

NuPure III

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 NuPureTM Omni series of Point-of-Use purifier systems incorporate the UltraPure[®] PF series[®] purifierfilter 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 NuPureTM Purifier Systems are available in a standard range of 0 - 100 slpm.

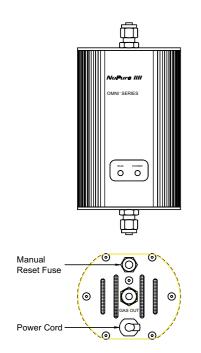
The NuPure[™] Omni Series is available in a wall mounted configuration offering a low cost fully integrated system including manual inlet, outlet and bypass valves, and optional gas particle filter.

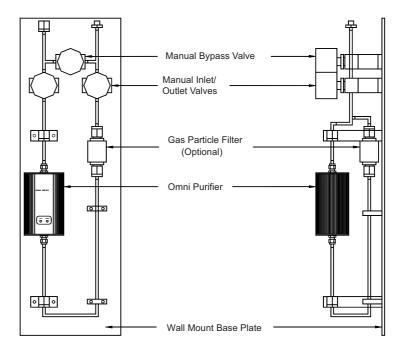
| LISTING OF GASES PURIFIED / FILTERED | | | | | | | | | |
|---|--------------------|---|-------------------|--|--|--|--|--|--|
| Inert Gases | | Hydrogen / Hydrides | | Acid Gases | Oxygen | | | | |
| Impurities Removed $H_2O, O_2, CO, CO_2, H_2^1 (N_2, CH_4)^2$ | | Impurities Removed $H_2O, O_2, CO_2, CO, (N_2)^3$ | | Impurities Removed H ₂ O | Impurities Removed $H_2O, CO_2, (H_2, CO, CH_4)^4$ | | | | |
| Ar | Ar/CH ₄ | H ₂ | AsH ₃ | HBr | O ₂ | | | | |
| He | CH ₄ | Ar/H_2 | PH ₃ | HCl | Air | | | | |
| Ne | CF ₄ | N_2/H_2 | NH ₃ | BCl ₃ | N ₂ O | | | | |
| Kr | CCl ₄ | SiH ₄ | B_2H_6 | BF ₃ | | | | | |
| Xe | SF ₆ | Si_2H_6 | H ₂ Se | Cl ₂ | | | | | |
| N ₂ | Freons | D.C.S. | GeH ₄ | HF | | | | | |

1 - Only with purchase of -H model. 2 - Additional impurities removed from He, Ne, Ar, Kr, Xe and N_2 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

| Madal | Average Flows (slpm) ¹ for 1 year lifetime | (slpm) | Voltage | 115/240 V AC |
|-----------|--|---|-----------------------|---|
| Model | (removal of impurities per chart page 1) | (a) 150 psig(Heated) | Housing | Extruded Aluminium 6063 |
| Omni 40 | 0.3 | 1.5 | Maximum Pressure | 250 psig/9.9 kg/cm ² G (Japan) |
| Omni 100 | 1 | 5 | Operating Temparature | 375°С - 450°С |
| Omni 200 | 2 | 10 | Leak Rate | $< 2 \text{ x } 10^{-10} \text{ atm cc/sec He}$ |
| Omni 600 | 6 | 30 | Materials (Purifier) | 316L S.S. (< 10Ra) |
| Omni 1000 | 10 | 50 | Fittings | 1/4" VCR ² / Compression |
| Omni 2000 | 20 | 100 | Gas Inlet | VLSI grade (99.9995%) |

1 - Lifetime is inversely proportional to the total inlet impurity level and to the average flow. Lifetime for H₂O/O₂ removal only using getter purifiers is approx 4 years at the stated flows / inlet gas. Under nominal conditions. 2 - VCR compatible fitting standard. $VCR^{\textcircled{R}}$ is a registered trademark of Cajon Corporation.

| NuPure IIII | Or Contact: |
|---|-------------|
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Titan[™] Series Gas Purifier Systems



