup>3</sup>		Impurities Removed H <sub>2</sub> O	Impurities Removed H <sub>2</sub> O, CO <sub>2</sub> , (H <sub>2</sub> , CO, CH <sub>4</sub> ) <sup>4</sup>
Ar	Ar/CH <sub>4</sub>	H <sub>2</sub>	AsH <sub>3</sub>	HBr	O <sub>2</sub>
He	CH <sub>4</sub>	Ar/H <sub>2</sub>	PH <sub>3</sub>	HCl	Air
Ne	CF <sub>4</sub>	N <sub>2</sub> /H <sub>2</sub>	NH <sub>3</sub>	BCl <sub>3</sub>	N <sub>2</sub> O
Kr	CCl <sub>4</sub>	SiH <sub>4</sub>	B <sub>2</sub> H <sub>6</sub>	BF <sub>3</sub>	
Xe	SF <sub>6</sub>	Si <sub>2</sub> H <sub>6</sub>	H <sub>2</sub> Se	Cl <sub>2</sub>	
N <sub>2</sub>	Freons	D.C.S.	GeH <sub>4</sub>	HF	

1 - Only with purchase of -H model. 2 - Additional impurities removed from He, Ne, Ar, Kr, Xe and N<sub>2</sub> only, using heated getter.

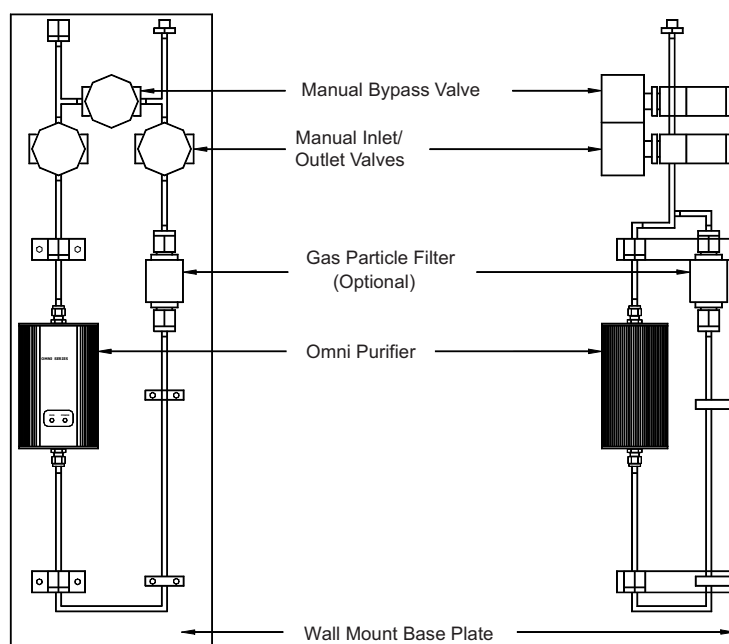
3 - Additional impurities removed from Hydrogen only, using heated getter. 4 - Only with purchase of optional heated catalyst.

# NuPure™ Omni Series Point-of-Use Purifier

## Technical Specification



Omni Series Purifier Module



Omni Series Purifier System

Model	Average Flows (slpm) <sup>1</sup> for 1 year lifetime (removal of impurities per chart page 1)	Max Flow (slpm) @ 150 psig (Heated)
Omni 40	0.3	1.5
Omni 100	1	5
Omni 200	2	10
Omni 600	6	30
Omni 1000	10	50
Omni 2000	20	100

Voltage	115/240 V AC
Housing	Extruded Aluminium 6063
Maximum Pressure	250 psig/9.9 kg/cm <sup>2</sup> G (Japan)
Operating Temperature	375°C - 450°C
Leak Rate	< 2 x 10 <sup>-10</sup> atm cc/sec He
Materials (Purifier)	316L S.S. (< 10Ra)
Fittings	1/4" VCR <sup>2</sup> / Compression
Gas Inlet	VLSI grade (99.9995%)

1 - Lifetime is inversely proportional to the total inlet impurity level and to the average flow. Lifetime for H<sub>2</sub>O/O<sub>2</sub> removal only using getter purifiers is approx 4 years at the stated flows / inlet gas. Under nominal conditions.

2 - VCR compatible fitting standard. VCR® is a registered trademark of Cajon Corporation.

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