

# PureGuard<sup>™</sup> Wall Mount Heated Getter Gas Purifiers





PureGuard wall mount heated getter gas purifiers provide total removal of all impurities and parts-per-trillion (ppt) purity for nitrogen, argon, helium and other rare gases. The compact packaging provides continuous purification and comes in sizes for most flow rates.

### **Total Impurity Removal**

PureGuard wall mount heated getter purifiers are continuously heated during operation to provide complete removal of all impurities. Getter purifiers offer the only method to remove  $N_2$ and  $CH_4$  from argon and rare gases. Getter is also the most efficient method for removal of  $O_2$ ,  $H_2O$ ,  $CO_2$  and  $H_2$ .



### **Longer Lifetime**

Getter purifiers use non-evaporable zirconium-based getter media that irreversibly removes impurities. Heating of the getter material allows for bulk diffusion of the impurities into the metal getter. This process allows for the use of the entire getter media to provide large capacity, unlike ambient catalyst-type purifiers which use only the surface area as active removal sites. PureGuard getter purifiers last up to 40 times longer than comparable size ambient catalyst purifiers.

#### **Suggested Applications**

- PVD, Sputtering
  SiC growth
  Ar, N<sub>2</sub>
- Si growth Ar
- Purge for MOCVD N<sub>2</sub>
- Zero gas for analytical instruments  $${\rm Ar,\,N_2}$$
- Low temp SiGe, epi
  N<sub>2</sub>

#### **Benefits**

- No need for regeneration
- Heated unit offers longer life than regenerable media
- Removes all impurities including  $\text{CH}_4$  and  $\text{N}_2$  to sub ppb levels
- Continues to purify to <1ppb during the longest power failures
- Manufactured by Johnson Matthey, a global technology leader for 190 years

# **Features**

- CE marked
- LED display
- · Redundant overtemperature protection
- · Stable temperature control
- · Manual inlet/outlet isolation valves

## **Specifications**

- · Gases purified: Nitrogen, Argon, Helium and other rare gases
- <10 ra electropolished material</li>
- <1 ppb  $0_2$ , H<sub>2</sub>0, C0, C0<sub>2</sub>, N<sub>2</sub>, H<sub>2</sub>, THC
- 0.003µm outlet particle retention filters built-in
- All fittings 1/4" VCR, other fittings available upon request
- Maximum operating pressure 250 psig
- Helium leak tested to 2 x 10-10 atm cc/sec
- Voltages: 100 VAC-50/60hz, 120 VAC-50/60hz, 240 VAC-50/60hz
- Pneumatic pressure: 70-120 psig (4.8-8.3 barg); Wall Mount II only

Model	Description	Features	Gas	Maximum Flow Rate
WMA-1-1000	Wall Mount I Heated Getter Purifier	Manual inlet & outlet valves	Argon, rare gases	30 slpm
WMN-1-1000	Wall Mount I Heated Getter Purifier	Manual inlet & outlet valves	Nitrogen	30 slpm
WMA-1-2000	Wall Mount I Heated Getter Purifier	Manual inlet & outlet valves	Argon, rare gases	50 slpm
WMN-1-2000	Wall Mount I Heated Getter Purifier	Manual inlet & outlet valves	Nitrogen	50 slpm
WMA-II-2000	Wall Mount II Heated Getter Purifier	Automatic inlet, outlet & bypass valve, safety enclosure	Argon, rare gases	75 slpm
WMN-II-2000	Wall Mount II Heated Getter Purifier	Manual inlet & outlet valves valve, safety enclosure	Nitrogen	75 slpm

NOTE: For larger flow rates, refer to Wall Mount III or Bulk Heated Getter Purifier Data sheets.



#### Johnson Matthey USA

Gas Purification Technology 1397 King Road West Chester, PA 19380, USA (800) 624-2204 (610) 232-1900 Fax: (610) 232-1934 www.pureguard.net

#### **Principal Locations:**

North America, England, France, South Korea, Taiwan, China, Hong Kong, Japan, Singapore